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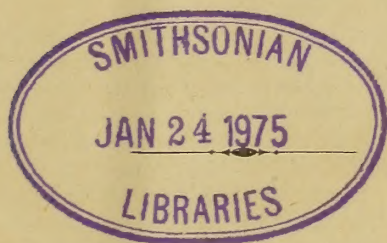
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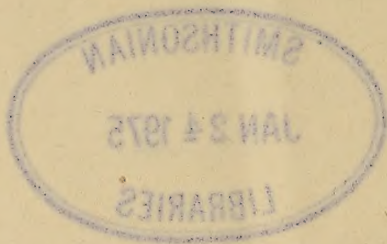
COMMISSIONER OF PATENTS

FOR

THE YEAR 1893.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1894.



REPORT
OF THE
COMMISSIONER OF PATENTS
TO CONGRESS,
FOR THE YEAR ENDING DECEMBER 31, 1893.

Laid before the Senate by the Vice-President March 22, 1894, referred to the Committee on Patents, and ordered to be printed.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,

Washington, D. C., January 31, 1894.

*To the Senate and House of Representatives of the
United States of America in Congress assembled:*

I have the honor to submit the following report of the business of this Office for the year ending December 31, 1893.

In 1893 there were received 37,293 applications for patents; 1,060 applications for designs; 120 applications for reissues; 2,247 caveats; 1,899 applications for trade-marks; and 401 applications for labels. There were 23,670 patents granted, including designs; 99 patents were reissued; and 1,677 trade-marks were registered. The number of patents which expired was 14,172. The number of patents which were by operation of law forfeited for non-payment of the final fees, was 4,102. The total expenditures were \$1,141,038.54; the receipts over expenditures were \$101,833.19, and the total receipts over expenditures to the credit of the Patent Office in the Treasury of the United States amounts to \$4,281,743.45.

At the beginning of the year the arrears of work amounted to 9,127 applications awaiting action, and one division was between seven and eight months behind. On the 2d of May the number reached 10,428. This number has been reduced so that at the close of the year there were on hand 6,261 applications—a reduction since May of 4,167 cases—and only one division was in arrears four months. Four divisions had the work so well in hand that an application would be reached for its first action within one month from the filing date; fifteen divisions were within two months; seven within three months, and six divisions were within four months of date.

Fuller details are given in the tables forming a part of this report.

In compliance with the requirements of the law, to lay before the Congress such information, in addition to the statistical tables, as will be useful, the national creed in material things will be taken to be that no imperfect welcome is accorded to mechanical inventions, that the race retains the power of great conceptions, that the world's inventive fertility will not ebb, that our industry will not become less and less originative, and that the recent international comparison of useful things has stimulated the creative thought, as it has trained the eyes and hands, of the people. There is accordingly reason to believe that an era of still greater constructive power, of keener speculative insight, will follow with its train of notable inventions. The national character is favorable. A foreign observer remarked, "The intuitive feeling in England is that if an invention were really valuable, it would have been hit upon before; the feeling in

America, that whatever is new ought, simply because it is new, to have a trial."

The American patent system has been developed to higher perfection than that of any other country in the world. The patents granted under it, up to January 1, 1894, number 521,700, while those granted in all other countries combined aggregate 817,362.

All the recent criticisms upon the patent system fall naturally into four classes:

First. Those which complain of the inconsiderate grant of invalid patents;

Second. Those which complain that the courts do not sustain whatever patents are granted, thus, as the criticism goes, discrediting the seal of the United States;

Third. That those to profit by the patent system are not the inventors, but the large business concerns, which by their mere size, and the capital employed, have monopolistic tendencies; and

Fourth. That when a valuable patent is granted, the public may be and sometimes is excluded from the use of the invention on any terms, and so some say that a compulsory license system on equal terms to all ought to be ingrafted upon the patent system.

The second and fourth criticisms concern the fate and effect of patents after they have left the Patent Office, and therefore belong to the larger question of the policy of the Republic toward inventions rather than to that more restricted domain wherein the Commissioner is required by law to give information of his Department to the Congress.

The third criticism likewise is of the same class, but in addition it implies that the government might transact with inventors with paternalism, so as to protect them from their own improvident bargains about their inventions. But as the modern state governs as little as possible, in order to leave the widest sphere to energy and enterprise, this can hardly be called a useful regress. I shall dismiss this also, and shall deal most fully with the first.

Doubtless the patent system may be regarded as less dependent on illusions and resting upon as firm and adequate foundations as any conceivable function of government. It has nurtured this country in its growth and is calculated to sustain it in its maturity. It is enduring and great, and so it may dare to disclose its deficiencies most fully; feasible solutions for all its problems may be found, once they are clearly stated.

All valid criticisms of an administrative kind connect themselves with the inadequate room, the inadequate force, the inadequate equipment of the office.

CLASSIFICATION DIVISION.

A Classification Division is required and should be established for the purpose of systematizing all the

material in which the history of invention is written, so that it would be readily accessible to searchers upon the novelty of any alleged invention. An outline of the procedure within the Office upon the application of an inventor will illustrate this. In considering the merits of an application for patent the first question to be determined is whether the alleged invention is new—that is, whether it is to be found in any of the 521,700 American patents or in any of the 817,362 foreign patents, or in any book, periodical, pamphlet, or paper, in any language, of this or any other country. The search is made by the Assistant Examiners. If a controlling or pertinent reference exists and is not found, the patent issued upon this application would be void, if contested. And herein lie the fruitful beginnings of all error. The references once found, a mistaken decision on the question of invention is not difficult of correction. Two appeals are provided within the Office and one to the courts, and the remedy by bill in equity is also open to applicants. But the search upon which the whole contention is based is usually made, once for all, at the outset, and it is here that the administrative side of the system may be greatly strengthened.

A study of eighty-one patent cases, recently before the courts, wherein the claims were held to be invalid, discloses that in twenty-six there was no evidence that the references before the court, in view of which the patents were found to be invalid, were ever cited by this Office; in twenty-nine some, but not all, of the references were cited, and only in the remaining twenty-six were the same references before the Office as were before the court.

Of 988 court cases reported in the OFFICIAL GAZETTE between 1886 and 1892, wherein patents were in litigation, 436 patents were sustained and 552 were declared invalid in whole or in part. Of the number declared invalid, 428 were by reason of some fault in the Office, and 124 on account of evidence brought to light of which the Office had no knowledge before granting the patents.

These figures do not furnish the basis for a general estimate of the proportion of patents granted, which, if contested, would be declared void, for all those in which there is general acquiescence in their validity and which consequently never are contested in courts must be reckoned upon the side of the proper actions of the Office. Candor compels the admission, however, that an indefinite number of patents are never contested, because out of weakness they are never insisted upon in court as valid.

Approaching the subject from another side, I am furnished with the result of examinations as to the validity of the claims in ten patents, taken at random, where searches in this Office were made by a well-known law firm. These patents contain fifty claims, of which thirty-five were considered and were reported to be old. In justice to the Office it must be said that the time given to such search by the attorneys was about one week to each patent, and their charge for making it ranged from one hundred to one thousand dollars, whereas each of the thirty-two divisions in this Office averages five searches for every

working day in the year, and at a cost of but fifteen dollars to the inventor.

This proposed classification division is the difference between the patent system, capable of being administered with beneficence and tending in all respects to the common good, and the same system encroaching upon the domain of common knowledge by reason of the deficiencies in its own equipment. A patent for a new thing adds to the common stock of knowledge; a patent for an old thing takes something away from what the public already enjoys. Against every application, therefore, must be opposed the whole prior art. Each of the thirty-two examining divisions contains on the average more than sixteen thousand domestic patents and a still larger number of foreign patents. These are now defectively and insufficiently classified in divisions and subdivisions, according to the uses to which the inventions are to be put. The kindred inventions of similar construction and of like operation in other arts and even in other subdivisions are not before the Examiner, excepting as he may remember them or guess where they may be found. Yet, all such as anticipate an application before the Examiner must be found, or else the grant of a patent will be void; and when found, all such must be critically and judicially examined, or the same disastrous consequences follow, and this examination of applications must be done promptly, for delay is often as great an evil as no action at all.

When it is considered that these are judicial decisions involving large interests, upon which the growth of the arts as well as private rights are dependent, it will be seen that the searching classification of all existing grants and other material is the only condition upon which the work may be done at all.

The proposed Classification Division calls for forty-four skilled Examiners and eight clerks and assistants, the salaries of whom would aggregate \$64,590 a year, as follows:

1 Chief of classification division.....	\$2,750
2 First assistant examiners (each).....	1,800
2 Second assistant examiners (each).....	1,600
3 Third assistant examiners (each).....	1,400
36 Fourth assistant examiners (each).....	1,200
4 Clerks (each).....	1,200
2 Permanent clerks (each).....	1,000
2 Copyists (each).....	900
2 Assistant messengers (each).....	720

Thirty-two of the thirty-six Fourth Assistant Examiners recommended would be assigned to work in the existing examining divisions, and as a part of their work would have charge of both the permanent and current division classification, as well as of their assigned part of the work as a whole in the new division to be established. This contemplates the fundamental and philosophical classification, based upon mode of operation and structure, of all domestic and foreign patents and of the entire mass of printed publications, these constituting the prior art or the field of search.

SCIENTIFIC LIBRARY.

The entire category of granted patents is yet but a part of the material to be classified; but that material is in the possession of the Office, or such parts as are lacking may be obtained by the courtesy of other nations and in exchange for copies of our own patents.

The scientific library of sixty-five thousand volumes

of technical books presents a deficiency of another kind. While well classified, so far as the subject-matter is concerned, it lacks more than three thousand two hundred necessary books, estimated to cost about \$10,000. Prior to 1885 \$5,000 was annually appropriated for the library; from 1885 to 1892, \$3,000; in 1893, \$2,500; and for the current year, \$2,000; and out of this altogether inadequate sum we must pay between four and five hundred dollars for the expense incident to transporting our publications and patents to foreign governments. The result is that the library today falls short of its necessary equipment. The Congress has enacted that if an invention is described in any printed book, in any language in Christendom, published before the date of an applicant's invention, a patent thereon will be void if granted; thus our most solemn acts depend for validity upon knowing books that we do not possess. It is thought that the requirement laid upon this Office by the Congress to know the contents of certain books is equally an obligation that the Congress should give this Office those books.

I respectfully recommend, therefore, an appropriation of \$10,000 for the scientific library, instead of \$2,000, and an appropriation of \$64,590 for the classification division. These two being added to the equipment of the Office will lay the errors in granting duplicate or invalid patents at the door of the judicial officers of the system, and they are alike and equally the necessary equipment of the Office in such sense that without them the reasonably fair administration of the law cannot be attained.

I refer to the report of the librarian, hereto appended, for a detailed statement of the resources and needs of the scientific library.

CASES WITHDRAWN FROM ISSUE.

Three Primary Examiners recently resigned. Their successors were instructed to re-examine the cases which had been passed to issue in their divisions, but which had not yet gone to patent. As the result of that investigation I was advised that in one hundred and fifty pending cases the applications should be withdrawn from issue, upon the ground that patents therein would be void, and they were withdrawn.

This action opened these cases for further consideration upon the merits, to be followed by an allowance or a final rejection by the Primary Examiner, according to law, with the right of successive appeals to the Board of Examiners-in-Chief, the Commissioner, and the United States Circuit Court of Appeals for the District of Columbia.

Errors are inevitable in the most perfect system, but the fact that one hundred and fifty applications were erroneously passed to issue, which were in fact met by references in the possession of the Office, furnishes a further reason for the comprehensive classification of all the patents and publications upon which the validity of new patents must depend.

But after all deductions are made, the intelligent scrutiny given to the vast mass of material presented, the rapidity and thoroughness of the search through the prior art made under inadequate and forbidding conditions, have earned for the examining corps of

the Patent Office the high encomiums of the most discriminating observers, and justify this claim made in their behalf, that the resources of the Office should be expanded to meet their needs.

PHOTOGRAPHS OF DRAWINGS.

The Office will make photographs of the drawings in those cases where changes in the drawings are required or permitted, and will in such cases make such photographs a part of the files, to the end that a perfect record may be preserved of the original application, through all changes that may follow. This will also be a safeguard against unauthorized changes.

RULE 64.

By a recent amendment to Rule 64 the Office gives precedence from the outset to actions upon the merits of applications and postpones requirements in mere matters of form until after patentable subject-matter has been found.

DIVISION OF APPLICATIONS.

The division of applications is not required upon the basis of Office classification, but only when an applicant attempts to put two or more distinct inventions into one application, and the patent for that reason would be void.

CONTRACTS.

The contract for the reproduction of drawings of the weekly issues of patents, for producing copies of designs, trade-marks, and pending applications, for the reproduction of exhausted copies of drawings and specifications, and for photolithographing or otherwise producing plates for the OFFICIAL GAZETTE, was awarded to the National Lithographing Company, although a new company, for the year beginning July 1, 1893, upon its competitive bid for such work, in which it was the lowest bidder, while the bid of the old company exceeded the reduced appropriation by over four thousand dollars, upon the estimated work of the year. In the beginning expected delays occurred, and for the first three or four issues of the OFFICIAL GAZETTE some falling off in the quality of the work was observed, but subsequently the arrears were recovered, and the quality of the work fully sustained.

It was considered that administrative reasons made it desirable that the work should be taken away from the contractor formerly doing it and given to another, with whatever attendant inconvenience to the office or to the public might temporarily result from the change.

EXPIRED PATENTS.

It is considered that it would be a distinct benefit to the public to reproduce from week to week in the OFFICIAL GAZETTE all patents as their terms expire, thus throwing open to the world full information respecting inventions which become free. There were fewer subscribers to the GAZETTE seventeen years ago. By this republication the present subscribers are furnished, without any additional expense, with the patents published in the early years of the GAZETTE. Aside from this consideration, many of the issues in the various years are exhausted. From January to June, 1880, from January, 1881, to June, 1882, and from April to June, 1884, all numbers are exhausted. Orders are not infrequent for complete sets of this

publication, which the office is unable to fill. It has been the practice for some time with one of the principal foreign patent offices to republish expired patents.

SALE OF COPIES OF PATENTS.

Under section 493 of the Revised Statutes the Commissioner is authorized to fix the price of printed uncertified copies of patents at from ten to fifty cents each. It is fixed at ten cents, but this legal minimum would appear to be too large. The Office now has on hand from one hundred to one hundred and fifty printed copies of all patents, except twenty-three thousand one hundred and twenty-six of those issued in 1861 and earlier. Some classes have been completed by the publication of all patents ever issued; sewing-machines and mowing-machines are among those which have been so completed. Prior to March 3, 1891, the charge for an uncertified printed copy was twenty-five cents. In the aggregate the Office has on hand by estimation more than fifty million copies of patents, most of which will never be sold at the present price. Certain manufacturers, law firms, and other patrons of the Office have standing orders for all patents in certain classes as issued. This is a heavy tax. In Class 105, railway-cars, there are 15,000 patents; in Class 56, harvesters, there are 10,000 patents; in Class 111, seeders and planters, there are 8,000 patents. These at the present rates would cost, respectively, \$1,500, \$1,000, and \$800.

These copies might be sold with much advantage by classes at five cents each, and in classes of a thousand or more at three cents, without exhausting the stock on hand, except in occasional instances, and where they are exhausted or likely to be, reprints may be made and the sales continue indefinitely.

Apart from the large increase in the receipts, this mass of material is so great in bulk as to overtax the storage capacity of this Office. Since some copies of every patent must be printed, and since the cost of printing the one hundred copies thus stored is only nominally greater, and since the patrons of the Office do not now take them in large quantities at the price now asked, but would take them at a less price, it is recommended that section 493 be amended so as to remove the minimum limit at which the Commissioner is now authorized to sell these copies, and to authorize him, with the approval of the Secretary of the Interior, to provide by rule for their sale at such price as he may deem reasonable, without any minimum limit.

INTERFERENCE CASES.

Congress by act of February 9, 1893, provided that appeals may be taken from the decisions of the Commissioner, in interference cases, to the United States Circuit Court of Appeals for the District of Columbia. The Examiner of Interferences in the first instance decides these cases, before whom they are argued at length upon printed records and upon briefs wherein the labor of counsel and the expense of litigants are oftentimes as great as in infringement cases in the circuit courts of the United States. From this decision an appeal lies to the Board of Examiners-in-Chief, and from their decision in turn an appeal lies to the Commissioner, and now from his decision a third appeal lies to the United States Circuit Court of

Appeals. It is thought that with the additional appeal to court, one decision within the Office might be dispensed with, and it is therefore recommended that such changes in the law be made that interference cases will be disposed of as follows:

The Examiner of Interferences shall superintend the preparation of the record and prepare a brief summary of it; he shall transmit the record and the summary to the Board of Examiners-in-Chief for their decision, from which appeals will lie, as now, to the Commissioner and from him to the court.

The printing of interference records is a heavy burden upon the parties, and with the appeal to the court now provided, the record must be reprinted at a double expense. When the record, as now privately printed, comes to be examined for the purpose of furnishing the court of appeals with certified copies, it is found that it is often defective. It is doubtful also whether the Office has authority to certify copies of the record furnished by the parties, although verified by the Office, except at the prescribed charge of ten cents a hundred words.

It is recommended that the Office be given authority to print the record in interference cases, through the Public Printer, upon the deposit of the estimated cost; that twenty-five copies in each case be printed, and that upon appeals the parties may have certified copies of this record at a nominal sum, so that is no case will a reprinting of the record be required, and that, on the other hand, the Office, having superintended the printing of the record in the first instance, may have no additional labor by reason of the requirement for certified copies in later proceedings.

PATENT BAR.

The vast public and private interests involved in the just administration of the patent system demand that the practitioners before the Office, like those before the Federal courts, shall be only those of ascertained moral and intellectual fitness. To this end it is respectfully recommended that legislation be had establishing a patent bar, which shall consist, in the first instance, of those counselors-at-law who are entitled to practice in the Federal courts, and that the Commissioner of Patents, with the approval of the Secretary of the Interior, may establish rules and regulations for the admission, from time to time, of those found qualified, and who may be recommended for admission by the Federal bar of the State in which they reside, or in the manner and by those on whose recommendation admissions to the State bar are made by the State courts where the applicant may reside. It is believed that under the guidance of a patent bar of recognized standing and repute, the soliciting of patents would attain a regularity and dignity in the practice of the profession of the law which is otherwise unattainable, and that the first to gain under such a practice would be the meritorious inventors, and second only to them, the industrial world and the public.

SECTION 4887.

It is estimated that about one-tenth of the inventions covered by American patents in recent years are also patented in foreign countries. Section 4887 provides that—

* * * every patent granted for an invention which has been previously patented in a foreign country shall be so limited as to expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term, and in no case shall it be in force more than seventeen years.

Those coming under the operation of this statute are in large part American citizens, and thus what was intended as a limitation upon foreigners in this country bears most heavily upon Americans in their own country. But the remedy is easy of application, should Congress see fit to apply it.

It is recommended that the last sentence of section 4887, the part above quoted, be repealed. Following this, it should be provided that application may be made in this country within six months from the date of application in any foreign country, without prejudice or loss of rights on account of the time of application, with the addition, in the language of the International Convention, of one month for countries beyond seas. This would make the American patent independent of the term of foreign patents and of the exigencies dependent upon procedure in the Patent Office of this or any foreign country.

These suggestions appear to be in line with the objects of the International Convention, which will be likely to secure in time two things: first, international agreement upon the term of all patents, and consequent uniformity in that respect, and, second, a period—say six months, or seven months for countries beyond seas—within which application may be made in the Patent Office of any country without regard to procedure in any other country and without harmful effect upon the term of the patent.

REMOVAL OF MODELS.

In July last 80,000 of the 154,900 models forming part of the record in patented cases were removed from this building to the Union Building in this city, rented from private owners, in order that the space thus vacated might be utilized to meet the urgent demand for additional room to accommodate the working force of the General Land Office and the Patent Office. The advantage thus gained in room is to a considerable extent offset by the inconvenience to the Examiners who have need to inspect these models in their daily work. I quote from the report of Mr. Commissioner Mitchell made to Congress in 1890:

The models contained in the model halls are not only of great interest to the public at large, who evince their interest by visiting them daily in large numbers, but they are of almost inestimable advantage to the Examiners by enabling them to conduct their investigations expeditiously. A considerable per cent. of the applications for patents received from day to day are found to be met and anticipated by the contents of the model cases. I regard it as nothing less than a public calamity that the Office was several years ago compelled to suspend the reception of models, excepting in special instances, for want of space in which to store and exhibit them. A public gallery containing specimens of all the inventions of the past ten years would furnish an exhibition of industrial growth of marvelous interest and value, and would be of vast assistance to inventors and Examiners in enabling them to readily ascertain whether inventions for which protection is sought have been patented previously. I venture to express the hope that the time will come when models will again be required in connection with all applications, and that when that time arrives an effort will also be put forth to obtain specimens of the more important inventions which have been patented during the intervening period.

I recommend Congress to make some provision which will enable the Department to return these models to the galleries in this building, designed and constructed for their exhibition.

WORLD'S FAIR.

The Patent Office Exhibit at the World's Fair, con-

sisting of 2,172 official models and 290 models furnished by private interests, together exhibiting the historical development of the most important arts, has, so far as possible, been preserved intact and many of the owners of unofficial models which were incorporated in the exhibit have presented them to the Patent Office. The exhibit is now installed in the corridor of the south model hall. A cordial acknowledgment is made to those who have contributed to it.

The World's Exposition at Chicago set forth objectively and by comparison with the achievements of other nations the result of the encouragement given to invention and discovery by the patent system. No statistics are available showing what exhibits are the direct offspring of the system, and what are more remotely the product of its methods, but it may be said that product, means, and methods were merely the tangible evidence of an unseen world of invention and discovery, which was brought into being by inventors, the fraternity of great thinkers, working under this stimulus.

The system has its historical relations with that of England, but in its present development it is distinctively American, in that exclusive rights for a limited time are given, not to claimants as a matter of course when applying in due form, but only upon a discriminating search. This distinctive feature has recently received the compliment of imitation from more than one foreign power.

It is agreed by all observers that the patent system and the exposition have interrelations of a causal nature. Facts when grouped support the inference.

Following the first great exposition in this country, the Philadelphia Centennial of 1876, more patents were issued than during the entire period from the establishment of the system down to that time. The record of applications received shows that the impulse of that event was not immediately perceived, but in the year 1880 and in every year after, the increase in applications filed has been marked.

It would seem that a great exposition, while in some sense the concrete result of the patent system, may be expected to emphasize the stimulus afforded to invention by the patent system, and that allowing for a period of reflection or for the maturing of inventive material, there may be expected to follow the World's Exposition a still greater activity in the field of invention than has hitherto been known.

RECEIPTS.

Detailed statement of all moneys received for patents, for copies of records or drawings, or from any source whatever.

Applications:	
Cash received	\$1,080,024 00
Cash refunded	5,125 00
Net cash	1,074,899 00
Certificates of deposit	41,526 00
Total cash and certificates	1,116,425 00
Copies:	
Cash received	98,451 14
Cash refunded	4,771 34
Net cash	93,679 80
Certificates of deposit	441 15
Total cash and certificates	94,120 95

Recording assignments:	
Cash received.....	21,190 73
Cash refunded.....	1,227 66
Net cash.....	19,963 07
Certificates of deposit.....	163 00
Total cash and certificates.....	20,126 07
Subscription to Official Gazette:	
Cash received.....	12,309 98
Cash refunded.....	117 96
Net cash.....	12,092 02
Certificates of deposit.....	77 60
Total cash and certificates.....	12,169 62
Registration of labels:	
Cash received.....	2,382 00
Cash refunded.....	2,352 00
Net cash.....	30 00
Certificates of deposit.....	
Total cash and certificates.....	30 00
Aggregates.	
Cash received.....	\$1,214,257 85
Cash refunded.....	13,593 96
Net cash.....	1,200,663 89
Certificates of deposit.....	42,207 75
Total cash and certificates.....	1,242,871 64

EXPENDITURES.

Amount expended by this Office under the several appropriations from January 1, 1893, to December 31, 1893.

Salaries.....	\$683,768 45
Official Gazette.....	54,283 40
Photolithographing.....	104,313 69
Scientific library.....	1,924 76
Transportation of publications to foreign governments.....	431 30
International Union for Protection of Industrial Property.....	681 76
Total.....	845,403 36

*Approximate amount reported by the Department of the Interior as expended on account of this Office from January 1, 1893, to December 31, 1893.**

Stationery.....	\$8,200 00
Postage on foreign matter.....	2,336 00
Printing and binding.....	253,730 51
Watch force.....	16,600 00
Furniture.....	3,201 20
Carpets.....	1,698 84
Ice.....	421 40
Telephones.....	444 00
Washing towels.....	97 12
Sundries.....	8,916 02
Total.....	295,635 09
Aggregate amount of expenditures.....	1,141,038 45

RECEIPTS OVER EXPENDITURES.

Total receipts.....	\$1,242,871 64
Total expenditures.....	1,141,038 45
Receipts over expenditures.....	101,833 19

Statement of balance in the Treasury of the United States on account of the patent fund.

Amount to the credit of the fund January 1, 1893..	\$4,179,910 26
Amount of receipts during the year 1893.....	1,242,871 64
Total.....	5,422,781 90
Deduct expenditures for the year 1893.....	1,141,038 45
Balance January 1, 1894.....	4,281,743 45

*A literal compliance with the provisions of the statute requiring "a detailed statement of all expenditures for contingent and miscellaneous expenses" is not possible, for the reason that the contingent fund for the several bureaus of this Department was consolidated by the act of March 3, 1883, and hence no part of that fund is disbursed by the Patent Office, and I am furnished only with an approximate sum expended on behalf of the Patent Office.

SUMMARY OF THE BUSINESS OF THE PATENT OFFICE.

Number of applications for patents for inventions.....	37,293
Number of applications for patents for designs.....	1,060
Number of applications for reissues of patents.....	120
Total number of applications.....	38,473
Number of caveats filed.....	2,247
Number of applications for registration of trade-marks.....	1,899
Number of applications for registration of labels.....	401
Number of disclaimers filed.....	7
Number of appeals on the merits.....	951
Total.....	5,505
Total number of applications, etc., requiring investigation and action.....	43,978
Number of patents issued, including designs.....	23,670
Number of patents reissued.....	99
Total.....	23,769
Number of trade-marks registered.....	1,677
Number of labels registered.....	
Total.....	1,677
Number of patents expired during the year.....	14,172
Number of patents withheld for non-payment of final fees.....	4,102

PATENTS ISSUED.

Patents issued to citizens of the United States, with the ratio of population to each patent granted.

States and Territories.	Patents and designs.	One to every—
Alabama.....	91	16,626
Arizona Territory.....	12	4,968
Arkansas.....	105	10,744
California.....	688	1,756
Colorado.....	246	1,675
Connecticut.....	764	976
Delaware.....	30	5,616
District of Columbia.....	204	1,129
Florida.....	62	6,313
Georgia.....	115	15,976
Idaho.....	21	4,018
Illinois.....	2,002	1,911
Indiana.....	564	3,887
Indian Territory.....	9	.....
Iowa.....	402	4,755
Kansas.....	236	6,047
Kentucky.....	224	8,297
Louisiana.....	99	11,298
Maine.....	133	4,970
Maryland.....	290	3,594
Massachusetts.....	2,014	1,111
Michigan.....	762	2,677
Minnesota.....	359	3,626
Mississippi.....	57	22,624
Missouri.....	773	3,465
Montana.....	78	1,694
Nebraska.....	191	5,544
Nevada.....	17	2,691
New Hampshire.....	113	3,332
New Jersey.....	1,002	1,442
New Mexico Territory.....	11	13,963
New York.....	3,630	1,652
North Carolina.....	85	19,034
North Dakota.....	18	10,151
Ohio.....	1,568	2,342
Oklahoma Territory.....	12	5,152
Oregon.....	93	3,373
Pennsylvania.....	2,253	2,333
Rhode Island.....	224	1,542
South Carolina.....	47	24,492
South Dakota.....	47	6,995
Tennessee.....	143	12,360
Texas.....	335	6,673
Utah Territory.....	62	3,353
Vermont.....	71	4,682
Virginia.....	144	11,499
Washington.....	116	3,011
West Virginia.....	54	14,125
Wisconsin.....	560	3,012
Wyoming.....	20	3,035
United States Army.....	10	.....
United States Navy.....	11	.....
Total.....	21,197	.....

Patents granted to citizens of foreign countries.

Argentine Republic	3	Malta, Island of	1
Austria-Hungary	77	Mexico	11
Belgium	20	Natal	1
Brazil	1	Netherlands	7
Canada	324	Newfoundland	2
Cape Colony	1	New South Wales	30
Ceylon	1	New Zealand	15
Chile	1	Norway	10
China	1	Peru	1
Colombia	2	Queensland	1
Cuba	5	Roumania	1
Denmark	15	Russia	12
Ecuador	1	Scotland	49
Egypt	1	South African Republic	2
England	757	South Australia	2
France	271	Spain	4
Germany	673	Straits Settlements	1
Guatemala	2	Sweden	31
Guernsey, Island of	1	Switzerland	55
Hawaii	4	Tasmania	3
India	5	Uruguay	1
Ireland	13	Victoria	29
Italy	22		
Japan	3	Total	2,473

The following tables present a comparative statement of the business of the Patent Office since the enactment of the statute of 1836 and exhibit in detail the business of the Office during the last calendar year:

Comparative statement of the business of the Office from 1837 to 1893, inclusive.

Year.	Applica- tions.	Caveats filed.	Patents and re- issues.	Cash re- ceived.	Cash ex- pended.	Surplus.
1837			435	\$29,289 08	\$33,506 98	
1838			520	42,123 54	37,338 92	\$4,784 62
1839			425	38,019 97	34,543 51	3,476 46
1840	765	228	473	38,056 51	39,020 67	
1841	847	312	495	40,413 01	52,666 87	
1842	761	291	517	36,505 63	31,241 43	5,264 20
1843	819	315	519	35,315 81	30,776 96	4,538 85
1844	1,045	380	497	42,509 26	36,344 53	6,164 73
1845	1,246	452	503	51,076 14	39,395 65	11,680 49
1846	1,272	448	638	50,264 16	46,158 71	4,105 45
1847	1,531	533	569	63,111 19	41,878 35	21,232 84
1848	1,628	607	653	67,576 69	58,905 84	8,670 85
1849	1,955	595	1,077	80,752 78	77,716 44	3,036 34
1850	2,193	602	993	86,927 05	80,100 95	6,826 10
1851	2,258	760	872	95,738 61	86,916 93	8,821 68
1852	2,639	996	1,019	112,056 34	95,916 91	16,139 43
1853	2,673	901	961	121,527 45	132,869 83	
1854	3,324	868	1,844	163,789 84	167,146 32	
1855	4,435	906	2,013	216,459 35	179,540 33	36,919 02
1856	4,960	1,024	2,505	192,588 02	199,931 02	
1857	4,771	1,010	2,496	196,132 01	211,582 09	
1858	5,364	943	3,710	203,716 16	193,193 74	10,522 42
1859	6,235	1,097	4,538	245,942 15	210,278 41	35,663 74
1860	7,653	1,084	4,819	256,352 59	252,820 80	3,531 79
1861	4,643	700	3,340	137,354 44	221,491 91	
1862	5,038	824	3,521	215,754 99	182,810 39	32,944 60
1863	6,014	787	4,170	195,593 29	189,414 14	6,179 15
1864	6,972	1,063	5,020	240,919 98	229,868 00	11,051 98
1865	10,664	1,937	6,616	348,791 84	274,199 34	74,592 50
1866	15,269	2,723	9,450	495,665 38	361,724 28	133,941 10
1867	21,276	3,597	13,015	646,581 92	639,263 32	7,318 60
1868	20,445	3,705	13,378	681,565 86	628,679 77	52,886 09
1869	19,271	3,624	13,986	693,145 81	486,430 74	206,715 07
1870	19,171	3,273	13,321	669,456 76	557,147 19	112,309 57
1871	19,472	3,366	13,033	678,716 46	562,091 64	116,624 82
1872	18,246	3,090	13,590	699,726 39	665,595 00	34,131 39
1873	20,414	3,248	12,864	703,191 77	691,178 98	12,012 79
1874	21,602	3,181	13,599	738,278 17	679,288 41	58,989 76
1875	21,638	3,094	14,837	743,453 36	721,657 71	21,795 65
1876	21,425	2,697	15,595	757,987 65	652,542 60	105,445 05
1877	20,308	2,809	14,187	732,342 85	613,152 62	119,190 23
1878	20,260	2,755	13,444	725,375 55	593,082 89	132,292 66
1879	20,059	2,620	13,213	703,931 47	529,638 97	174,292 50
1880	23,012	2,490	13,947	749,685 32	538,865 17	210,820 15
1881	26,059	2,406	16,584	853,665 89	605,173 28	248,492 61
1882	31,522	2,553	19,267	1,009,219 45	683,867 67	325,351 78
1883	34,576	2,741	22,383	1,146,240 00	675,234 86	471,005 14
1884	35,600	2,582	20,413	1,075,798 80	970,579 76	105,219 04
1885	35,717	2,552	24,233	1,188,089 15	1,024,378 85	163,710 30
1886	35,968	2,513	22,508	1,154,551 40	992,503 45	162,047 95
1887	35,613	2,622	21,477	1,144,509 60	994,472 22	150,037 38
1888	35,797	2,251	20,506	1,118,516 10	973,108 78	145,407 32
1889	40,575	2,481	24,158	1,281,728 05	1,052,955 96	228,772 09
1890	41,048	2,311	26,292	1,340,372 66	1,099,297 74	241,074 92
1891	40,552	2,408	23,244	1,271,285 78	1,139,713 35	131,572 43
1892	40,753	2,290	23,559	1,286,331 88	1,110,739 24	175,592 64
1893	38,473	2,247	23,769	1,242,871 64	1,141,038 45	101,833 19

Statement showing the number of the first patent, Design patent, and reissued patent, and the number of the first certificate of registration of a Trade-Mark and a Label issued in each calendar year since July 28, 1836, when the present series of numbers of Letters Patent commenced, together with the total number of each issued during the year.

[The number of patents granted prior to the commencement of this series of numbering (July 28, 1836) was 9,957.]

Year.	Number of first patent and certificate issued in each calendar year.					Number of patents and certificates of registration issued during each calendar year.						
	Patents.	Designs.	Reissues.	Trade-Marks.	Labels.	Patents.	Designs.	Reissues.	Total patents.	Trade-Marks.	Labels.	Total certificates.
1836 (July 28)	1					109						
1837	110					496						
1838	546					515		6				
1839	1,061		1			404		13				
1840	1,465		7			453		10				
1841	1,923		20			490		6				
1842	2,413		30			488		13				
1843	2,901		36			494	14	11	519			
1844	3,395	1	49			478	12	7	497			
1845	3,873	15	60			475	17	11	503			
1846	4,348	27	67			566	59	13	638			
1847	4,914	44	78			495	60	14	569			
1848	5,409	103	91			584	46	23	653			
1849	5,993	163	105			988	49	30	1,067			
1850	6,981	209	128			884	83	26	993			
1851	7,865	258	158			757	90	25	872			
1852	8,622	341	184			890	109	20	1,019			
1853	9,512	431	209			846	86	29	961			
1854	10,358	540	229			1,759	57	28	1,844			
1855	12,117	626	258			1,892	70	51	2,013			
1856	14,009	683	286			2,315	107	83	2,505			
1857	16,324	753	337			2,686	113	97	2,896			
1858	19,010	860	420			3,467	102	126	3,695			
1859	22,477	973	517			4,165	108	231	4,504			
1860	26,642	1,075	643			4,363	183	232	4,778			
1861	31,005	1,183	874			3,040	142	147	3,329			
1862	34,045	1,366	1,106			3,221	195	116	3,532			
1863	37,266	1,508	1,253			3,781	176	227	4,184			
1864	41,047	1,703	1,369			4,638	139	248	5,025			
1865	45,685	1,879	1,596			6,099	221	296	6,616			
1866	51,784	2,018	1,844			8,874	294	290	9,458			
1867	60,658	2,239	2,140			12,301	325	400	13,026			
1868	72,959	2,533	2,430			12,544	446	420	13,410			
1869	85,503	2,858	2,830			12,957	506	534	13,997			
1870	98,460	3,304	3,250			12,157	737	439	13,333	121		121
1871	110,617	3,810	3,784		1	11,687	905	464	13,056	486		486
1872	122,304	4,547	4,223	122		12,200	884	529	13,613	491		491
1873	134,504	5,452	4,687	608		11,616	747	501	12,864	492		492
1874	146,120	6,336	5,216	1,099		12,230	886	483	13,599	559	232	791
1875	158,350	7,083	5,717	1,591	1	13,291	915	631	14,837	1,138	232	1,370
1876	171,641	7,969	6,200	2,150	233	14,172	802	621	15,595	959	472	1,431
1877	185,813	8,884	6,831	3,288	465	12,920	699	568	14,187	1,216	392	1,608
1878	198,733	9,686	7,452	4,247	937	12,345	590	509	13,444	1,455	492	1,947
1879	211,078	10,385	8,020	5,463	1,329	12,133	592	488	13,213	872	355	1,227
1880	223,211	10,975	8,529	6,918	1,821	12,926	515	506	13,947	349	203	552
1881	236,137	11,567	9,017	7,790	2,176	15,548	565	471	16,584	834	202	1,036
1882	251,685	12,082	9,523	8,139	2,379	18,135	861	271	19,267	947	304	1,251
1883	269,820	12,647	9,994	8,973	2,581	21,196	1,020	167	22,383	902	906	1,808
1884	291,016	13,508	10,265	9,930	2,885	19,147	1,150	116	20,413	1,021	513	1,534
1885	310,163	14,528	10,432	10,822	3,791	23,331	773	129	24,233	1,067	391	1,458
1886	333,494	15,678	10,548	11,843	4,314	21,797	595	116	22,508	1,029	378	1,407
1887	355,291	16,451	10,677	12,910	4,695	20,429	949	99	21,477	1,133	380	1,513
1888	375,720	17,046	10,793	13,939	5,073	19,585	835	86	20,506	1,059	327	1,386
1889	395,505	17,995	10,892	15,072	5,453	23,360	723	75	24,158	1,229	319	1,548
1890	418,665	18,890	10,978	16,131	5,780	25,322	886	84	26,292	1,415	304	1,719
1891	443,957	19,553	11,053	17,360	6,099	22,328	836	0	23,244	1,762	137	1,899
1892	466,315	20,439	11,173	18,775	6,403	22,661	817	81	23,559	1,737	0	1,743
1893	488,976	21,275	11,217	20,537	6,540	22,768	902	99	23,769	1,677	0	1,677
		22,092	11,298	22,274	6,546							

Respectfully submitted,

JOHN S. SEYMOUR,

Commissioner.

APPENDIX.

SCIENTIFIC LIBRARY, *December 30, 1893.*

SIR: I have the honor to forward herewith a report upon the history, scope, and present condition of the Scientific Library of the Patent Office.

This library may be said to have been founded by the act of Congress of March 3, 1839, appropriating \$1,000 from the Patent fund for the purchase of "necessary books" for the use of the Patent Office. Though a collection of books had previously existed, yet, even if it could properly be called a library, it perished in the fire which destroyed the building in December, 1836.

For the first fifteen years the library had a slow, neglected, and ill-recorded growth. It was feebly nourished on uncertain appropriations, the first of which was counter-appropriated by the Office in its need of repairs from the fire. About 1852 the solid history of the library begins. A much more liberal appropriation was made, and a librarian was secured of such qualifications that prosperity of the library under him would be of necessity. The name of this great scholar and faithful worker, W. W. Turner, may be singly mentioned from his primary position in the history. The library now began to be one of record, and to acquire the great sets of foreign patents, and technical periodicals on an adequate scale, as well as other matter, which have given it the peculiar character ever since borne. All development of the library as a collection has been simply on the lines laid out by Turner and his immediate followers.

The Congressional appropriation, always fluctuating, lapsed after a time into mere contingency, and purchase was more or less precarious. In 1876 the library numbered 33,500 volumes, but in 1879 a regular annual appropriation was obtained of \$5,000 until 1886, then of about \$2,500 until the past two years, during which it has suffered a scaling of \$500 each year to its present figure, \$1,500.

During these eighteen years the size of the library has nearly doubled, its number at the present time being 64,680 volumes. There are in addition about 1,000 unbound volumes not yet placed upon the shelves. About half of its periodicals are obtained by exchange; Government publications, trade catalogues, and the proceedings of some of the learned societies, by gift. Being a Government library of course it has no hope of those bequests and munificent donations which have enriched so many collections. No librarian of the Departments need await, with faith and what patience he may command, the good man's end which shall bestow the gift of thousands on his shelves. The Government library is supposed to take care of itself; and it does, with difficulties of its own. The boar of the Appropriations Committee doth waste it, and the wild beast of the Office doth choke it into dark corners. The arm of the Government is over it—with a chastening rod, oftentimes.

Designed as a collection for reference in the examination for applications for patents, in order to determine the question of novelty of invention, it has grown mainly in the direction of technological publi-

cations, including full sets of the periodicals devoted to special industrial art and all the more important treatises on machines, arts, processes, and products in the English, French and German languages.

Prominent among such works it contains a series of English patents from their beginning in 1617 to date, comprising upward of 5,000 volumes of text and plates; a series of French patents numbering about 900 volumes; 800 of German, and complete sets of Victoria, Queensland, Canada, New Zealand, Italy, Switzerland, Sweden, Russia, Austria, Norway, Belgium and Sardinia, each containing less than one hundred volumes, the whole aggregating more than half a million of individual patents. It contains also 1,531 volumes of literature relating to patents, including indexes and abridgments of foreign patents; 1,300 volumes of bibliographical works; 3,000 law books; 500 United States publications not of a strictly technical character, and about 1,300 volumes of the important English and American reviews, the subscription to which has been, some time since, discontinued. The classes above mentioned, together with encyclopedias of every description, works on pure science, specific and general, and medical works of which few purchases are now made but of which a large number were retained when the copyright collection was removed in 1870—comprise in round numbers 26,500 volumes; leaving for publications devoted to special arts about 38,000, very nearly equally divided between books and periodicals.

The library at the present time is believed to be closely adhering to its original purpose and unquestionably is the best technical library in this country; while a high authority of one of our leading universities has publicly stated that it has no superior in the world. It is a useful resort for the study of the application of science to art in every department and in all kinds of practical or utilitarian investigation. It aims to embody as far as possible the literature of Human Industry.

The books are freely opened for consultation in the library hall to all persons; but the freedom of the shelves and the privilege of withdrawal for study are limited to employees in discharge of official duties. It is largely and increasingly used by inventors, attorneys and all interested in patent business, as well as by men in all the walks of science, and especially by other scientific departments of the Government, who do not attempt as a rule to duplicate in their own collections the resources of this library.

The catalogue of the library as it now exists was founded by W. E. Jillson, who was librarian from 1856 to 1865. It was made on cards according to the rules of Jewett, then librarian of the Smithsonian Institution and whose system, adopted from that of the British Museum, has never been essentially superseded, the later and more elaborate rules being rather developments than change of organic structure. Library cataloguing, it may be properly mentioned, is an art of such requirements that the pithiest digest of the rules would make a pamphlet about as large as that of the Patent Office. This catalogue was first printed in 1878, containing authors and subjects in one alphabet. Additions were also printed in 1882

and in 1888. This last catalogue, in the matter of accuracy, is much in advance of the previous additions, the copy and proof having been exclusively under the charge of Mr. Farquhar, the accomplished reference librarian.

The catalogue since 1888 exists as a card catalogue representing 9,330 volumes. Every book received in the library is at once catalogued and the cards of author, subject, and cross-reference, alphabetized in their cases. For eight years past the catalogue has been entirely in the hands of one person, who is thoroughly trained in the theory and the artificialities of the subject, and for this reason especially, would, I believe, be free from many errors and inconsistencies to be found in the first and second issues. An interleaved copy of the catalogue is kept in the reading-room in which the printed additions are pasted, so that all thus far published may be found in one general alphabetical list.

In my judgment no more supplementary catalogues should be printed, both on account of their decreasing usefulness as they multiply and the defects of the original which serves as a foundation of the later series; but as soon as a sufficient appropriation can be given the whole should be thoroughly revised and combined from the beginning.

A duplicate set of patents is now received from every country which exchanges its printed specifications with the United States, and these immediately on arrival are distributed to the several Examining Divisions controlling that subject-matter.

One of the first subjects to come under the notice of the present librarian was the binding work of the library. This was found to be in an extremely bad condition, far behind date and bearing evidence of loose and careless management. Much time was devoted to this branch of library economy which has been thoroughly systematized, until now nearly every periodical received can be sent to the bindery within a month after the reception of title-page and index, subject only to the limitation of the Public Printer to handle the material. The necessities of the library require the binding of at least 1,000 volumes a year, but we have seldom been able to obtain the performance of so much work, and through no fault of its own the library is at the present time more than 500 volumes behind.

For three years past all the time which could be spared from the general supervision of the library has been devoted by the librarian to special efforts to make its resources available in the highest degree to the Office and to the public. To this end three full sets of French patents of the third series beginning with 1860 were obtained, and of these two sets were arranged by sub-classes of inventions, from 1860 to 1885, inclusive, following the French classification. One of these sets has been assigned to the Examiners according to the subject-matter, the other retained on the shelves of the library, which now has two complete sets of French patents since 1860, the one chronological and the other by subjects, the latter greatly facilitating search and examination. Current issues of German and English patents are now received in triplicate, and arrangements have been made for a

triplicate copy of back issues, with the intent of providing classified sets similar to the French. The lack of money to pay for the transportation has compelled us thus far to forego the advantages to be derived from this plan, and, with the present accommodation of the library, room could not be found for them if completed.

My attention was called at an early date to the indexing work of the library. The plan in vogue had been to take up single periodicals and index them from the beginning. Under this system I found indexes to the *Scientific American*, *Telegraphic Journal*, and *London Engineer* nearly completed. These had been stowed away in drawers inaccessible for use, parts of them for many years, as the attempts made for printing had failed by reason of the expense. The work on these journals was done at different periods by many different indexers, and therefore lacked uniformity and required a large amount of revision. It was determined to make these cards available for use and they were sent to the Library Bureau, punched, and the drawers fitted with guard-rods. While the revision of this work was in progress I became impressed with the inutility of the method for the production of wide and tangible results, and the necessity of making available to the Office its immense collection of technical and scientific periodicals. This necessity is more apparent when it is pointed out that *Poole's Index of Periodicals* utterly ignores all technical journals, and its successor takes up less than ten. An *Index of Engineering Periodicals* covering however, only nineteen journals, has been published in Boston in series of five years each. Two journals, one in Chicago and one in London, are now publishing indexes covering only the subject of engineering, and there is no index in the English language that makes any pretensions to do for Science and Technics the work that the magnificent *Index Catalogue of the Surgeon-General's Office* has done for Medicine. Rieth's *Repertorium der Technischen Journal-Literatur*, published under the auspices of the German Patent Office, is the only one which covers this field, but this of course is printed in German and singularly enough almost entirely ignores pure chemistry.

As it was impossible to go back and take up all the periodical literature of the library from the beginning, it was determined to commence with January 1, 1891, and index, as far as possible, all the periodicals received in the library. Sufficient force could not be obtained to include the whole list, and the work was begun and has been carried on by seven clerks, most of whom have other duties in connection with the work of the library. With this force we are now indexing 208 journals in English and Continental languages; in the classes of electricity, engineering, chemistry and photography, all the journals excepting a portion of the German are covered by the indexers. Having only one German translator, we are obliged to make a selection from the German periodicals. In other departments the principal journals in all languages have been selected, very little being omitted which is printed in English.

It has been said "that system is best which most appropriately and completely corresponds to the special

peculiarities and real needs of the library." The conditions which prevail in this library, which was established and is maintained primarily for the use of the Examining Corps, seemed to demand a subject-index which would afford the greatest facility for consultation by the Office force, patent attorneys and inventors, who form the great bulk of seekers for information from our shelves. This consideration has not only led to the adoption of the classified feature, but the structure has been reared upon the foundation of the Patent Office classification of inventions; a system which has been a growth, not an invention, empirical and unscientific in many details, but in its broad features admirably adapted to the needs of its users, and the most minutely specialized scheme in existence.

The plan adopted is in general the same as that of Rieth's *Repertorium*—that is, the principal subjects arranged alphabetically with a certain amount of classification. Each large subject is under leading headings, and these are subdivided, the divisions being marked by guide-cards of different colors. In distinction from the *Repertorium*, however, the alphabetical arrangement is repeated in each division and sub-division, a plan first used in Mr. Ezra Abbot's card catalogue of Harvard College library. In the ultimate subdivision, the cards are arranged alphabetically by authors, or by the principal word in anonymous articles. Each card contains the name of author, full title of the article, abbreviated title of the journal, and number of the year, volume and page. There will also be a cross-reference card to each division and subdivision placed in its proper alphabetical order, as a guide to all subjects which by the classification are removed from their natural place in the alphabet. For the principal headings zinc guides are used, for the first division a blue card with projection on the outer third, for the second a buff card with center projection, and for cross-references a white card with center projection. The cases are of the standard form furnished by the Library Bureau.

As there is very little prospect of the printing of this index, at least for a long time to come, all preparations have been made with a view to carrying it on as a card index open to the force of the Office and such of the general public as visit the library.

The duty of reviewing the periodicals and selecting the articles to be indexed falls wholly upon the librarian, and this, with the general work of the library, has so pressed upon the time necessary for completing the classification of the cards, that the date of opening the index to the public has been delayed much longer than was expected. The end is, however, now in sight, and I trust that within a few months this index which now comprises about 100,000 cards will be thrown open to the public, and will be found to greatly facilitate the search of the Examiners and other users of the library. As soon as this index is opened it is proposed to consolidate the cards of the three individual indexes before mentioned into one alphabet, and to change them from the present alphabetical arrangement to a classification following the same general system as that adopted in the current index. These are typical journals in the field covered by each, and through

them may be traced, in the *Scientific American*, the progress of general science since 1846; that of engineering since 1856 in the *Engineer*, and of electricity since 1873 in the *Telegraphic Journal*.

A resolution recently introduced by Senator McMillan has been referred to the Committee on the Library, providing that duplicates of copyrighted works on scientific and technical subjects may be distributed by the Librarian of Congress among the several Governmental libraries situated in Washington, with the privilege of recall whenever the original copy may be lost or defaced. This resolution, if enacted into law, would make a large saving in the expenditures for current American books, our only competitors being the library of the Engineer Corps and that of the Geological Survey. This resolution has been referred for report to Mr. Spofford, the Librarian of Congress, and his recommendation will doubtless be followed. He has asked librarians for an expression of views upon the subject, and our claims and the advantages which would accrue to us will be presented to him at an early day.

It is hardly necessary for me to call your attention to the needs of the library for money and space. Three years ago I said "the library has already passed the limit of its capacity, and devices of various degrees of demerit must be resorted to in making provision for the increasing store of books. This straitness is felt most severely in the foreign patent room, which crossed the danger line nearly a year [four years] ago. By putting the equivalent of a mansard roof upon eight cases, space has been obtained for the foreign patents for five years, this, however, at the expense of convenience in handling, a ladder now being necessary for high shelves."

As for the financial need of the library, I am sure that nothing said by me can add to the interest or solicitude which you have already expressed on this subject, or to the earnestness with which you are laboring for improved conditions. I will therefore only call your attention to the report lately furnished at your request, showing in addition to the necessity for an increased appropriation for the purchase of current books, the need of an expenditure of nearly \$10,000 to fill up broken sets of publications and to complete our stock of references on certain lines of invention. When the Surgeon-General's library can get \$7,000 for books and \$11,000 for printing and binding, it would seem, without detracting from the magnificent service which that library is rendering to medical bibliography, that more than \$1,500 might well be spared for the equally necessary work which this Office renders to the cause of invention.

This library, above all others, exists not for the dim future but for the living present. It is an armory whose every weapon is ready to battle against error and prejudice; a workshop whose tools are always sharp and whose anvils ring with sturdy blows for the uplifting of labor and the spread of prosperity through all the land; a storehouse filled with the garnered wealth of all ages, where every one, rich or poor, the wayfarer and the stranger, who hungereth and thirsteth for knowledge, may come and be filled.

The outlays for the fiscal year ending June 30, 1893, have been thus divided:

Appropriation	\$2,500.00
Books, law and technical	\$1,181.58
Periodicals and foreign serials	853.27
Transportation	465.15
	<u>2,500.00</u>

The employees under my charge have, with rare exceptions, rendered intelligent and earnest service during the year, many of the most faithful and deserving among them receiving salaries far below the merit of their work, and less than are paid for the same grade of talent in other Departments.

I append herewith a statement of the work per-

formed in the scientific library during the calendar year 1893:

Volumes sent to the bindery	1,000
Volumes collated and catalogued	1,598
Number of journals indexed	4,120
Number of articles indexed	27,371
Translations, miscellaneous	143
Number of words in patents translated	65,400
Letters received	373
Letters written	376
Circulars sent	624

Very respectfully,

HOWARD L. PRINCE,
Librarian.

Hon. J. S. SEYMOUR,
Commissioner of Patents.

ALPHABETICAL LIST

OF

PATENTEEES FOR THE YEAR 1893.

[Patentees of Designs, Trade-Marks, and Prints, and parties who have filed Disclaimers follow this in separate indexes, but precede the Alphabetical List of Inventions.]

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
A. C. Fairbanks Company. (See Fairbanks, Albert C., assignor.)						
A. G. Spalding & Brothers <i>et al.</i> (See Perkins, Albert, assignor.)						
A. L. Due Fireworks Company. (See Hebenstreit, Edward, assignor.)						
A. Mertes Manufacturing Company. (See Mertes, August, assignor.)						
Abbe, Richard W. F., Belleville, N. J. Pulverizing-machine	496,031	Apr. 25	2402	608	63	492
Abbé, Richard W. F., Brooklyn, N. Y. Grinding-mill	496,677	May 2	457	123	63	702
Abbee, Jerome, Reno, Nev. Stump-extractor	498,150	May 23	2821	706	63	1172
Abbey, Hartwell. (See Staber and Abbey.)						
Abbott, Albert R., Boston, Mass. Ticket-printing apparatus	490,939	Jan. 31	3145	807	62	690
Abbott, Alfred T., New York, N. Y. Temporary binder	491,833	Apr. 4	499	125	63	96
Abbott, Alfred T., New York, N. Y. Nail or spike	505,743	Sept. 26	2411	609	64	1761
Abbott, David S., and C. G. Redstone, Glean, N. Y. Condenser	500,701	July 4	268	73	64	50
Abbott, James L., Fort Lee, N. J. Bicycle speed-gearing	502,803	Aug. 8	952	232	64	756
Abbott, John G., and S. R. Robinson, Antrim, N. H. Folding crib	504,646	Sept. 5	533	137	64	1371
Abbott, Leonard G., Syracuse, N. Y., assignor of three-fifths to W. W. Guilford, West Medford, and R. E. Perkins, Salem, Mass. Garment-supporter	498,217	May 23	2940	732	63	1192
Abbott, Leonard G., Syracuse, N. Y., assignor of three-fifths to W. W. Guilford, West Medford, and R. E. Perkins, Salem, Mass. Catch for supporting stockings	498,218	May 23	2942	732	63	1192
Abbott Machine Company. (See Blodgett, John W., assignor.)						
Abbott, Robert, assignor of one-half to T. York, Portsmouth, Ohio. Dish-cover	508,198	Nov. 7	362	89	65	826
Abbott, Warren E., East Monroe, Ohio. Corn-harvester	504,188	Aug. 29	3210	800	64	1219
Abbott, William W., assignor to E. F. Barnes, New Haven, Conn. Mitering-machine	493,541	Mar. 14	1321	313	62	1611
Abel, George H., and J. W. Daly, Maxwell, Cal. Heading and reaping machine	491,629	Feb. 14	935	235	62	951
Abell, Bernard M., assignor to J. Goldberg, New York, N. Y. Coin-controlled machine for throwing dice	500,313	June 27	2619	639 640	63	1888
Abell, Bernard M., and W. Ostrander, New York, N. Y. Means for forming and ornamenting sheet-metal articles	493,005	Mar. 7	370	92	62	1432
Abell, Clara, Baldwinville, N. Y. Dishcloth-holder	504,647	Sept. 5	534	137	64	1371
Abell, Eugene A. (See Brewster and Abell.)						
Abell, Irvin H., assignor to East Hampton Bell Company, East Hampton Conn. Bell	505,284	Sept. 19	1601	416	64	1598
Abell, John, Toronto, Canada. Variable-cut-off engine	499,493	June 13	1360	300	63	1625
Abell, John, Toronto, Canada. Steam-engine	510,561	Dec. 12	1219	296	65	1653
Abell, Robert T., Cleveland, Ohio. Steam-engine	511,488	Dec. 26	2242	687	65	1777
Abelspiets, John F. C., Glasgow, Scotland. Musical instrument	497,939	May 23	2506	625	63	1116
Abenheim, Sidney, New York, N. Y. Shoe-polishing machine	489,907	Jan. 17	1417	367	62	323
Abercrombie, Alexander V., Bridgeport, Conn., and W. A. Mack, Cleveland, Ohio. Power-transmitter	508,075	Nov. 7	156	44	65	787
Abercrombie, Robert, Meaford, assignor of one-half to J. A. Rose, Essex, Canada. Sack-scale	502,265	Aug. 1	1	1	64	567
Åberg, Aloar, Helsingfors, Finland. Method of and apparatus for measuring electricity	502,454	Aug. 1	345	83	64	629
Aberg, Walfrid A., assignor to himself and H. F. Heimerle, New Westminster, Canada. Wrench	493,051	Mar. 7	435	110	62	1445
Abert, William B., and W. Scherer, Washington, D. C. Paint	491,003	Jan. 31	3248		62	710
Abney, Dite H., assignor of one-third to G. W. Rose, Kansas City, Mo. Shoe-lace fastening	493,202	Mar. 7	663	169	62	1489
Aborn, Frank, Cleveland, Ohio. Compass-joint	499,193	June 13	759	181	63	1537
Abraham, John H., assignor to Empire State Cigar Machine Company, Philadelphia, Pa. Cigar-bunching machine	506,615	Oct. 10	1391	349 350	65	279
Abram Cox Stove Company. (See Rankin, Thomas I., assignor.)						
Abrams, Emanuel V. (See Emig, Jacob, assignor.)						
Abrams, Ira D. (See Ruprecht, Frank, assignor.)						
Accles, James G. (See Grenfell and Accles.)						
Accumulator Company. (See Pfatscher, Mathias, assignor.)						
Ace, James T., Wilkes-Barré, Pa. Fire-box for forging	506,576	Oct. 10	1339	336	65	269
Acheson, Edward G., assignor to Carborundum Company, Monongahela City, Pa. Production of artificial crystalline carbonaceous materials	492,767	Feb. 28	2722	678	62	1340
Acheson, Samuel J., Plainfield, N. J. Ingrain carpet fabric	497,294	May 16	1477	373	63	917
Achtenhagen, Ferdinand, <i>et al.</i> (See Schroeder, Conrad, assignor.)						
Ackerman, Cordula, Pekin, Ill. Coffee-making pot or utensil	498,098	May 23	2748	687	63	1159
Ackerman, Elmer H. (See Hendershot and Ackerman.)						
Ackerman, William, and A. A. Hasselquist, Elgin, Ill. Wheeled scraper	509,278	Nov. 21	2134	513	65	1190
Ackermann, Wilhelm, Giebichenstein, near Halle-on-the-Saale, assignor to Grabau's Aluminium-Werke, Trotha, near Halle-on-the-Saale, Germany. Making aluminum fluoride	508,796	Nov. 14	1304		65	1020

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Ackfeld, Joseph. (See Laiminger and Ackfeld.)						
Ackles, Stephen S., Detroit, Mich. Station-indicator	500,457	June 27	2834	698	63	1926
Ackley, Foster E., Hamilton, Mo. Vaginal syringe	497,757	May 23	2223	557	63	1067
Acklin, Murray, Angel Island, Cal. Bicycle	510,227	Dec. 5	654	155	65	1534
Ackroyd, Thomas H. (See Ackroyd and Willoughby.)						
Ackroyd, William and T. H., Birkenshaw, and J. Willoughby, Gomersal, England. Smoke-consuming furnace	497,741	May 16	2177	544	63	1043
Acme Filter Company. (See Kraker, Michael, assignor.)						
Actien-Gesellschaft für Anilin Fabrikation. (See Diehl, Theodor, assignor.)						
Actien-Gesellschaft für Anilin Fabrikation. (See Diehl and Moeller, assignors.)						
Actien-Gesellschaft für Anilin Fabrikation. (See Moeller, Max, assignor.)						
Actien-Gesellschaft für Anilin Fabrikation. (See Schultz, Gustav, assignor.)						
Acton, John, New York, N. Y. Pressure-regulator	497,295	May 16	1480	373	63	917
Acton, William, Chicago, Ill., assignor to T. T. Wood, St. Joseph, Mich. Brick-machine	505,285	Sept. 19	1602	416 417	64	1398
Adair, Benjamin, and C. H. Klewer, Denver, Colo. Cut-out for Brush lamps	494,995	Apr. 4	726	184	63	139
Adair, Benjamin, and C. H. Klewer, Denver, Colo. Electric-arc lamp	508,392	Nov. 7	674	165	65	883
Adair, George, Rock Falls, Ill. Garden-cultivator, &c	504,189	Aug. 29	3212	800	64	1219
Adam, Carl, Königsberg, Germany. Gyroscopic toy	510,308	Dec. 5	779	189	65	1557
Adam, Edwin, and M. O. Rehfuß, Philadelphia, Pa.; said Rehfuß assignor to said Adam.	510,756	Dec. 12	1555	388 389	65	1716
Adam, Edwin, and M. O. Rehfuß, Philadelphia, Pa.; said Rehfuß assignor to said Adam.						
Sterilizing apparatus	510,757	Dec. 12	1557	389	65	1716
Adam, William J., Joliet, Ill. Portable granary	500,458	June 27	2836	693	63	1926
Adam, William J., Joliet, Ill. Portable crib	500,459	June 27	2837	698	63	1927
Adams, Abe L., Bridgeport, Conn. Auger-bit	503,224	Aug. 15	1654	406	64	898
Adams, Abe L., Bridgeport, Conn. Auger-bit	503,225	Aug. 15	1655	406	64	898
Adams, Abe L., Bridgeport, Conn. Auger-bit	504,261	Aug. 29	3323	831	64	1240
Adams, Alban H., Fort Meade, Fla. Hoop-cutting machine	508,264	Nov. 7	474	114	65	815
Adams, Alton D., St. Paul, Minn. Starting device for electric motors	503,568	Aug. 22	9209	553	64	1013
Adams, Austin, New York, N. Y. Bolt	504,262	Aug. 29	3324	831	64	1240
Adams, Austin, New York, N. Y. Latch	504,263	Aug. 29	3326	831	64	1241
Adams, Austin, Jr., Orange, N. J. Glass-tube cutter	505,211	Sept. 19	1486	383	64	1576
Adams, Benjamin D., assignor of one-half to J. H. Howard, Minneapolis, Minn. Lawn-mower	491,914	Feb. 14	1370	341	62	1038
Adams, Charles F. (See Griffin, Heber C., assignor.)						
Adams, Charles F., assignor of two-thirds to H. S. Green and E. A. Smith, Morrison, Ill. Electric-arc lamp	495,649	Apr. 18	1817	455	63	370
Adams, Charles P., Cleveland, Ohio. Steam-boiler	492,253	Feb. 21	1899	474	62	1160
Adams Company. (See Farwell, Fay O., assignor.)						
Adams, Cornele B., Augusta, Ga. Photogrammetry	510,758	Dec. 12	1559	389	65	1716
Adams, Cornele B., Augusta, Ga. Aerial camera	510,759	Dec. 12	1562	390	65	1717
Adams, Edmund H., Lamar, Mo. Plug-stopper	503,223	Aug. 22	2613	653	64	1089
Adams, Eleanor. (See Adams, John, assignor.)						
Adams, Eli H., Fitchburg, Mass. Railway time-signal	509,785	Nov. 28	3016	729	65	1370
Adams, Frederick U., assignor of one-half to R. S. McCormick, Chicago, Ill. Ventilating apparatus for railway-cars in trains	489,908	Jan. 17	1417	367 368 369	62	323
Adams, Frederick U., assignor of one-half to R. S. McCormick, Chicago, Ill. Air-supply device for railway passenger-cars	489,909	Jan. 17	1420	369	62	323
Adams, Frederick U., assignor of one-half to R. S. McCormick, Chicago, Ill. Air-supply device for railway-cars	489,910	Jan. 17	1422	370 371 372	62	324
Adams, Frederick U., assignor of one-half to R. S. McCormick, Chicago, Ill. Railway car and train	489,911	Jan. 17	1425	373 374 375	62	324
Adams, Frederick U., assignor of one-half to R. S. McCormick, Chicago, Ill. Railway-car	489,912	Jan. 17	1429	375 376	62	325
Adams, Frederick U., assignor of one-half to R. S. McCormick, Chicago, Ill. Locomotive and tender housing	490,057	Jan. 17	1693	440 441	62	377
Adams, George B., Irvington, N. J. Garment-supporter	489,702	Jan. 10	1101	284	62	244
Adams, George B., Irvington, N. J. Trousers-strap	510,875	Dec. 19	1807	447	65	1773
Adams, George E. (See Hunter, William N., assignor.)						
Adams, George E. (See Sullivan, James M., assignor.)						
Adams, George E., Providence, R. I. Glove-fastener	489,890	Jan. 10	1375	358	62	300
Adams, George E., Providence, R. I. Clasp	489,891	Jan. 10	1376	358	62	300
Adams, George E., Hartford, Conn. Clasp	496,629	May 2	374	102	63	687
Adams, George E., New Britain, Conn. Garment-supporter	496,630	May 2	376	102	63	688
Adams, George E., New Britain, Conn. Garment-supporter	499,773	June 20	1721	414	63	1718
Adams, George E., Providence, R. I., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Suspender-end cast-off	489,445	Jan. 10	717	193	62	167
Adams, George E., Providence, R. I., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Cast-off for suspender-ends	490,058	Jan. 17	1695	441	62	377
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Cast-off for suspender-ends	489,596	Jan. 10	954	248	62	213
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Cast-off buckle	491,630	Feb. 14	936	235	62	951
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Suspender-end cast-off	492,131	Feb. 21	1701	423	62	1119
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Pulley for garment-supporters	498,754	June 6	1	1	63	1389
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Buckle or metallic garment-supporter	507,704	Oct. 31	3265	798	65	664
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Buckle or metallic fastener	507,705	Oct. 31	3266	799	65	664
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Garment-supporter	507,871	Oct. 31	3539	870	65	716
Adams, George E., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Garment-supporter	508,076	Nov. 7	157	41	65	788
Adams, George F., Nashua, N. H., and J. S. Lynam, Winchester, Mass., assignors of one-third to C. S. Collins and I. F. Harris, Nashua, N. H. Railway-signal	490,220	Jan. 17	1962	514	62	431
Adams, George O., Firth, Nebr. Scull-propeller	503,026	Aug. 8	1325	325	64	824
Adams, George S., Red Lodge, Mont. Bob-sleigh	503,639	Aug. 22	2338	583	64	1095

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Prig.	Vol.	Page.
Adams, Granger, U. S. Army. Gate.....	511,034	Dec. 19	2067	512	65	1820
Adams, Henry, and H. Eisert, Baltimore, Md. Drying-furnace for brewers' grains, &c.....	507,085	Oct. 17	2165	536 537	65	433
Adams, Henry J., Topeka, Kans. Portable machinery for pumping water.....	500,460	June 27	2838	698 699	63	1927
Adams, James M. and M., Elkhart, Ind. Electrical transformer or induction device.....	506,577	Oct. 10	1341	336	65	269
Adams, James W., Chicago, Ill. Velocipede.....	496,388	May 2	1	1	63	619
Adams, John, assignor to E. Adams, Chicago, Ill. Latch and lock combined.....	501,474	July 11	1495	376 377	64	288
Adams, John H., Deering, assignor to himself, and E. H. Locke, Portland, Me. Thill-support.....	504,146	Aug. 29	3130	783	64	1204
Adams, John Q., Newton, Mass. Canceling, feeding, and locking device for ballot-boxes.....	503,025	Aug. 8	1319	323 324	64	823
Adams, John V. (See Bradley and Adams.)						
Adams, Julian. (See Weaver, Adams, and Hamilton.)						
Adams, Marshall L., Elroy, N. C. Fender for plows.....	493,236	Mar. 14	727	187	62	1519
Adams, Martin. (See Adams, James M. and M.)						
Adams, Nathaniel F., Boston, assignor of one-half to J. G. Robinson, Melrose, and H. Lougee, Newton, Mass. Cut-out.....	509,713	Nov. 28	2895	701	65	1346
Adams, Oscar C. C., et al. (See Eastman, Sylvester, assignor.)						
Adams, Phineas H., Montrose, assignor to L. W. Noyes, Chicago, Ill. Windmill.....	506,026	Oct. 3	346	92	65	68
Adams, Samuel E., Washington Court-House, Ohio. Tag-fastener.....	502,160	July 25	2602	654	64	520
Adams & Sons Company. (See Williams, John A., assignor.)						
Adams, Stephen J., Pittsburg, Pa. Sand mold.....	508,590	Nov. 14	1006	247	65	961
Adams, Stephen J., Pittsburg, Pa. Sand mold.....	511,284	Dec. 19	2486	606	65	1899
Adams, Thomas, Highland, N. Y. Folding bedstead.....	511,230	Dec. 19	2390	582	65	1882
Adams, Thomas, assignor to Hensel-Colladay Company, Philadelphia, Pa. Cord-covering machine.....	492,618	Feb. 28	2491	618	62	1293
Adams, Thomas E., Cleveland, Ohio, assignor to Brush Electric Company. Double-pole trolley.....	496,631	May 2	377	102	63	688
Adams, Thomas G., Chicago, Ill. Sad-iron.....	506,895	Oct. 17	1866	464	65	379
Adams, Thomas J., Aurora, Nebr. Automatic windmill-regulator.....	510,627	Dec. 12	1336	328	65	1674
Adams, Thomas P., Rico, Colo. Electric alarm-clock.....	495,287	Apr. 11	1241	310	63	247
Adams Tobacco Press Company. (See Hill, Thomas, assignor.)						
Adams, W. G. (See Benesh, Joseph, assignor.)						
Adams, Walter A., Hogan, Mont. Dish-cleaner.....	502,159	July 25	2601	654	64	520
Adams, Walter S. (See Brill and Adams.)						
Adams, Walter S., assignor to J. A. Brill, Philadelphia, Pa. Folding gate for car-platforms.....	507,092	Oct. 24	2185	541	65	449
Adams & Westlake Company. (See Giese, James A., assignor.)						
Adams & Westlake Company. (See Hitchcock, Charles A., assignor.)						
Adams & Westlake Company. (See Johnston, John S., assignor.)						
Adams & Westlake Company. (See Paterson, James W., assignor.)						
Adams, William G., and J. S. Forbes, Philadelphia, Pa. Valve.....	495,213	Apr. 11	1112	277 278	63	224
Adams, William H., Chicago, Ill. Car-attacher.....	496,215	Apr. 25	2685	673	63	545
Adams, William T., Reading, Pa. Mold for artificial teeth.....	488,976	Jan. 3	1	1	62	3
Adams & Williamson. (See Raymond, Perley B., assignor.)						
Adancourt, William F., Minneapolis, Minn. Drink-mixer.....	505,692	Sept. 26	2335	592	64	1748
Adcock, James L., W. L. Tippet, and H. G. Moss, Tar River, N. C. Car-coupling.....	508,265	Nov. 7	475	115	65	845
Adcox, Joseph E., Lebanon, Oreg. Jewel and pivot gage.....	502,648	Aug. 1	666	162	64	689
Addison, Cornelius N., Grand Haven, Mich. Broom-holder.....	502,843	Aug. 8	1020	249	64	769
Addyston Pipe and Steel Company. (See Anderson, Larz W., assignor.)						
Adee, Fred, Brooklyn, N. Y. Water-closet bowl.....	499,194	June 13	760	181	63	1537
Adelmann, Wolf, Jersey City, N. J. Swimming apparatus.....	496,105	Apr. 25	2521	637	63	515
Adeney, Walter E., Monkstown, and W. K. Parry, Dublin, Ireland. Purifying sewage.....	505,182	Sept. 19	1439	370 371	64	1567
Adkins, James M., and R. C. Berry, Indianapolis, Ind. Lock stop-cock.....	506,087	Oct. 3	446	117	65	87
Adkinson, James. (See Hull, Alfred A., assignor.)						
Adler, Abraham S., and W. S. Black, Baltimore, Md. Conformator.....	506,761	Oct. 17	1644	412	65	338
Adler, Dankmar. (See Armstrong, Charles G., assignor.)						
Adler, Joseph B., New York, N. Y. Nail.....	493,144	Mar. 7	579	145	62	1473
Adler, Joseph B., New York, N. Y. Screw.....	497,510	May 16	1829	461	63	979
Adler, Leon D., et al. (See Moskowitz and Young, assignors.)						
Adriance, Benjamin, Brooklyn, and G. E. Armstrong, New York, N. Y., assignors to Progressive Product Company, of New Jersey. Machine for treating fibrous material.....	499,409	June 13	1121	269 270	63	1600
Adriance, John E. (See Thompson, Sumner C., assignor.)						
Adsit, John O., Hornellsville, N. Y. Prescription-glass.....	493,851	Mar. 21	1740	442	62	1729
Adsit, John O., Hornellsville, N. Y., and C. H. Wickham, Tioga, Pa. Street-car.....	492,882	Mar. 7	175	42, 43	62	1393
Adt, John B., Baltimore, Md. Machine for cutting tobacco.....	498,454	May 30	3341	831 832	63	1280
Adt, John B., Baltimore, Md. Conveyer-belt.....	506,456	Oct. 10	1151	286	65	232
Aeberly, Jakob, St. Paul, Minn. Cattle-stall.....	502,599	Aug. 1	538	140	64	674
Aery, George W. (See Bunch, James M., assignor.)						
Agabeg, Frank J., Charanpore, India. Fan.....	489,913	Jan. 17	1433	377	62	326
Agin, Charles C., et al. (See Ricke, George H., assignor.)						
Agin, George W., Pekin, Ill. Screw-driver.....	503,569	Aug. 22	2210	553	64	1013
Agnew, Theodore. (See Gibson, Andrew K., assignor.)						
Agnew, William C., Creston, Ill. Horse-collar.....	491,065	Feb. 7	1	1	62	749
Agricola La Burt Manufacturing Company. (See La Burt, John, assignor.)						
Ahearn, Thomas, Ottawa, Canada. Electric warming-bottle.....	490,891	Jan. 31	3061	786	62	675
Ahern, James J., et al. (See Musham, William H., assignor.)						
Ahlstrand, Hugo, Everett, Mass. Music-leaf turner.....	499,195	June 13	761	181	63	1537
Ahne, Bernard W., Bayonne, N. J. Ruler for slates.....	500,046	June 20	2154	522	63	1794
Ahner, Cyrus S., Harmony, assignor of one-fourth to W. J. Steel, Zelienople, Pa. Sucker-rod clamp or wrench.....	492,380	Feb. 28	2097	523	62	1213
Ahrens, Alfred E., Stratford, Canada. Securing dental suction-valves to plates.....	506,762	Oct. 17	1647	412	65	338
Ahrens, Christopher, Cincinnati, Ohio, assignor to American Fire Engine Company, Seneca Falls, N. Y. Steam-boiler.....	495,868	Apr. 18	2164	542 543	63	432
Ahrens, John T., assignor of eleven-sixteenths to W. S. Knight, G. Hillsley, and F. E. Gallagher, Wilmington, Del. Loom-shuttle.....	496,766	May 2	593	159	66	726
Ahrens, Louis, et al. (See Bowen, Philip A., assignor.)						
Aichner, Johann, Brooklyn, N. Y. Carpenter's vise.....	504,856	Sept. 12	904	234	64	1455
Aiken, Albion P., Port Perry, Pa. Lifting-jack.....	490,221	Jan. 17	1963	514	62	431
Aiken, Albion P., Port Perry, Pa. Lifting-jack.....	509,565	Nov. 28	2667	646	65	1303

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Aiken, Henry, Pittsburg, Pa. Charging-crane	489,779	Jan. 10	1223	320 321 322	62	268
Aiken, Henry, Pittsburg, Pa. Crane	491,933	Feb. 14	1402	350		1414
Aiken, Henry, Pittsburg, Pa. Apparatus for straightening metal plates	492,951	Mar. 7	281	71, 72		1038
Aiken, Henry, Pittsburg, Pa. Tongs	498,498	May 30	3415	847 848 249 250	63	1292
Aiken, Henry, Pittsburg, Pa. Hydraulic motor	502,844	Aug. 8	1021	633 634		769
Aiken, Henry, Pittsburg, Pa. Crane	507,303	Oct. 24	2578	189	65	521
Aiken, Joseph D., Taftville, Conn. Bobbin-holder for spooling yarns	510,309	Dec. 5	780		65	1557
Aiken, William A. (See Applegath, William, assignor.) (Reissue.)						
Aiken, William A. (See Rogers, Woodbury O., assignor.)						
Ainbach, Franz F. von, Knittelfeld, Austria-Hungary. Manufacture of artificial stone	505,082	Sept. 19	1287		64	1541
Ainscough, Charles N., et al. (See Ainscough, Thomas A., assignor.)						
Ainscough, James, et al. (See Ainscough, Thomas A., assignor.)						
Ainscough, Thomas A., assignor of two-thirds to C. N. and J. Ainscough, Manchester, Eng- land. Railway-car brake	503,027	Aug. 8	1326	325 326	64	824
Ainsworth, Charles F., Horwich, and J. Haydock, Bolton, England. Lapping-machine	503,890	Aug. 22	2704	678		1107
Ainsworth, George W., Montpelier, Vt. Clothes-pounder	500,461	June 27	2839	699	63	1927
Ainsworth, Henry A., Moline, Ill., assignor to Williams, White & Company. Coal-chute	498,419	May 30	3276	816 817	63	1268
Ainsworth, Squire, Pittsburg, Pa. Continuous brick drying and burning machine	496,540	May 9	719	191		767
Air Brake Pressure Regulator Company. (See Dean, Ogden W., assignor.)						
Airey, George, Buffalo, N. Y. Spark-arrester and smoke-condenser for locomotives	495,387	Apr. 11	1390	347	63	275
Aitchison, James, Cleveland, Ohio. Oil-burner	510,149	Dec. 5	518	119 120	65	1507
Aitchison, James, and T. Bradley, London, England. Opera, field, marine, or other glass.	500,835	July 4	484	126		88
Aitchison, James, and T. Bradley, London, England. Construction of metallic volute coils.	501,815	July 18	2048	504	64	401
Ajax Lead Coating Company. (See Clamer, Francis J., assignor.)						
Akerman, John N., and F. Le Noir, Worcester, Mass. Trolley-wheel guard	507,641	Oct. 31	3173	777	65	647
Aker, Anton, Helena, Mont. Whim	497,291	May 9	1463	368	63	898
Aker, Anton, Helena, assignor of one-half to N. and J. Wagner, Rimini, Mont. Horse- power	503,640	Aug. 22	2339	583 584	64	1035
Akester, William H., London, England. Electric-arc lamp	491,915	Feb. 14	1372	342		1039
Akester, William H., London, England. Electric-arc lamp	491,916	Feb. 14	1373	342	62	1044
Akester, William H., London, England. Electric-arc lamp	496,386	Apr. 25	2979	743	63	602
Akester, William H., London, England. Electric-arc lamp	496,387	Apr. 25	2980	744	63	602
Akey, D. L., et al. (See Godfrey, Wyman H. A., assignor.)						
Akin, Myron H., et al. (See Mable, William, assignor.)						
Akins, Lest. (See Goodenberger and Akins.)						
Akron Tool Company. (See Bowen, Charles A., assignor.)						
Akron Tool Company. (See Morey, Albert E., assignor.)						
Aktiebolaget Radiator. (See Salenius, Erik G. N., assignor.)						
Aktiebolaget Separator. (See Bernström, John, assignor.)						
Aktiebolaget Separator. (See Folk, Jesse E., assignor.)						
Aktiebolaget Separator. (See Hart, Frederick, assignor.)						
Aktiebolaget Separator. (See Jönsson and Berg, assignors.)						
Al. Hugo Lhota, House of. (See Klár, Karel, assignor.)						
Aladdin Camera Company. (See Davidson, Joseph A., assignor.)						
Alaska Refrigerator Company. (See Vierck, William J., assignor.)						
Albach, William H., Mansfield, Ohio. Package-carrier apparatus	501,035	July 4	786	206	61	143
Albach, William H., assignor to Barr Cash and Package Carrier Company, Mansfield, Ohio. Cash and parcel carrier apparatus	490,093	Jan. 17	1749	456	62	390
Albach, William H., assignor to Barr Cash and Package Carrier Company, Mansfield, Ohio. Turnbuckle	500,836	July 4	484	126	64	88
Albee, Honestus M., Newark, N. J. Woodworking-machine	505,805	Oct. 3	1	1	65	3
Albee, William H., New York, N. Y. Paper-file	500,837	July 4	485	127	64	88
Albert, Charles F., Jr., Philadelphia, Pa. Banjo-bridge	503,396	Aug. 15	1931	480	64	948
Albert, Clay B., Carrollton, Mo. Clothes-line	505,016	Sept. 12	1165	299	64	1504
Albert, David L., Fort Bragg, Cal. Mechanical calculating device	502,217	July 25	2693	680	64	538
Albert, George B. (See Stafford, Benjamin D., assignor.)						
Albert, H. & E. (See Meyer, Theodor, assignor.)						
Albertsen, Albert C., assignor of one-half to L. H. Owen, Chicago, Ill. Elevated rail- way	496,505	May 2	174	49	63	651
Albertson, William R., Worcester, and N. B. Briggs, Rockland, Mass.; said Briggs assignor to said Albertson. Coloring and burnishing composition	501,311	July 11	1230		64	238
Albertson, William R., Worcester, and N. B. Briggs, Rockland, Mass.; said Briggs assignor to said Albertson. Coloring and burnishing composition	501,312	July 11	1231		64	238
Albes, Theodore, et al. (See Treacy, Laurence J., assignor.)						
Albin, Elmer E., et al. (See Broome, Henry, assignor.)						
Albinson, James E., Washington, D. C. Portable sprayer	489,780	Jan. 10	1226	321	62	269
Albrecht, Antonius C., assignor to North Brothers Manufacturing Company, Philadelphia, Pa. Egg-beater	495,925	Apr. 18	2245	565 566	63	448
Albrecht, Herman S., St. Louis, Mo. Machine for disintegrating clay, ores, &c.	504,689	Sept. 5	615	157		1386
Albrecht, Herman S., St. Louis, Mo. Apparatus for making artificial fuel	510,228	Dec. 5	655	155 156	65	1534
Albright, Harry W., and S. B. Lenhart, Maytown, Pa. Gate for railway-crossings	502,341	Aug. 1	148	345		592
Albro, Charles E., Philadelphia, Pa. Safety-clutch for elevators	501,396	July 11	1390	348	61	266
Albro, Charles E., Philadelphia, Pa. Hoisting mechanism for elevators	502,600	Aug. 1	590	141	64	674
Alden, Clarence. (See Young and Alden.)						
Alden, David A., assignor of one-half to C. S. Mersick, New Haven, Conn. File holder or drawer	499,001	June 6	454	106	63	1470
Alden, John F. (See Gear, Samuel W., assignor.)						
Alden Type Machine Company. (See Johnson, Louis K., assignor.)						
Alderson, William A., et al. (See Livengood, Chadbourne, and Gibbons, assignors.)						
Alderson, William H., Wittington, near Manchester, England. Illuminated clock	502,161	July 25	2604	655	64	520
Alderson, William N. B., assignor of one-half to E. R. Ray, Eureka Springs, Ark. Device for testing and handling eggs	505,429	Sept. 26	1847	475	64	1657
Aldrich, Aaron, Waterbury, Conn. Lawn-mower	506,457	Oct. 10	1152	286	65	233
Aldrich, Alonzo, Beloit, Wis. Press-roll stand for paper-making machines	499,696	June 20	1581	381	63	1695
Aldrich, Alonzo, Beloit, Wis. Paper-making machine	502,266	Aug. 1	2	1	64	567

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Aldrich, Charles F., Pittsburg, N. H. Scraper	501,858	July 18	2106	520	64	412
Aldrich, Henry E., Boston, Mass., assignor, by mesne assignments, to Postal Improvement Company, Norristown, Pa. House-door letter-box	491,509	Feb. 14	743	189	62	911
Alessandro, Benvenuto B. d', Paris, France. Apparatus for calming the waves of the sea	499,319	June 13	944	228	63	1569
Alexander, Abram, Jr., Allegheny, Pa. Cuff-holder	496,841	May 9	720	191	63	767
Alexander Brothers. (See Lewin, Jacob, assignor.)						
Alexander, David, <i>et al.</i> (See Harper, Thomas, assignor.)						
Alexander, Elmer P., Yeagertown, Pa. Heater for incubators	502,899	Aug. 8	1114	274	64	782
Alexander, Frederick, <i>et al.</i> (See Lancaster, John P., assignor.)						
Alexander, George, New Philadelphia, Ohio. Wire-nail machine	496,389	May 2	4	1	63	619
Alexander, Henry, Portland, Me. Pipe-tongs	508,591	Nov. 14	1008	248	65	961
Alexander, Henry D., Canton, Ohio. Vegetable-slicer	506,088	Oct. 3	447	117	65	87
Alexander, Horace C., Bonham, Tex. Churn	491,917	Feb. 14	1376	343	62	1039
Alexander, Hugh, Brooklyn, N. Y. Electric-arc lamp	498,604	May 30	3583	887	63	1322
Alexander, James, Lakeview, Idaho. Animal-trap	499,079	June 6	579	138	63	1492
Alexander, John A., assignor of one-half to J. M. Alexander, Ardmore, Indian Ter. Vehicle-step	493,373	Mar. 14	954	245	62	1561
Alexander, John A., assignor of one-half to J. M. Alexander, Ardmore, Indian Ter. Spring-seat for vehicles	500,789	July 4	409	107	64	76
Alexander, John G. (See Jester and Alexander.)						
Alexander, John M. (See Alexander, John A., assignor.)						
Alexander, John W. (See Timmerman, William T., assignor.)						
Alexander, Morton, Ireland, Ind. Fruit-gatherer	508,905	Nov. 21	1523	371	65	1073
Alexander, Reece H., Fort Wayne, Ind. Steam-generating-boiler furnace	491,918	Feb. 14	1377	343	62	1039
Alexander, Samuel M., Bentonville, Ark. Combined garden-tool	508,393	Nov. 14	687	169	65	899
Alexander Smith & Sons Carpet Company. (See Tymeson and Ducros, assignors.)						
Alexander, Ulysses H., Wilmington, Del. Guide-block for running wire	504,190	Aug. 29	3213	800	64	1219
Alexander, William W., Kansas City, Mo. Electric switch	506,297	Oct. 10	865	214	65	176
Alford, Albert, Chicago, Ill. Cigar-moistener	493,347	Mar. 14	909	233	62	1551
Alfred, Chauncey C., Fairfax, Va. Sugar-evaporating pan	489,622	Jan. 10	987	258	62	220
Algeo, Charles C., Philadelphia, assignor of one-half to A. H. Mueller, Narberth, Pa. Ink-stand	497,087	May 9	1119	287	63	838
Alger, Albert W., Kansas City, Mo. Stove	490,531	Jan. 24	2474	637	62	544
Alger, Albert W., Kansas City, Mo. Stove	507,093	Oct. 24	2187	541	65	449
Alger, William P., assignor to C. C. Kelly, West Troy, N. Y. Tool for dressing emery-wheels	498,220	May 30	2949	735	63	1209
Allaays, Honoré B., Frenchtown, Mont. Making mosaics	490,467	Jan. 24	2368	612	62	523
Allan, Andrew A., Boston, Mass. Siphon-regulator for water-closet tanks	509,855	Dec. 5	1	1	65	1411
Allan, Edward T., assignor of seven-tenths to A. Godshaw, Cincinnati, Ohio, and T. James, Newport, Ky. Button for shoes or other articles	490,595	Jan. 24	2559	659	62	561
Allan, Edward T., assignor of seven-tenths to A. Godshaw, Cincinnati, Ohio, and T. James, Newport, Ky. Machine for securing buttons to fabrics	490,619	Jan. 24	2603	671	62	570
Allan, John R., Boston, Mass. Ball-cock for tanks for water-closets, &c.	503,339	Aug. 15	1846	457	64	931
Allan, John W., assignor of three-fourths to R. Ehrenberg and A. H. Runge, Minneapolis, Minn. Wagon-brake	489,175	Jan. 3	291	81	62	67
Allard, Charles H., Quincy, Ill. Penman's rest	502,218	July 25	2694	680	64	538
Allderdice, Taylor, Swissvale, assignor to Carnegie Steel Company, Limited, Pittsburg, Pa. Manufacturing steel	491,035	Jan. 31	3313		62	724
Allderdice, William H. (See Allderdice, Winslow, assignor.)						
Allderdice, Winslow, Warren, Ohio, assignor to W. H. Allderdice, Washington, D. C. Apparatus for distilling water	497,742	May 16	2177	544	63	1043
Allderdice, Winslow, Warren, Ohio, assignor to W. H. Allderdice, Washington, D. C. Water purifier and cooler	497,743	May 16	2179	545	63	1043
Allen, Albert A. (See Bowman, Ohmart, and Allen.)						
Allen, Albert W. (See Denison, Charles H., assignor.)						
Allen, Alexander S., assignor to J. W. Griswold, Troy, N. Y. Device for forming wire bale-ties	507,642	Oct. 31	3175	777	65	647
Allen, Alfred J., Essex, Canada, assignor to S. H. and J. D. Randall, Wyoming, Ohio. Leather-skiving machine	500,838	July 4	486	127	64	89
Allen, Ambrose, Medicine Lodge, Kans. Baker's oven	511,396	Dec. 26	2696	653	65	1950
Allen, C. A., <i>et al.</i> (See Trautman, Adam, assignor.)						
Allen, Chancellor C. (See Crockett and Allen.)						
Allen, Charles, and S. Goulden, Newark, N. J. Table-bell	495,650	Apr. 18	1822	456	63	371
Allen, Charles L., Pewaukee, Wis. Adjustable bag-holding device	506,896	Oct. 17	1867	465	65	379
Allen, Charles M., Butte, Mont., assignor of one-half to W. J. Chalmers, Chicago, Ill., and L. C. Trent, Salt Lake City, Utah Ter. Smelting ores and refining metals	496,032	Apr. 25	2403	608	63	493
Allen, Charles M., Butte, Mont., assignor of one-half to W. J. Chalmers, Chicago, Ill., and L. C. Trent, Salt Lake City, Utah Ter. Converter	496,033	Apr. 25	2405	608	63	493
Allen, Charles M., Butte, Mont., assignor of one-half to W. J. Chalmers, Chicago, Ill., and L. C. Trent, Salt Lake City, Utah Ter. Tuiere	496,034	Apr. 25	2406	609	63	493
Allen, Charles O., Grand Rapids, Mich. Carpet-sweeper	503,107	Aug. 8	1451	357	64	847
Allen, Courtland H., Sr., Chattanooga, Tenn. Boiler-furnace	501,907	July 25	2203	549	64	445
Allen, David H. (See Gamble and Allen.)						
Allen, Dwight, assignor to That Manufacturing Company, Le Mars, Iowa. Soft soap	501,036	July 4	788		64	144
Allen, Edward H., Cramer Hill, N. J., assignor of two-thirds to W. A. Barrett, Jr., Philadelphia, Pa. Electric-railway trolley	498,046	May 23	2673	668	63	1145
Allen, Ethan. (See Huyck, Leonard W., assignor.)						
Allen, Frank B., Salt Lake City, Utah Ter. Steam-engine	496,966	May 9	935	245	63	806
Allen, George C., assignor of one-half to C. Sproat, Taunton, Mass. Stovepipe attachment	507,094	Oct. 24	2189	541	65	450
Allen, George H., <i>et al.</i> (See Tonns, Lewis N., assignor.)						
Allen, George H., Fall River, assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing	506,616	Oct. 10	1393	350	65	279
Allen, George H., Fall River, assignor to G. Draper & Sons, Hopedale, Mass. Spindle and bearing therefor	511,719	Dec. 26	3212	787	65	2045
Allen, George R., assignor of one-half to C. M. Schmitt, Buffalo, N. Y. Wax-thread sewing-machine	510,951	Dec. 19	1939	473	65	1797
Allen, Henry A., assignor to Eaton & Prince Company, Chicago, Ill. Regulating-switch for electric elevators	509,279	Nov. 21	2138	513	65	1191
Allen, Henry L. (See Pullman, Herbert S., assignor.)						
Allen, Isaac, La Belle, Mo. Hay-stacker	497,160	May 9	1235	314	63	859

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Allen, J. W., <i>et al.</i> (See Avery, Oliver, assignor.)						
Allen, J. W., Richford, N. Y. Chopping-knife.	496,809	May 2	671	177	63	738
Allen, James A. (See McCaslin, Irving A., assignor.)						
Allen, John F., New York, N. Y. Surface condenser.	495,128	Apr. 11	981	245 246	63	200
Allen, Levi G., Sandy Creek, N. Y. Billet-loop.	498,221	May 30	2950	735	63	1209
Allen, Morris W., Eldon, Mo. Heel for boots or shoes.	497,153	May 9	1232	314	63	858
Allen, Noble. (See Warner, George B., assignor.)						
Allen, Norman, Rockaway Beach, N. Y. Toy.	497,159	May 9	1233	314	63	858
Allen, Oscar M., Sr., <i>et al.</i> (See Harris, Levi, assignor.)						
Allen, Peter W., assignor of one-half to F. S. Rainey, Pueblo, Colo. Hose pliers.	507,872	Oct. 31	3540	870	65	716
Allen, Reuben L., Providence, R. I. Spring-check.	498,099	May 23	2749	687	63	1159
Allen, Russell, <i>et al.</i> (See Whiteley, Albert M., assignor.)						
Allen, Samuel L., Cinnaminson, N. J. Pulverizer and leveler.	493,958	Mar. 21	1918	489	62	1762
Allen, Samuel L., Cinnaminson, N. J. Seed-planter and fertilizer-distributor.	509,856	Dec. 5	2	1	65	1411
Allen, Samuel L., Cinnaminson, N. J. Cultivator.	509,857	Dec. 5	5	1, 2	65	1412
Allen, Standhope I., Crossville, Ala. Vehicle-brake.	510,667	Dec. 12	1411	347 348	65	1688
Allen, Theodore B., Brooklyn, N. Y. Machine for hackling and preparing fibers.	504,648	Sept. 5	535	137	64	1371
Allen, Thomas H., Toronto, Canada. Railway-brake.	506,298	Oct. 10	867	214	65	177
Allen, Wash. J. (See Jewett, David W., assignor.)						
Allen, William. (See Jones, John M., assignor.)						
Allen, William, assignor of one-half to L. H. Finch, Greenwich, N. Y. Metallic crook for stone-boats.	500,363	June 27	2699	662	63	1902
Allen, William E., Providence, R. I., assignor to Sawyer Spindle Company, Hopedale, Mass. Spindle and its support.	494,453	Mar. 28	2739	687	62	1929
Allen, William V., Chico, Cal. Transporting logs.	504,191	Aug. 29	3215	801	64	1220
Allenberg, Albert. (See Grosch, Allenberg, and Buerling.)						
Allenberg, Leo, <i>et al.</i> (See Forbes, George H., assignor.)						
Allerton, Rufus K., <i>et al.</i> (See Stiles, Frederic, assignor.)						
Alleston, Louis M., Amenia, and G. B. Chapman, Dover Plains, N. Y. Wagon-jack.	511,182	Dec. 19	2316	567	65	1868
Allfree, James B., Indianapolis, Ind. Metallic conveyer.	505,806	Oct. 3	3	1	65	3
Allgaier, George E., Hillsborough, Tex. Clothes-pounder.	496,506	May 2	176	49	63	651
Allgemeine Elektrizitäts Gesellschaft. (See Dolivo-Dobrowolsky, Michael von, assignor.)						
Allgear, Nelson, Syracuse, N. Y. Machine for edging razors, &c.	492,910	Mar. 7	223	56	62	1402
Allgire, James R., Indianapolis, Ind., assignor to F. H. McKinnie, Pittsburg, Pa. Machine for cutting and printing veneer-package blanks.	506,837	Oct. 17	1767	444	65	360
Allin, Samuel S., London, England. Combined door-check and spring.	505,744	Sept. 26	2412	610	64	1762
Allingham, James. (See Allingham, William and J.)						
Allingham, William, El Cajon, Cal., and J. Allingham, Minneapolis, Minn. Stalk-cutting machine.	508,906	Nov. 21	1524	371	65	1073
Allis, Abram Q., assignor of one-third to H. T. Wurth and T. H. Flynn, Prattsburg, N. Y. Oil-stove.	489,138	Jan. 3	236	65	62	54
Allis, John, Lowville, N. Y. Apparatus for supplying water to animals.	492,568	Feb. 28	2407	600	62	1278
Allis, Thomas V. (See Jordan, Edmund, assignor.)						
Allis, Thomas V. (See Templin, Joseph H., assignor.)						
Allis, Thomas V., New York, N. Y. Barbed fencing.	501,129	July 11	956	244	64	189
Allis, Thomas V., New York, N. Y. Making barbed fencing.	505,693	Sept. 26	2336	592	64	1749
Allis, Thomas V., New York, N. Y. Making metallic fencing.	507,197	Oct. 24	2395	590	65	487
Allis, Thomas V., New York, N. Y. Making barbed fencing.	507,198	Oct. 24	2398	591	65	487
Allison, James F., Trinity, assignor of one-half to V. O. Hawkins, Decatur, Ala. Churn.	492,499	May 30	3417	848	63	1293
Allison, James L., Waddington, N. Y., and R. G. Nash, Morrisburg, Canada. Centrifugal dredging-machine.	494,094	Mar. 21	2149	549	62	1805
Allison, John H., Elkhart, Ind., assignor of one-half to J. G. Rich, Auburn, N. Y., and D. G. Reed, Richmond, Ind. Electric-railway trolley-switch.	503,570	Aug. 22	2211	553	64	1013
Allison, John W., Philadelphia, Pa. Draw-rigging for cars.	510,828	Dec. 12	1678	417	65	1738
Allison, Robert, Port Carbon, Pa. Governor for steam-engines.	492,254	Feb. 21	1900	474	62	1161
Allison, Samuel B., assignor to American Fibre Company, New Orleans, La. Fiber-separating machine.	493,852	Mar. 21	1741	443 444	62	1729
Allison, Samuel B., assignor of one-half to S. L. Gilmore, New Orleans, La. Dust and cinder guard for railway-car windows.	496,767	May 2	595	159	63	726
Allison, William D., assignor to Western Electric Company, Chicago, Ill. Test system for multiple switchboards.	503,115	Aug. 15	1475	363	61	865
Alfred, Elijah H., Randleman, assignor of one-tenth to W. C. Hammer, Ashborough, N. C. Steam-engine.	500,462	June 27	2840	699	63	1927
Alfred, Lemuel O., Palestine, Tex. Measuring and drawing tool.	496,714	May 2	508	136	63	712
Allshouse, Clarence E. (See Peck and Allshouse.)						
Allyn, Isaac W., Lansdowne, Pa. Horseshoe-fastening.	503,397	Aug. 15	1932	480	64	948
Almack, John W., and C. D. Ferguson, Coshocton, Ohio. Druggist's cabinet.	506,147	Oct. 3	551	143	65	107
Almy, James F., Salem, Mass. Ventilator.	495,288	Apr. 11	1242	310	63	248
Alpaugh, Ephraim, Galt, Canada. Bin for flour, meal, &c.	489,552	Jan. 10	887	232	62	201
Alpaugh, Ephraim, Galt, Canada. Churn.	493,006	Mar. 7	372	93	62	1432
Alrich, William A., Perryman, Md. Grapple for baskets, &c.	507,056	Oct. 17	2123	527	65	426
Altamus, Jacob K., <i>et al.</i> (See Zimmermann, John, assignor.)						
Altamus, William W., <i>et al.</i> (See Zimmermann, John, assignor.)						
Althen, Fredrick W., Rome, Ohio. Forge.	490,732	Jan. 31	2810	721	62	625
Althoff, William F., and J. H. Stokesbury, Denver, Colo. Oil-cup.	491,830	Feb. 14	1238	309	62	1012
Althouse, Albert C., Hagersville, Pa. Hedge-trimmer.	496,035	Apr. 25	2407	609	63	493
Althouse, Milo J., Waupun, Wis. Car-coupling.	491,503	Feb. 7	719	182	62	887
Althouse, Milo J., Waupun, Wis. Car-coupling.	491,504	Feb. 7	721	182	62	887
Altman, George W., Marion, Ind. Button-setting machine.	503,891	Aug. 22	2705	678	64	1107
Altman, Henry, <i>et al.</i> (See Flohr, Otto, assignor.)						
Altman, William H. (See Bernhardt, Charles, assignor.)						
Altman, Arthur, Rostock, assignor to S. Gray, Cologne, Germany. Track-gage.	490,705	Jan. 31	2772	712	62	618
Altorfer, Gustav G. (See Payne, William H., assignor.)						
Amblor, Augustin I., assignor to R. N. Amblor, Washington, D. C. Electric locomotive.	504,484	Sept. 5	278	72	64	1322
Amblor, Roseline N. (See Amblor, Augustin I., assignor.)						
Amblor, Russell P., De Funiak Springs, Fla. Propeller.	502,061	July 25	2441	613	64	488
Ambruster, Joseph H., St. Louis, Mo. Extension copy-holder and rest.	489,518	Jan. 10	845	220	62	192
Amelotte, Paul, Spencer, Mass. Horseshoe-removing tool.	503,935	Aug. 29	2779	697	64	1139
Amend, Otto P., New York, N. Y. Dyeing anilin black.	499,410	June 13	1124		63	1601
Ament, Elzie, Rogers Park, assignor of one-half to C. W. Ross, Aurora, Ill. Sash-fastener.	505,341	Sept. 19	1689	435	64	1614
Ament, James E., Carroll, Iowa, assignor of one-half to F. W. Brooks, Blandinsville, Ill. Car-coupling.	508,797	Nov. 14	1305	324	65	1020

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American and Continental Sanitas Company. (See Woodcock and Kingzett, assignors.)						
American Arithmometer Company. (See Burroughs, William S., assignor.)						
American Bell Telephone Company. (See Ford and Lenfest, assignors.)						
American Bell Telephone Company. (See Jacques, William W., assignor.)						
American Bell Telephone Company. (See May, Edmund S. C., assignor.)						
American Bell Telephone Company. (See McQuarrie, James L., assignor.)						
American Bell Telephone Company. (See O'Connell, Joseph J., assignor.)						
American Bell Telephone Company. (See Spencer, Theodore, assignor.)						
American Bell Telephone Company. (See Stour, John S., assignor.)						
American Bell Telephone Company <i>et al.</i> (See Lockwood and Larned, assignors.)						
American Butter Machine Company. (See Boynton, Edward S., assignor.)						
American Cap Company. (See Rodgers, Samuel, assignor.)						
American Carbonate Company. (See Endemann, Hermann, assignor.)						
American Carving and Manufacturing Company. (See Morgencier, Robert, assignor.)						
American Change and Register Company. (See Travis, Charles L., assignor.)						
American Cordage Company. (See Fellowes, Ernest T., assignor.)						
American Dress Stay Company. (See Bray, Isabella, assignor.)						
American Electric Heating Company. (See Coffin, Charles L., assignor.)						
American Electric Heating Company. (See Cook, Samuel M., assignor.)						
American Electric Heating Company. (See Jenkins, Samuel B., assignor.)						
American Electric Heating Company. (See Mitchell, Willis, assignor.)						
American Electric Train and Switch Signal Company. (See Miller, George E., assignor.)						
American Fibre Company. (See Allison, Samuel B., assignor.)						
American Fiber Extracting Company. (See Weicher, John J., assignor.)						
American Fire Engine Company. (See Ahrens, Christopher, assignor.)						
American Fuel Economizer and Engineering Company. (See Burpee, George H., assignor.)						
American Harrow Company. (See Owenshire, Elijah A., assignor.)						
American Incinerating Company. (See Dowling, North, assignor.)						
American Lead Company. (See Browne, Arthur B., assignor.)						
American Lightning Protection Company. (See Hodges, Nathaniel D. C., assignor.)						
American Magnetic Electric Company. (See Humans, William, assignor.)						
American Malt Manufacturing Company. (See Baker and Free, assignors.)						
American Meter Company. (See Logue, Hugh, assignor.)						
American Napping Machine Company. (See Leech and Himelspark, assignors.)						
American Novelty Manufacturing Company. (See Beehler, Charles W., assignor.)						
American Nut Lock Company. (See Herman, John C., assignor.)						
American Nut Lock Company. (See Read, Alfred H., assignor.)						
American Optical Company. (See De Celles and Wells, assignors.)						
American Patents Company. (See Bennett, Jesse, assignor.)						
American Perfuming Machine Company. (See Busenbenz, Jacob J., assignor.)						
American Phosphate and Chemical Company. (See Hoffmann, Philip C., assignor.)						
American Postal Machines Company. (See Ethridge, Martin V. B., assignor.)						
American Radiator Company. (See Mann, Ernest E., assignor.)						
American Safety Car Coupling Company. (See Welch, Michael I., assignor.)						
American Saw Company. (See Brooke, William E., assignor.)						
American Saw Company. (See Putnam, Samuel W., assignor.)						
American Ship Windlass Company. (See Bryant and Victor, assignors.)						
American Ship Windlass Company. (See Whitney, Edwin H., assignor.)						
American Shoe Tip Company. (See Dixon, George W., assignor.)						
American Silican Company. (See Jones, John K., assignor.)						
American Silican Company. (See McIlvried, James R., assignor.)						
American Soda Fountain Company. (See Kelsey, Benjamin F., assignor.)						
American Soda Fountain Company. (See Lippincott, Fisher H., assignor.)						
American Soda Fountain Company. (See Puffer, Alvin D., Jr., assignor.)						
American Spring Company. (See Procnier, Henry E., assignor.)						
American Telephone and Telegraph Company. (See Dunbar, Francis W., assignor.)						
American Telephone and Telegraph Company. (See Dunbar and May, assignors.)						
American Telephone and Telegraph Company. (See Hall, Edward J., assignor.)						
American Telephone and Telegraph Company. (See Hall and Pickernell, assignors.)						
American Telephone and Telegraph Company. (See Larned and Pickernell, assignors.)						
American Telephone and Telegraph Company. (See Perrin, Frederic S., assignor.)						
American Telephone and Telegraph Company. (See Pickernell, Frank A., assignor.)						
American Telephone and Telegraph Company. (See Pickernell and Dunbar, assignors.)						
American Telephone and Telegraph Company <i>et al.</i> (See Lockwood and Larned, assignors.)						
American Terra Cotta and Ceramic Company. (See Babcock, Fred L., assignor.)						
American Tire Company. (See Hnss, Rudolph W., assignor.)						
American Tobacco Company. (See Whitlock, Philip, assignor.)						
American Typewriter Company. (See Valiquet, Louis P., assignor.)						
American Waltham Watch Company. (See Duncan, Harrie E., assignor.)						
American Waltham Watch Company. (See Wood, Gleason, assignor.)						
American Washboard Company. (See Sargent, James T., assignor.)						
American Writing Machine Company. (See Carthy, Florence M., assignor.)						
Ames, Albert C., Chicago, Ill. Driving mechanism for road-vehicles.....	500,544	July 4	1	1	64	3
Ames, Albert C., Chicago, Ill. Traction-Engine.....	505,151	Sept. 19	1390	{ 356 357 }	{ 64 }	1558
Ames, Alden T. (See Fulton and Ames.)						
Ames, Charles D., Portland, Ind., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Tub or Pail Making Machinery.....	491,157	Feb. 7	151	39	62	778
Ames, Charles L. (See Morrison and Ames.)						
Ames, Emerson, assignor of one-half to H. E. Ames, Washington, D. C. Covered bucket or other vessel.....	493,145	Mar. 7	580	145	62	1473
Ames, Ernest M. (See Ames, Nathaniel, assignor.)						
Ames, Fisher, Newton, Mass. Playing-card.....	491,302	Feb. 7	400	103	62	823
Ames & Frost Company. (See Morrison and Ames, assignors.)						
Ames & Frost Company. (See Pease, Charles F., assignor.)						
Ames, Hobart, Easton, Mass. Shovel.....	511,670	Dec. 25	3131	765	65	2030
Ames, Howard E. (See Ames, Emerson, assignor.)						
Ames Iron Works. (See Armstrong, Edwin J., assignor.)						
Ames, Jesse E., Boston, Mass. Transfer-binder.....	492,772	Mar. 7	1	1	62	1359
Ames, Nathaniel, assignor of one-half to E. M. Ames, East Madison, Me. Utensil for cook- ing beans.....	507,199	Oct. 24	2400	591	65	488
Ames, Samuel F., Berea, Ky. Sawmill head-block.....	490,131	Jan. 17	1818	475	62	404
Amick, Andrew J. (See Hagar and Amick.)						
Amick, Andrew J., Boonsborough, Mo. Feeder and band-cutter for thrashing-machines..	502,162	July 25	2604	{ 655 656 }	{ 64 }	520

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Ammon, Jacob S. (See Shaaber, Mahlon, assignor.)						
Ammon, John, New York, N. Y. Piano-hammer.....	504,192	Aug. 29	3216	801	64	1220
Ammons, William H., Little Rock, S. C. Plow.....	491,397	Feb. 7	559	141	62	155
Amos, William, Providence, R. I. Ventilating-curtain for windows.....	507,520	Oct. 24	2940	721	65	590
Ams, Max, New York, N. Y. Wall-facing.....	489,914	Jan. 17	1434	377	62	326
Ams, Max, New York, N. Y. Harmonica.....	504,899	Sept. 12	971	250	64	1467
Amsbury, Albert, assignor of one-half to E. Little, Keystone, S. D. Cam for stamp-mills.....	502,219	July 25	2696	680	64	534
Amsden, Colonel E., Grand Rapids, Mich. Hinge.....	496,180	Apr. 25	2625	661	63	
Amsinck, Gustav, et al., trustees. (See Mattullath, Hugo, assignor.)						
Amsler, Carl. (See McClure and Amsler.)						
Amwake, Jacob B., assignor of one-half to D. F. Buchmiller, Lancaster, Pa. Padlock.....	494,540	Apr. 4	1	1	63	3
Andem, James L. (See Anthony, Marcus O., assignor.)						
Anders, George L., assignor of three-fourths to W. Kottgen, London, England. Telephone system.....	500,545	July 4	5	2, 3	64	4
Andersen, Carl V. (See Lohmann and Andersen.)						
Andersen, Hans C., Cambridge, assignor of one-half to T. Hansen, West Somerville, Mass. Speed-indicator for shafting.....	502,649	Aug. 1	668	162	64	690
Andersen, Johan M., assignor of one-half to A. Anderson, Boston, Mass. Trolley-support for electric railways.....	506,617	Oct. 10	1391	350	65	220
Anderson, Abraham A., New York, N. Y. Egg-holder.....	499,080	June 6	580	139	63	1492
Anderson, Abraham A., New York, N. Y. Egg-holder.....	499,081	June 6	581	139	63	1492
Anderson, Albert. (See Andersen, Johan M., assignor.)						
Anderson, Albert & J. M. (See Dey, Charles H., assignor.)						
Anderson, Albert G., Kerrville, Tex. Washing-machine.....	494,665	Apr. 4	217	54	63	45
Anderson, Alexander, Sunderland, England. Furnace.....	507,095	Oct. 24	2192	542	65	450
Anderson, Alfred, Chelsea, assignor of one-third to J. J. Dacey, Boston, Mass. Banjo.....	509,507	Nov. 28	2577	623	65	1286
Anderson, Alfred I., Odell, N. D. Clevis, &c.....	506,897	Oct. 17	1862	465	65	379
Anderson, Andreas P., Oriental, Nev. Endless self-laying track for vehicles.....	510,668	Dec. 12	1412	348	65	1688
Anderson, Anders P., Kasson, Minn. Washing-machine.....	500,546	July 4	9	3	64	4
Anderson, Anders P., assignor of one-half to H. E. Vernon, San Antonio, Tex. Car-coupling.....	505,621	Sept. 26	2197	555 556	64	1723
Anderson, Andrew G., Moline, Ill., assignor to Moline Plow Company, of Illinois. Check-row planter.....	499,697	June 20	1582	321	63	1695
Anderson, Andrew L. (See Niederriter, William F., assignor.)						
Anderson, Andro R., Milwaukee, Wis. Smoke-jack.....	504,511	Sept. 5	335	85, 86	64	1332
Anderson, Anton, Chicago, Ill. Hay-loader.....	497,620	May 16	1993	499	63	1008
Anderson, Anton G., Chicago, Ill. Collapsible tap.....	509,113	Nov. 21	1861	456	65	1139
Anderson, Arthur R. (See Anderson, John C., assignor.)						
Anderson, Axel, Attleborough, Mass. Wrench.....	498,348	May 30	3179	792	63	1249
Anderson, Axel, Attleborough, Mass. Wrench.....	504,698	Sept. 12	629	163	64	1403
Anderson, Axel R. (See Anderson, Elias B. and A. R.)						
Anderson, Benjamin B., Chicago, Ill. Railway-ticket.....	492,601	Feb. 28	2463	612	62	1259
Anderson, Carl A., Lynn Centre, Ill. End-gate.....	490,333	Jan. 24	2162	564	62	423
Anderson, Carl P., Everett, assignor to Wadsworth, Howland & Company, Boston, Mass. Adjustable scraper and spout for paint-mills.....	506,578	Oct. 10	1341	337	65	269
Anderson, Charles, Detroit, Mich. Lawn-sprinkler.....	510,496	Dec. 12	1081	261	65	1629
Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Sulky-plow.....	499,868	June 20	1882	457 458	63	1746
Anderson, Charles A., and J. S. Winston, assignors of one-half to J. J. Jones and J. S. Wilson, Sturgis, Ky. Harrow attachment.....	496,036	Apr. 25	2410	610	63	494
Anderson, Charles A., and J. S. Winston, assignors of one-half to J. J. Jones and J. S. Wilson, Sturgis, Ky. Harrow.....	502,391	Aug. 1	237	56	64	575
Anderson, David W., Richmond, Va. Drying apparatus.....	511,184	Dec. 19	2318	568	65	1869
Anderson, Eli, assignor of one-half to T. Hinson, Carpentersville, Ind. Spike-extractor.....	492,977	Mar. 7	336	82	62	1423
Anderson, Elias B. and A. R., Worcester, Mass. Dinner-pail.....	501,313	July 11	1232	311	64	238
Anderson, Euclid, Peekskill, N. Y. Ratchet-drill.....	497,261	May 9	1382	350	63	886
Anderson, Francis J., and W. M. Irick, Gainesville, Tex. Reading-stand.....	502,601	Aug. 1	593	141 142	64	675
Anderson, Frank, Shoals, Ind. Wheeled harrow.....	490,132	Jan. 17	1820	475	62	405
Anderson, Frank, assignor of one-half to G. S. Crosby, Buffalo, N. Y. Car-coupling.....	500,731	July 4	321	86	64	60
Anderson, Frank E. (See Bickley, John H., assignor.)						
Anderson, Frank S. (See Hayward and Anderson.)						
Anderson, Frederick E., Chicago, Ill. Barrel-washer.....	489,066	Jan. 3	129	35	62	32
Anderson, Frederick G., assignor of one-half to H. H. White, Fort McLeod, Canada. Hay-rack loader and unloader.....	495,952	Apr. 25	2287	777	63	471
Anderson, Harry P., Washington, D. C. Wood-molding machine.....	500,790	July 4	410	108	64	76
Anderson, Hulbert E., Lancaster, Pa. Compound cork and oil gun-wad.....	506,299	Oct. 10	868	214	65	177
Anderson, James, Harrodsburg, Ky. Corn-planter.....	489,446	Jan. 10	718	193	62	167
Anderson, James A., Bedford, Ohio. Handling coal-cars in mines.....	500,547	July 4	10	3	64	4
Anderson, James C., Highland Park, Ill. Method of and machinery for operating the pressing-plungers of brick-machines.....	500,047	June 20	2156	523 524	63	1795
Anderson, John, Philadelphia, Pa. Car-coupling.....	505,933	Oct. 3	201	51	65	40
Anderson, John A. E., Lebanon, Ind. Washing-machine.....	495,651	Apr. 18	1823	456	63	371
Anderson, John A. E., assignor of two-thirds to W. C. and T. S. Kern, Lebanon, Ind. Fence.....	502,343	Aug. 1	159	37	64	595
Anderson, John B., Montpelier, Vt. Traveling crane.....	495,574	Apr. 18	1694	427	63	351
Anderson, John C., deceased, New Windsor, Ill., (A. R. Anderson, administrator,) assignor to A. R. Anderson. Hame-tug.....	497,904	May 23	2455	613	63	1107
Anderson, John R., Macon, Ga. Horseshoe.....	511,489	Dec. 26	2246	638	65	1978
Anderson, Laz W., assignor to Addyston Pipe and Steel Company, Cincinnati, Ohio. Apparatus for molding pipe-cores.....	491,973	Feb. 21	1465	365	62	1071
Anderson, Lee, assignor of three-fourths to T. Broad, J. Martin, and E. W. Rush, Paris, Tex. Hame.....	505,430	Sept. 26	1848	475	64	1657
Anderson, Louis. (See Myers and Anderson.)						
Anderson, Newton M., and G. S. Rider, Cleveland, Ohio. Adjustable table.....	501,638	July 18	1759	438	64	352
Anderson, Olaf G., and J. R. Sjolander, Ironwood, Mich. Sleigh-knee.....	508,266	Nov. 7	476	115	65	845
Anderson, Oscar, Newark, N. J. Centrifugal butter-extractor.....	503,731	Aug. 22	2478	616	64	1062
Anderson, Peter, Prentice, Wis. Car-stake.....	511,575	Dec. 26	2980	726 727	65	2003
Anderson, Robert C., Jeffersonville, Ind. Wire-stretcher.....	503,892	Aug. 22	2707	679	64	1107
Anderson, Robert S., Toronto, Canada. Embossing-machine.....	502,342	Aug. 1	154	35, 36	64	594
Anderson, Robert S., assignor of one-half to E. W. Blackhall, Toronto, Canada. Envelope-machine.....	497,484	May 16	1779	448 449	63	970
Anderson, Steve, Colehour, Ill. Oiling-can.....	506,763	Oct. 17	1648	413	65	338
Anderson, T. S., et al. (See Smith, George, assignor.)						
Anderson, Tillman H., Spencer, Ind. Combined pipe wrench and cutter.....	508,077	Nov. 7	158	44	65	788

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Anderson, Victor, assignor of one-half to C. N. Christensen, Chicago, Ill. Pipe-organ.....	503,326	Aug. 15	1656	407	64	898
Anderson, Walter E., <i>et al.</i> (See Preston, Charles W., assignor.)						
Anderson, William, New Moorefield, Ohio. Cultivating-hoe for grain-drills.....	511,183	Dec. 19	2317	567	65	1868
Anderson, William B., and G. L. Daugherty, assignors of one-third to R. P. Daugherty, Elizabethtown, Ky. Car-brake.....	504,313	Sept. 5	1	1	64	1271
Anderson, William E. (See Fitts and Anderson.)						
Anderson, William F. (See Gustafson, Axel R., assignor.)						
Anderson, William V. (See Cherot and Clouse, assignors.)						
Anderson, William W., New York, N. Y. Clasp.....	489,781	Jan. 10	1227	321	62	269
Anderssen, Johannes, Christiania, Norway. Cigar-holder.....	500,791	July 4	413	108	64	76
Andersson, Robert F., Lynn, Mass. Package-registering device.....	494,050	Mar. 21	2074	530	62	1792
Anderton, George P., Concession, La. Levee and dam structure.....	492,704	Feb. 23	2621	649	62	1320
André, Friedrich, Hildesheim, Germany. Wood-pulp-grinding machine.....	503,304	Aug. 15	1783	440	64	920
André, Oscar, assignor to Société du Nettoyeur O. André Appliqué au Filtre Chamberland Système Pasteur, Paris, France. Self-cleansing filter.....	502,690	Aug. 1	754	136	64	704
André, Thomas J., Wauseon, Ohio. Gate.....	505,212	Sept. 19	1488	388	64	1576
Andreasen, Peter O., Ferndale, Cal. Butter molding and cutting machine.....	491,792	Feb. 14	1182	297	62	1000
Andreasen, Peter O., Ferndale, Cal. Butter-molding apparatus.....	509,714	Nov. 28	2897	701	65	1346
Andresen, Andreas C. D. (See Andresen, Asmus J. and A. C. D.)						
Andresen, Asmus J. and A. C. D., St. Louis, Mo. Gang-plow.....	503,515	Aug. 15	2110	529	64	979
Andresen, John C., assignor to F. W. Hintz and L. Andresen, Brooklyn, N. Y. Cabinet-bedstead.....	509,148	Nov. 21	1916	468	65	1149
Andresen, Louisa, <i>et al.</i> (See Andresen, John C., assignor.)						
Andress, Cassius C., New York, N. Y. Railway-frog.....	494,115	Mar. 28	2197	561	62	1829
Andreu, Francis, assignor of one-half to S. Mochove, New York, N. Y. Roofing-tile.....	497,161	May 9	1238	315	63	859
Andrew, Arthur C., <i>et al.</i> (See Church, Dwight M., assignor.) (Reissue.)						
Andrew, Charles, Cincinnati, Ohio. Thill-coupling.....	493,462	Mar. 14	1090	279	62	1587
Andrew, Thomas M., <i>et al.</i> (See Mustard, James E., assignor.)						
Andrew, William A., <i>et al.</i> (See Woodward, William H., assignor.)						
Andrews, Adolphus Y., Philadelphia, Pa. Banker's case.....	508,394	Nov. 14	688	169	65	899
Andrews, Charles B., assignor of one-half to C. E. Rauch, Lebanon, Pa. Machine for bunching matches.....	507,399	Oct. 24	2732	670	65	551
Andrews, Edward N., New Britain, assignor to himself and G. A. Coles, Middletown, Conn. Water-wheel.....	505,342	Sept. 19	1690	435	64	1614
Andrews, Edward R. (See Storey, Andrews, Cushing, and Eaton.)						
Andrews, Edwin W., Elmira, N. Y., assignor to E. Andrews. Incubator.....	508,857	Nov. 14	1404	349	65	1038
Andrews, Emanuel. (See Andrews, Edwin W., assignor.)						
Andrews, Emanuel, Williamsport, Pa. Saw-handle.....	508,798	Nov. 14	1306	325	65	1020
Andrews, Ezra R., <i>et al.</i> (See Ellis, Edgar E., assignor.)						
Andrews, George, Ashford, England. Animal-trap.....	491,329	Feb. 7	446	115	62	833
Andrews, James L. (See McNamara and Andrews.)						
Andrews, Mary B., Philadelphia, Pa. Game apparatus.....	502,455	Aug. 1	347	83	64	630
Andrews, Thomas C., New York, N. Y. Steam-boiler and water-heater.....	490,940	Jan. 31	3149	807	62	691
Andrews, Wallace C., New York, N. Y. Apparatus for preparing coal for transportation.....	502,062	July 25	2442	614	64	488
Andrews, Wallace C., New York, N. Y. Settling or storage pond or basin for pulverized coal.....	502,063	July 25	2444	614	64	489
Andrews, William W., Fallbrook, Cal. Rotary engine.....	500,983	July 4	716	188	64	130
Andrus, Doane P., St. Louis, Mo. Electric belt.....	502,404	Aug. 8	954	232	64	756
Andrus, Elliot S., Willard, N. Y. Trace-fastener.....	507,977	Nov. 7	1	1	65	759
Angeles, Mary. (See Schaaf and Ritz, assignors.)						
Angeli, Alfredo. (See Caccialupi, Epimaco O., assignor.)						
Angell, Edward F. (See Spear, Arthur, assignor.)						
Angell, Edwin E. (See Burton and Angell.)						
Angell, Edwin E., Somerville, and S. Porter, Boston, Mass. Fire-guard for lamp-cords.....	511,720	Dec. 26	3214	788	65	2045
Angell, William S., and C. A. Winn, Charles City, Iowa. Stanchion.....	496,390	May 2	6	2	63	620
Anger, John A. (See Barry, James R., assignor.)						
Anger, John E., Green Island, assignor of one-fourth to E. A. Stanley, Lansingburg, N. Y. Reversible car-seat.....	497,228	May 9	1331	339	63	877
Anger, John E., Green Island, assignor of one-fourth to E. A. Stanley, Lansingburg, N. Y. Reversible car-seat.....	510,374	Dec. 5	875	210	65	1576
Anger, John E., assignor of one-fourth to E. J. Gilbert, Green Island, N. Y. Car-truck.....	508,362	Nov. 7	624	153	65	874
Anger, Louis J., New York, N. Y. Machine for filling cream-puffs.....	504,857	Sept. 12	905	234	64	1455
Angerer, Victor. (See Samuel and Angerer.)						
Angerer, Victor, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Railway-switch.....	504,649	Sept. 5	536	137	64	1371
Angerer, Victor, and C. A. Psilander, assignors to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Apparatus for the manufacture of track structures.....	490,941	Jan. 31	3152	808	62	691
Angier, James W., Merchantville, N. J. Tire-clamp.....	504,017	Aug. 29	2926	733	64	1165
Anidjah Fire Escape Company. (See Anidjah, Lewis, assignor.)						
Anidjah, Lewis, assignor to Anidjah Fire Escape Company, Limited, London, England. Fire-escape.....	489,915	Jan. 17	1435	377	62	326
Aniello, John A., assignor of two-thirds to W. L. McConnico and C. E. Rice, New Orleans, La. Life-boat.....	507,096	Oct. 24	2193	542	65	451
Ankeney, Eliza E., <i>et al.</i> (See Springer, Clifton F., assignor.)						
Annett, James P., Eastleigh, near Southampton, England. Railway-signal connection.....	497,758	May 23	2224	557	63	1067
Anson, Frederick G., London, England. Printing show-bills or similar articles.....	508,497	Nov. 14	850		65	931
Anschütz, Ottomar, Lissa, Germany. Fraud-preventive device for coin-controlled apparatus.....	489,687	Jan. 10	1044	272	62	232
Ansley, George W., Medical Lake, Wash. Carpet stretcher and tacker.....	505,546	Sept. 26	2057	525	64	1696
Ansbach, John, and C. Rebstock, Bridgeport, Conn. Knob attachment.....	511,185	Dec. 19	2320	568	65	1869
Antoine, Joseph H., Wakefield, Mass. Turned shoe.....	509,566	Nov. 28	2669	646	65	1304
Anthony, Henri, Reninmont, France. Treating cotton.....	500,732	July 4	323	86	64	61
Anthony, Edgar W. (See Marshall, William H., assignor.)						
Anthony, Frederick A. (See Cossitt, Franklin M., assignor.)						
Anthony, Frederick A., Livermore, Cal. Store-shelving.....	505,017	Sept. 12	1166	299	64	1504
Anthony, John M., Hadnot, La. Floor or ceiling set.....	489,405	Jan. 3	641	174	62	138
Anthony, Marcus O., assignor of three-fifths to J. L. Andem, Cincinnati, Ohio. Automatic feed and return mechanism for phonographs.....	489,519	Jan. 10	845	220	62	192
Anthony, Mark, Berkeley, Cal. Display-stand.....	500,839	July 4	488	127	64	89
Anthony, Mark, Berkeley, Cal. Advertising-machine.....	509,640	Nov. 28	2781	668 669	65	1325
Anthony, Walter F., Williamsport, Pa. Back-band buckle.....	493,744	Mar. 21	1576	401	62	1697
Antisdel, Egbert M. (See Lortz, George M., assignor.)						
Anton, Christopher L., Monongahela City, Pa. Marking-stamp.....	509,858	Dec. 5	8	2	65	1412

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Apel, Hermann C., Milwaukee, Wis. Stop and waste device	495,575	Apr. 18	1698	428	63	351
Apfelbaum, Herman. (See Schweiger, William J., assignor.)						
Appar, Theodore H., Bound Brook, N. J. Puzzle	504,823	Sept. 12	851	218	64	1443
Appell, John F., St. Louis, Mo. Vehicle-brake	506,458	Oct. 10	1153	286	65	233
Appelman, Erastus W., Clermont, Iowa. Car-platform balcony	509,641	Nov. 28	2784	669	65	1326
Appelman, Erastus W., assignor of one-half to R. P. Berry, Clermont, Iowa. Platform and gate for cars	497,744	May 16	2181	545	63	1044
Appert, Leon, Paris, France. Manufacture of hollow glass articles	507,400	Oct. 24	2734	671	65	552
Apple, Benjamin J. (See Hohenstein and Apple.)						
Apple, Charles N. (See Wright, William A., assignor.)						
Apple, Charles S., Bellaire, Ohio. Adhesive pencil	502,163	July 25	2607		64	521
Apple, William H., Ashland, Ky. Stuffing box packing for piston-rods	493,671	Mar. 21	1448	369	62	1672
Appley, John F., Santa Cruz, Cal. Grain-binder	502,267	Aug. 1	2	1, 2	64	567
Applegate Boot and Shoe Lasting Company. (See Cunningham, Patrick, assignor.)						
Applegate Electric Light and Power Company, (See Applegate, Eugene W., assignor.)						
Applegate, Eugene W., assignor to Applegate Electric Light and Power Company, Chicago, Ill. Incandescent electric lamp	495,620	Apr. 18	1766	445	63	362
Applegath, William, Hamilton, Canada, assignor to W. A. Aiken, Norwich, Conn. Hat-supporter. (Reissue)	11,336	May 16	2215	554	63	1049
Appleton, Charles J., assignor of two-thirds to H. S. Mack and E. A. Whittlesey, New York, N. Y. Circular-knitting machine	510,829	Dec. 12	1679	417	65	1739
Appleton Manufacturing Company. (See Search, Casper F., assignor.)						
Aquart, Arthur D., et al. (See Simons, Frank, assignor.)						
Arbel, Pierre, assignor to Société Anonyme Industrielle des Etablissements Arbel, Paris, France. Making car-wheels and dies for same	501,908	July 25	2204	{ 549 550 }	64	445
Arbel, Pierre, assignor to Société Anonyme Industrielle des Etablissements, Arbel, Paris, France. Car-wheel	506,199	Oct. 10	685	173	65	141
Arbuckle Brothers. (See Smyser, Henry E., assignor.)						
Archbold, George, Washington, D. C., assignor to H. L. Terrell, New York, N. Y. Method of and means for extracting hydrocarbons from bituminous rocks	503,028	Aug. 8	1327	326	64	825
Archer, Frank M., New York, N. Y., assignor, by mesne assignments, to Hero Electric Company, Jersey City, N. J. Electric battery	495,176	Apr. 11	1060	264	63	214
Archer, Frank M., New York, N. Y., assignor, by mesne assignments, to Hero Electric Company, Jersey City, N. J. Electric battery	495,177	Apr. 11	1061	264	63	214
Archer, George F., New York, N. Y. Windlass	496,967	May 9	937	246	63	806
Archer, George W., assignor to Archer Manufacturing Company, Rochester, N. Y. Dental chair	506,200	Oct. 10	626	173	65	141
Archer, John B., Washington, D. C. Manufacturing gas	491,066	Feb. 7	2	1, 2	62	749
Archer, John B., Washington, D. C. Apparatus for the manufacture of gas	491,067	Feb. 7	5	2, 3	62	749
Archer, John B., Washington, D. C. Furnace	492,653	Feb. 28	2550	631	62	1305
Archer, John B., Washington, D. C. Apparatus for the manufacture of gas	501,130	July 11	957	244	64	189
Archer, John B., Washington, D. C. Tile for use in apparatus for the manufacture of gas	502,693	Aug. 8	761	185	64	721
Archer, John B., Washington, D. C. Tile for use in apparatus for the manufacture of gas	504,314	Sept. 5	3	1	64	1271
Archer, John B., Washington, D. C. Apparatus for the manufacture of gas	505,998	Oct. 3	306	79, 80	65	60
Archer, John H., St. Louis, Mo. Water-purifier	488,977	Jan. 3	2	1	62	3
Archer Manufacturing Company. (See Archer, George W., assignor.)						
Archer Manufacturing Company. (See Butler, Maguler, assignor.)						
Ariel Cycle Manufacturing Company. (See Hamman, Frank M., assignor.)						
Arkland, Ezra H., et al. (See Arkland, Henry D., assignor.)						
Arkland, Henry D., assignor of six-elevenths to D. D. Rexford, E. H. Arkland, G. H. Shur, and C. J. Dell, Buffalo, N. Y. Railway-car platform	495,652	Apr. 18	1824	456	63	372
Armantout, Peter, assignor of one-half to F. L. Schneider, Hoover, Ind. Pipe or nut wrench	501,985	July 25	2316	579	64	466
Armat, Thomas, Washington, D. C. Finger-protector	490,733	Jan. 31	2811	721	62	625
Armbruster, Frank C., Milwaukee, Wis. Window	503,189	Aug. 15	1595	392	64	888
Armen, Arakelyan H., Lynn, assignor to D. Gillis and T. W. Gleason, Boston, Mass. Volt-meter	496,678	May 2	458	123	63	702
Armitage, Edwin, assignor to J. L. Armitage, Newark, N. J. Machine for painting fabric materials	493,463	Mar. 14	1091	{ 279 280 }	62	1587
Armitage, John L. (See Armitage, Edwin, assignor.)						
Armitstead, Thomas E., Mazomanie, Wis. Gun-sight	504,696	Sept. 5	630	160	64	1389
Armour, James N., and A. J. Hancock, Chanute, Kans. Car-coupling	505,892	Oct. 3	146	38	65	29
Armour, Jonathan O. (See McDonald, Charles B., assignor.)						
Armour, Robert J. (See Huntington and Armour.)						
Arms, Melford D., assignor of one-half to F. R. Strong, San Diego, Cal. Wood water-pipe	490,892	Jan. 31	3062	786	62	675
Armstrong, Alexander. (See Bronson and Armstrong.)						
Armstrong, Alfred, assignor to R. H. Clifford and H. L. Haydel, St. Louis, Mo. Combination laundry outfit	503,711	Aug. 22	2449	609	64	1057
Armstrong Camera Company. (See Armstrong, William A., assignor.)						
Armstrong, Charles G., assignor of one half to D. Adler, Chicago, Ill. Electric signaling apparatus for elevators	499,411	June 13	1125	{ 270 271 }	63	1601
Armstrong, Edwin J., assignor to Ames Iron Works, Oswego, N. Y. Rock-arm for horizontal engines	500,840	July 4	489	127	64	89
Armstrong, Frank, Bridgeport, Conn. Die-stock	495,214	Apr. 11	1113	278	63	225
Armstrong, George, Chicago, Ill. Tool-holder	492,381	Feb. 28	2098	523	62	1213
Armstrong, George E. (See Adriance and Armstrong.)						
Armstrong, George P., et al. (See Krieghoff, Anton, assignor.)						
Armstrong, Harry W., Oakmont, assignor to Verona Tool Works, Pittsburg, Pa. Nut-lock	498,734	May 30	3838	946	63	1366
Armstrong, James A., et al. (See Becker, Henry S., assignor.)						
Armstrong, John, West Bromwich, England. Manufacture of tanks or boxes of glass	499,082	June 6	584	139	63	1492
Armstrong, John B., deceased, Guelph, Canada; R. Torrance, administrator. Apparatus for shaping, hardening, and tempering steel plates, &c	499,368	June 13	1042	253	63	1587
Armstrong, John B., deceased, Guelph, Canada; R. Torrance, administrator. Road-cart	504,771	Sept. 12	769	194	64	1428
Armstrong, John B., deceased, (R. Torrance, administrator,) and R. Parker, Guelph, Canada, and C. W. Vernon, Flint, Mich.; said Parker and Vernon assignors to said Armstrong. Shifting seat for vehicles	499,369	June 13	1045	254	63	1588
Armstrong, John E., Santa Cruz, Cal. Latch and lock	491,793	Feb. 14	1188	297	62	1001
Armstrong, John E., Santa Cruz, Cal. Latch and lock	508,267	Nov. 7	477	115	65	846
Armstrong, John H., Duquoin, assignor of one-half to W. C. Russell, Perry county, Ill. Means for aerating and purifying the water of wells, &c	493,853	Mar. 21	1744	444	62	1729
Armstrong, Robert L., Sheffield, Pa. Ironing-board	510,876	Dec. 19	1809	447	65	1773
Armstrong, Samuel, Lind, Wash. Door-mat	509,013	Nov. 21	1688	416	65	1106

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Armstrong, Samuel H. (See Woods, Charles L. and P. C., assignors.)						
Armstrong, William A., assignor to Armstrong Camera Company, Milwaukee, Wis. Photo-graphic camera	494,517	Mar. 28	2842	{ 711 712 }	{ 62 63 }	1948
Armstrong, William T., Lerdo, Cal. Cheese-making apparatus.	494,973	Apr. 4	697	178	63	133
Arnand, Georges A. M., Paris, France. Centrifugal runner-mill.	499,083	June 6	585	140	63	1493
Arndt, Albert F. R., Detroit, Mich. Suspenders	500,524	June 27	2941	722	63	1946
Arnemann, Wilhelm, Hamburg, Germany. Smoke-consuming furnace.	491,233	Feb. 7	282	70	62	802
Arnemann, William, Jr., New York, N. Y. Smoke-consuming furnace.	491,696	Feb. 14	1036	262	62	972
Arnett, James B., Kansas City, Kans. Meat-cutter.	496,842	May 9	721	191	63	767
Arnett, Thomas F. (See Sennett and Arnett.)						
Arnold, Benjamin, East Greenwich, R. I. Postal wagon	499,084	June 6	588	{ 140 141 }	{ 63 64 }	1493
Arnold, Benjamin, East Greenwich, R. I., assignor to Meriden Curtain Fixture Company, Meriden, Conn. Machine for making and knotting fringes	504,315	Sept. 5	4	2	64	1272
Arnold, Benjamin, East Greenwich, R. I., assignor to Meriden Curtain Fixture Company, Meriden, Conn. Machine for making and knotting fringes	504,316	Sept. 5	7	2, 3	64	1272
Arnold, Benjamin, East Greenwich, R. I., assignor to Meriden Curtain Fixture Company, Meriden, Conn. Machine for making and knotting fringes, &c.	505,934	Oct. 3	202	51, 52	65	40
Arnold, Benjamin, East Greenwich, R. I., assignor to Meriden Curtain Fixture Company, Meriden, Conn. Making fringes	505,935	Oct. 3	205	52	65	40
Arnold, Craig R., Sharon Hill, Pa. Electric metal-working.	489,114	Jan. 3	206	55	62	48
Arnold, Craig R., Sharon Hill, Pa. Secondary battery	489,115	Jan. 3	207	55	62	48
Arnold, Craig R., Sharon Hill, Pa. Incandescent electric lamp	507,978	Nov. 7	1	1	65	759
Arnold, Daniel J. C., New London, Ohio. Re-press brick-machine	500,315	June 27	2623	{ 640 641 }	{ 63 64 }	1888
Arnold, Daniel J. C., New London, Ohio. Brick-barrow	501,314	July 11	1234	311	64	239
Arnold, Don J., Omaha, Neb. Fire-escape	490,222	Jan. 17	1965	515	62	432
Arnold, Eliphalet L., Georgetown, Tex. Construction of railways	493,052	Mar. 7	437	110	62	1445
Arnold, Eliphalet L., Georgetown, Tex. Nut-lock	493,393	Mar. 14	979	252	62	1567
Arnold, Emil and R., Leipsic-Plagwitz, Germany. Composition for treating lithographic stones and plates	504,772	Sept. 12	770	-----	64	1428
Arnold, Emma J., administratrix. (See Arnold, Ezra P. and E. F.)						
Arnold, Ezra P. and H. H., Rockland, assignors, by mesne assignments, to Eppler Welt Machine Company, Boston, Mass. Shoe-sewing machine	507,873	Oct. 31	3541	{ 870 871 }	{ 65 66 }	716
Arnold, Ezra P., Rockland, and E. F. Arnold, deceased, North Abington, Mass., (E. J. Arnold, administratrix,) assignors to Campbell Machine Company, Pawtucket, R. I. Welt-guiding device for shoe-sewing machines	510,150	Dec. 5	520	120	65	1508
Arnold, Horace L., Brooklyn, N. Y., assignor of fifty-one one-hundredths to F. W. Roeb-ling, Trenton, N. J. Book-covering machine	493,959	Mar. 21	1919	{ 490 491 492 493 }	{ 62 63 64 65 }	1762
Arnold, Horatio B., Boston, Mass. Disposing of city garbage	501,037	July 4	789	{ 206 207 }	{ 64 65 }	144
Arnold, Henry H. (See Arnold, Ezra P. and H. H.)						
Arnold, James H., et al. (See Kidd, Gideon P., assignor.)						
Arnold Print Works. (See Brownrigg, William, assignor.)						
Arnold Print Works. (See Donald, George, assignor.)						
Arnold Print Works. (See Pearson, Frank P., assignor.)						
Arnold, Richard. (See Arnold, Emil and R.)						
Arnold, Samuel S., Toronto, Canada. Box for wheel-hubs	510,229	Dec. 5	659	156	65	1535
Arnold, Stanley P. V., Cincinnati, Ohio. Watch-charm, pocket, and wall display calendar	500,314	June 27	2622	640	63	1888
Arnott, Eugene L. (See Arnott, John S. and E. L.)						
Arnott, John S. and E. L., Greenfield, Ohio. Pneumatic oil-can	496,843	May 9	723	192	63	767
Aronson, Louis, assignor of one-half to J. H. Hoffman, New York, N. Y. Electro-tin-plating.	497,621	May 16	1994	-----	63	1009
Aronson, Mark, New York, N. Y. Dress-skirt	494,404	Mar. 28	2669	669	62	1916
Arper, George W., Oakland, Cal. Faucet for oil-cans.	497,398	May 16	1640	415	63	946
Arper, George W., Oakland, Cal. Faucet for oil-cans	497,399	May 16	1641	415	63	947
Artol, William, and W. Foulis, Glasgow, Scotland. Apparatus for charging gas-retorts.	498,755	June 6	2	1, 2	63	1389
Art Stove Company. (See Cope, George W., assignor.)						
Arthur, Alexander J., Fort Dodge, Iowa. Pencil	493,464	Mar. 14	1093	280	62	1587
Arthur, Alexander J., Fort Dodge, Iowa. Lead-pencil	493,465	Mar. 14	1095	280	62	1588
Arthur, James, Jersey City, N. J. Fan	507,253	Oct. 24	2485	612	65	503
Asbury, Francis, et al. (See Cornell, Elijah B., assignor.)						
Ash, Edwin. (See Ellsworth, John J., assignor.)						
Ash, John W., Ogden, Utah Ter. Washing-machine	498,151	May 23	2822	706	63	1172
Ash, Richard E., et al. (See Woodfill, Owensby H., assignor.)						
Ash, Thomas M., and H. W. Gill, Birmingham, assignors of one-half to L. Green, Maidstone, England. Coating non-metallic articles with metal	509,280	Nov. 21	2142	-----	65	1191
Ashbaugh, William F. (See Graham, William, assignor.)						
Ashbrook, Armstrong. (See Crook, James A., assignor.)						
Ashcroft, Edgar A., Broken Hill, New South Wales. Apparatus for generating steam by the aid of molten slag	510,395	Dec. 12	919	221	65	1599
Ashcroft Manufacturing Company. (See Houghtaling, William, assignor.)						
Ashford, James A., Memphis, Tenn. Tire-tightener	493,756	June 6	6	2	63	1390
Ashley, Frank M., Brooklyn, N. Y. Automatic boiler-feeder	493,237	Mar. 14	728	187	62	1519
Ashley, Frank M., Brooklyn, N. Y. Safety water column	493,238	Mar. 14	731	187	62	1519
Ashley, Frank M., Hawthorne, N. J. Steam-boiler	500,733	July 4	325	87	64	61
Ashley, Frank M., Hawthorne, N. J. Steam-whistle	511,490	Dec. 26	2846	638	65	1978
Ashley, Franklin M., New Bedford, Mass. Device for use when repairing or laying pipes in streets	506,668	Oct. 17	1817	453	65	369
Ashley, Ralph. (See Groswith and Ashley.)						
Ashley, Ralph, Philadelphia, Pa., assignor, by mesne assignments, to United Columbian Electric Company, of New Jersey. Brush-holder for dynamos and electric motors	488,978	Jan. 3	5	2	62	4
Ashley, Ralph, assignor of one-half to C. W. Kennedy, Philadelphia, Pa. Electric motor.	505,723	Sept. 26	2476	624	64	1775
Ashton, John. (See Morgan, Theophilus D., assignor.)						
Ashton, John R. (See Lybarger, John P., assignor.)						
Ashton, William H., Seward, Neb. Meat-chopping machine	488,979	Jan. 3	7	2	62	4
Ashton, William H. Seward, Neb. Chimney-cowl	494,454	Mar. 28	2740	687	62	1929
Ashurst, John L., Havana, assignor to L. B. Ashurst, Kilbourne, Ill. Press-drill	492,255	Feb. 21	1902	475	62	1161
Ashurst, Lewis B. (See Ashurst, John L., assignor.)						
Asker, Per F., Boston, Mass. Sofa-bed	500,792	July 4	414	109	64	77
Askew, Joseph W., Baileyville, Tex. Plow cultivator and irrigator	496,228	Apr. 25	2796	699	63	567
Askin, George P., assignor of one-half to E. M. Hitchcock, Detroit, Mich. Sleigh attachment for wheeled vehicles	509,786	Nov. 28	3019	729	65	1370

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Askins, Joseph, Lima, Ohio. Apparatus for the manufacture of gas.....	491,398	Feb. 7	560	{ 141 142 }	62	855
Aspinwall, Lewis A., assignor to Aspinwall Manufacturing Company, Jackson, Mich. Beehive.....	493,466	Mar. 14	1095	281	62	1588
Aspinwall, Lewis A., assignor to Aspinwall Manufacturing Company, Jackson, Mich. Potato-cutter.....	499,002	June 6	455	107	63	1471
Aspinwall Manufacturing Company. (See Aspinwall, Lewis A., assignor.)						
Assmann, Oswald, Tegelen, Netherlands. Binder for loose sheets of paper, &c	504,317	Sept. 5	9	3	64	1272
Ast, Jacob. (See Edmister, Worden, assignor.)						
Aster, Robert. (See Paproth and Aster.)						
Astier, Victor, Écully, France. Letter-file.....	493,960	Mar. 21	1935	493	62	1764
Atherton, Charles F. (See Potter, Howard C., assignor.)						
Atherton, Edmond F., Cleveland, Ohio. Winding attachment for derricks.....	490,350	Jan. 24	2031	531	62	457
Athey, Isaac H., assignor of two-thirds to W. W. Simpson and H. J. Sievers, Chicago, Ill. Fire-escape.....	492,180	Feb. 21	1784	446	62	1137
Athey, William H. (See Williams and Athey.)						
Atkins, Charles H. M., Rond Hill, Ohio. Hydraulic elevator.....	508,159	Nov. 7	297	74	65	813
Atkins, Edward E. (See Ross and Atkins.)						
Atkins, Elias C. (See Hancock, Atkins, and Roberts.)						
Atkins, Elias C. (See Moss, Benjamin F., assignor.)						
Atkins, Elias C. (See Poore, Henry F., assignor.)						
Atkins, Elias C. (See Roberts, Nate H., assignor.)						
Atkins, Joseph L., Washington, D. C. Talking-machine.....	495,869	Apr. 18	2166	{ 543 544 545 }	63	432
Atkinson, Fred G. (See Smith, George Y., assignor.)						
Atkinson, Henry C., assignor to Donaldson Manufacturing Company, Louisville, Ky. Churn.....	492,654	Feb. 28	2551	632	62	1305
Atkinson, James W., San José, Cal. Combined incubator and brooder.....	502,900	Aug. 8	1115	{ 274 275 276 277 278 279 280 }	64	787
Atkinson, John O., Freeport, Ill. Ensilage-machine.....	500,181	June 27	2409	{ 589 590 591 592 593 594 595 596 597 598 599 600 }	63	1851
Atkinson, Lewis E., assignor to Standard Lubricant Company, Boston, Mass. Axle-lubricator.....	491,671	Feb. 14	995	250	62	963
Atkinson, Llewelyn B. (See Gooden and Atkinson.)						
Atkinson, William H., and D. M. Somers, Brooklyn, N. Y. Drive-rod clutch for shears.....	489,210	Jan. 3	349	98	62	80
Atlantic Manufacturing Company. (See Ryder, Edgar F., assignor.)						
Atlas Gun Company. (See Gunn, George P., assignor.)						
Atlas Tack Corporation. (See Rumsey, Oscar C., assignor.)						
Atmospheric Propulsion Company. (See Kames, Joshua, assignor.)						
Aton, James B., Morganfield, Ky. Harrow.....	496,037	Apr. 25	2412	610	63	494
Atterbury, Thomas B., Pittsburg, Pa. Tool for the manufacture of glassware.....	498,835	June 6	149	36	63	1418
Atterbury, Thomas B., Pittsburg, Pa. Manufacture of glassware.....	499,085	June 6	589	141	63	1493
Atterbury, Thomas B., Pittsburg, Pa. Incandescent-lamp globe.....	500,841	July 4	491	128	64	90
Atterbury, Thomas B., Pittsburg, Pa. Glass-mold.....	511,491	Dec. 26	2848	689	65	1978
Attix, Thomas F., assignor of one-third to H. C. Hulbert, Brooklyn, N. Y. Insulated conductor.....	498,757	June 6	8	2	63	1390
Atwater, Arthur S., assignor to Atwater General Electric Company, Cleveland, Ohio. Electric-arc lamp.....	505,183	Sept. 19	1440	371	64	1567
Atwater, Arthur S., assignor to Atwater General Electric Company, Cleveland, Ohio. Dynamo-electric machine.....	505,184	Sept. 19	1441	371	64	1567
Atwater, Arthur S., assignor to Atwater General Electric Company, Cleveland, Ohio. Dynamo-electric machine.....	505,622	Sept. 26	2199	556	64	1724
Atwater, Bryan, Berlin, Conn. Milking-machine.....	498,947	June 6	346	83	63	1453
Atwater, Bryan, Berlin, Conn. Milking-machine.....	498,948	June 6	349	83, 84	63	1453
Atwater General Electric Company. (See Atwater, Arthur S., assignor.)						
Atwater, Henry W., East Orange, N. J. Ice-cream freezer.....	511,319	Dec. 26	2545	621	65	1923
Atwood, Eugene, <i>et al.</i> (See Bradley, Edward E., assignor.)						
Atwood, Eugene, <i>et al.</i> (See Cowan, Charles H., assignor.)						
Atwood, Eugene, Stonington, Conn. Spindle for machines for winding quills.....	508,160	Nov. 7	298	74	65	813
Atwood, George F., Malden, Mass. Bottle-stopper.....	500,182	June 27	2411	587	63	1851
Atwood, George F., Melrose, Mass. Combined bottle-stopper fastening and extractor.....	507,669	Oct. 31	3214	786	65	655
Atwood, George F., assignor to G. M. French, Malden, Mass. Bottle-stopper.....	490,405	Jan. 24	2270	590	62	505
Atwood, George H. (See Jones, Samuel O., assignor.)						
Atwood, Irving L., Waterbury, Conn. Making chain.....	507,346	Oct. 24	2649	651	65	535
Atwood, Irving L., Waterbury, Conn. Making chain.....	507,347	Oct. 24	2650	651	65	535
Atwood, John E., <i>et al.</i> (See Bradley, Edward E., assignor.)						
Atwood, John E., <i>et al.</i> (See Cowan, Charles H., assignor.)						
Atwood, Leonard, Philadelphia, Pa. Crane.....	498,605	May 30	3584	888	63	1322
Atwood, Lewis J., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Lamp.....	495,289	Apr. 11	1243	310	63	248
Atwood, William K., <i>et al.</i> (See Vanstone, Samuel, assignor.)						
Au, Alfred, Crandon, S. D. Velocipede.....	509,787	Nov. 28	3019	729	65	1370
Acock, Robert, Utica, N. Y. Clothes-line clutch.....	511,492	Dec. 26	2849	689	65	1979
Audemars, Henri, and H. Sandoz-Sandoz, Yverdon, Switzerland. Repeating mechanism for timepieces.....	494,727	Apr. 4	315	79, 80	63	63
Auerbach, Joseph S. (See Flower, George K., assignor.) (Reissue.)						
Auerbach, Julius. (See West, Theodore E., assignor.)						
Auerbach, Moritz. (See Jaack and Auerbach.)						
Aufrichtig, Alois. (See Pougher, John T., assignor.)						
Aufuldish, John B. (See Tyrrel and Aufuldish.)						
Aufuldish, John B., Dayton, assignor to Columbia Cash Register Company, Miamisburg, Ohio. Cash register and indicator.....	492,454	Feb. 28	2213	{ 553 554 }	62	1236
Auger, John A. (See Barry, James R., assignor.)						
Augustenborg, Laurits J., and R. Hansen, Kolding, Denmark. Centrifugal milk-tester.....	495,653	Apr. 18	1826	457	63	372
Aulsberg, Christopher, Minneapolis, Minn. Cultivator.....	500,842	July 4	492	128	64	90
Aultman & Taylor Machinery Company. (See Galland, Joseph, assignor.)						
Aumiller, Daniel, Bucyrus, Ohio. Anchor for check-row planters.....	510,463	Dec. 12	1033	247	65	1620
Aune, Ole O., Columbus, Ohio. Watchcase-pendant.....	502,268	Aug. 1	5	2	64	567
Ausman, Jasper M., Herkimer, N. Y. Rocking-chair.....	505,083	Sept. 19	1288	333	64	1541
Aust, Max M. (See Thiel and Aust.)						
Austen, Peter T., New Brunswick, N. J. Obtaining friable coloring-matter from dye-wood extracts.....	508,592	Nov. 14	1009	.....	65	961
Austen, Peter T., New Brunswick, N. J., assignor to W. J. Matheson & Co., Limited, New York, N. Y. Coloring-matter from logwood and preparing same.....	491,972	Feb. 14	1463	62	1057

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Austen, Peter T., New Brunswick, N. J., assignor to William J. Matheson & Company, Limited, New York, N. Y. Solid coloring-matter from fustic and preparing same	492,368	Feb. 21	2073	62	1195
Austen, Peter T., New Brunswick, N. J., assignor to William J. Matheson & Company, Limited, New York, N. Y. Curing logwood-chips	494,237	Mar. 28	2399	.....	62	1867
Austen, Peter T., New Brunswick, N. J., assignor to William J. Matheson & Company, Limited, New York, N. Y. Making solid extract of sumac, hemlock, and other tanning agents	495,768	Apr. 18	2008	.....	63	404
Austin, Anna B. (See Bunnell, Morton G., assignor.)						
Austin, Edgar A., Hannibal, Mo. Adjustable pitch-roof ladder	505,343	Sept. 19	1691	435	64	1614
Austin, Eugene, assignor of one-half to J. Trix, Detroit, Mich. Pressure-regulator for pumping-engines	503,068	Aug. 8	1382	341	64	835
Austin, Frederick C. (See Bunnell, Morton G., assignor.)						
Austin, Henry K., Reading, Mass. Combination-square	490,893	Jan. 31	3062	786	62	675
Austin, James, and F. G. Molitor, Brooklyn, N. Y. Bowling-alley pin	496,105	Apr. 25	2522	637	63	515
Austin, Louise, Whatcom, Wash. Pinking-shears	489,406	Jan. 3	642	174	62	138
Austin, Nelson, <i>et al.</i> (See Austin, William G., assignor.)						
Austin, Oscar P., Washington, D. C. Nozzle appliance	509,333	Nov. 28	2279	553	65	1229
Austin, Stephen J., Terre Haute, Ind. Platform-scale	506,148	Oct. 3	552	144	65	107
Austin, Truman E., Binghamton, N. Y. Combined spark arrester and ejector	500,648	July 4	181	47	64	86
Austin, William F., Albany, N. Y. Elevator	503,781	Aug. 22	2558	637	61	1078
Austin, William G., assignor of three-fourths to S. Rainey, J. C. Culbertson, and N. Austin, Tarkio, Mo. Clutch	503,824	Aug. 22	2613	653	64	1089
Austin, William H., assignor to himself, W. H. Cary, W. Thompson, and A. A. Delano, Brookton, Mass. Machine for manufacturing lasts for boots or shoes	494,771	Apr. 4	386	95, 96	63	76
Austin, William H., assignor to himself, W. H. Cary, W. Thompson, and A. A. Delano, Brookton, Mass. Machine for finishing tree-legs for boot-trees for rubber boots	494,834	Apr. 4	501	126	63	97
Austin, William H., assignor to himself, W. H. Cary, W. Thompson, and A. A. Delano, Brookton, Mass. Machine for manufacturing lasts for boots or shoes	503,893	Aug. 22	2708	679, 680	64	1107
Automatic Advertising Panorama Company. (See Stone, Henrie D., assignor.)						
Automatic and Electric Scale Company. (See Drawbaugh, Daniel, assignor.)						
Automatic and Electric Scale Company. (See Johns, Jacob R., assignor.)						
Automatic Can Opening Attachment Company. (See Fitz Gerald, Augustine F., assignor.)						
Automatic Electric Light Extinguisher Company of Baltimore City. (See Hughes and Reed, assignors.)						
Automatic Gem and Gold Separator Syndicate. (See Lockhart, William S., assignor.)						
Automatic Machine Company. (See Carroll, Charles, assignor.)						
Automatic Machine Company. (See Hawk and Hazlett, assignors.)						
Automatic Manufacturing Company. (See Pope, William R., assignor.)						
Automatic Railway Track Sander Company. (See Field, Millard F., assignor.)						
Automatic Register Company. (See Dyer, Millard F., assignor.)						
Automatic Rubber Mixer Company. (See Bragg, Edward F., assignor.)						
Automatic Rubber Mixer Company. (See Cowen and Bragg, assignors.)						
Automatic Smoker Company. (See Peirce, Charles L., assignor.)						
Automatic Telegraph Improvement Company. (See Hotchkiss, Zeroy P., assignor.)						
Automatic Time Stamp and Register Company. (See Martin, Morris, assignor.)						
Automatic Track-Sanding Company. (See Murry and Walker, assignors.)						
Automatic Water Tank Company. (See Winkelmann, Herman R., assignor.)						
Anwarter, August, Schillerbach, Germany. Knitting-machine	510,760	Dec. 12	1564	390	65	1718
Averbeck, Theodore, Cincinnati, Ohio. Permutation-lock	489,447	Jan. 10	719	193	62	167
Averill, Frank E., Syracuse, N. Y. Brush-holder for dynamo-electric machines	510,952	Dec. 19	1942	474	65	1798
Avery, Franklin C., <i>et al.</i> (See Mable, William, assignor.)						
Avery, George C., Louisville, Ky. Molding-machine	507,577	Oct. 31	3056	747	65	624
Avery, James R., Louisville, Ky. Car-coupling	504,690	Sept. 5	617	158	64	1386
Avery, John G., Spencer, Mass. Antifriction-bearing	502,925	July 25	2383	599	64	478
Avery, John T., assignor to Avery Lasting Machine Company, St. Louis, Mo. Lasting-machine	500,548	July 4	12	4, 5, 6, 7, 8	64	5
Avery Lasting Machine Company. (See Avery, John T., assignor.)						
Avery, Oliver, Groton, N. Y. Vegetable or meat cutter	510,310	Dec. 5	782	189	65	1558
Avery, Oliver, assignor to D. McLachlan, Groton, and J. W. Allen, Richford, N. Y. Household implement	491,919	Feb. 14	1378	344	62	1040
Avery & Sons, B. F. (See Holsclaw, Wilford H., assignor.)						
Avery, Thomas M., <i>et al.</i> , trustees. (See Bagley, Charles H., assignor.)						
Avery, Thomas M., <i>et al.</i> , trustees. (See Stark, John, assignor.)						
Avey, William J., Cincinnati, Ohio. Work-holding clamp	504,960	Sept. 12	1069	273	64	1486
Avis, Walter H., Toronto, Canada. Twine-finishing machine	503,936	Aug. 29	2780	697	64	1139
Axtell, Frank C. (See Stevens and Axtell.)						
Ayars, Benjamin D., Jr., Chester, Pa. Preventing moisture on windows	509,715	Nov. 28	2899	701, 702	65	1347
Ayars, Charles H., Havre de Grace, Md. Vise	499,494	June 13	1262	300	63	1625
Ayer, Alfred, Lake Weir, Fla. Machine for wrapping oranges	498,222	May 30	2951	735, 736	63	1209
Ayer, Caleb R., Boston, and G. A. Ayer, Worcester, Mass. Steam-boiler and furnace	498,500	May 30	3418	848	63	1293
Ayer, Caleb R., Boston, and G. A. Ayer, Worcester, Mass. Steam-boiler and furnace	498,501	May 30	3420	849	63	1293
Ayer, Caleb R., Boston, and G. A. Ayer, Worcester, Mass. Steam-boiler and furnace	498,606	May 30	3585	888, 889	63	1323
Ayer, George A. (See Ayer, Caleb R. and G. A.)						
Ayer, George A., New Bedford, Mass. Machine for balling cotton-warps	492,506	Feb. 28	2316	574	62	1257
Ayer, Joseph C., Boston, Mass. Vending device	493,805	Mar. 21	1675	427	62	1716
Ayers, James R., Petersburg, Va. Dumping-wagon	495,388	Apr. 11	1391	347, 348	63	275
Ayers, Samuel C., assignor to Bigelow Carpet Company, Clinton, Mass. Apparatus for dyeing	504,291	Aug. 29	3371	843	64	1249
Aylworth, Daniel W., Cleveland, Ohio. Device for transplanting trees	498,608	May 30	3589	889	63	1323
Aylworth, George H., Brighton, Ill. Gate	508,799	Nov. 14	1307	325	65	1020
Aylworth, George M., Collingwood, Canada. Buckle	492,256	Feb. 21	1904	475	62	1161
Ayres, Albert R., Hannibal, Mo. Coasting sled	507,200	Oct. 24	2400	591	65	488
Ayres, Andrus D., Kalamazoo, Mich. Electro-magnetic brake	492,773	Mar. 7	2	1	62	1359
Ayres Brothers. (See Ingersoll, Simon, assignor.)						
Ayres, Henry. (See Brown, James D., assignor.)						
Ayres, Ruben B., New York, N. Y. Operating street or station indicators	498,607	May 30	3587	889	63	1323
Ayres, William H. (See Meadows, Jesse A., assignor.)						
Ayres, William H., Sackett's Harbor, N. Y. Music book or folio	495,870	Apr. 18	2171	545	63	433
Ayrton, William E., and J. Perry; said Ayrton assignor to C. E. Holland, London, Eng-land. Heat-measuring device	492,602	Feb. 23	2464	612, 613	62	1289

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Ayton, Charles W., New York, N. Y. Electrical transmitter for telemeter systems	498,871	June 6	212	51, 52	63	1430
Ayton, Charles W., New York, N. Y. Receiver for telemeter systems	498,872	June 6	217	52, 53	63	1431
Ayton, Charles W., New York, N. Y. Electrical steering-gear	507,522	Oct. 31	2947	723	65	605
Ayuso, John, Brooklyn, N. Y. Winding-key for guitars	510,375	Dec. 5	876	211	65	1576
Aze, Emile, and E. N. Gilfillan, assignors to H. A. Wheeler, Chicago, Ill. Car-seat	491,761	Feb. 14	1133	225	62	991
B. & J. Car Conpler Company. (See Jennings, William S., assignor.)						
Baade, John, Waco, Tex. Automatic recording apparatus for vehicles	506,579	Oct. 10	1343	337	65	270
Babbitt, George A., Brownsborough, Ky. Protecting the buds of fruit-trees	496,376	Apr. 25	2965	.....	63	599
Babbitt, Seth W., assignor to Wilcox Silver Plate Company, Meriden, Conn. Letter-scale	490,422	Jan. 24	2296	596	62	509
Babbitt, Seward S. (See Fitzhugh and Babbitt.)						
Babbitt, Seward S. (See Fitzhugh, Speer, and Babbitt.)						
Babbitt, Seward S., Pittsburg, Pa. Billet-conveyer	497,511	May 16	1830	461	63	979
Babbitt, Seward S., Pittsburg, Pa. Billet-conveyer for rolling-mills	503,894	Aug. 22	2711	{ 680 681 }	{ 64 64 }	{ 1108 1108 }
Babcock, Elisha W., Lorain, Ohio. Hull of steam-vessels	510,877	Dec. 19	1810	447	65	1773
Babcock, Erskine L., and E. D. Schmitt, assignors to Falls Rivet and Machine Company, Cuyahoga Falls, Ohio. Friction-clutch mechanism	511,320	Dec. 26	2548	621	65	1923
Babcock, Fred L., Terra Cotta, assignor of one-half to American Terra Cotta and Ceramic Company, Chicago, Ill. Oil-burning apparatus	506,027	Oct. 3	348	92	65	68
Babcock, Sylvester P., assignor to Economic Manufacturing Company, Limited, Adrian, Mich. Fence-post	500,183	June 27	2412	587	63	1851
Babcock, William H. (See Eastman and Babcock.)						
Babendreier, Arthur O., and F. P. Davis, Baltimore, assignors of one-half to J. E. Norwood, Sykesville, Md. Cable-grip	491,934	Feb. 14	1403	350	62	1044
Bache, William H., assignor to Graphite Lubricating Company, Bound Brook, N. J. Manufacture of bushings	500,463	June 27	2841	699	63	1928
Bache-Wig, Carl, <i>et al.</i> (See Drewsen, Viggo, assignor.)						
Bache-Wig, Hartwig, <i>et al.</i> (See Drewsen, Viggo, assignor.)						
Bachert, Max. (See Schiiler, Lina, assignor.)						
Backman, Bertha A., Malden, Mass. Kitchen utensil	497,162	May 9	1239	315	63	859
Backman, Joseph A., Austin, Tex. Ginning cotton	508,126	Nov. 7	243	61	65	803
Bachman, Joseph A., and F. S. Clark, Austin, Tex. Apparatus for handling seed-cotton	507,773	Oct. 31	3377	{ 826 827 }	{ 65 65 }	{ 685 685 }
Back, James S., assignor of one-half to G. L. Orme, Ottawa, Canada. Guitar	508,858	Nov. 14	1407	350	65	1038
Backstrom, Jonas. (See Stephenson and Backstrom.)						
Backus Water Motor Company. (See Denison, Julian F., assignor.)						
Backus Water Motor Company. (See Shepperd, Sylvanus D., assignor.)						
Bacon, Daniel H. (See White and Bacon.)						
Bacon, Leonard W., Jr., New Haven, Conn. Feeding-cup	497,940	May 23	2508	625	63	1116
Bacon, William F. (See Quilleash and Bacon.)						
Bacot, Richard H., St. Louis, Mo. Halter-hitch	504,650	Sept. 5	537	138	64	1371
Badertscher, Johann, Langnau, Switzerland. Scythe	504,773	Sept. 12	771	194	64	1428
Badger, John F. (See Burke and Badger.)						
Badger, Leslie P., <i>et al.</i> (See Karnes and Rice, assignors.)						
Badger, William F., Quincy, Mass. Monkey-wrench	502,869	Aug. 8	1058	260	64	776
Badger, William E., Quincy, Mass. Wrench	502,870	Aug. 8	1059	260	64	776
Badgley, Eugene F. (See Bedbury and Badgley.)						
Badia, Jose G., New York, N. Y. Washtub	492,343	Feb. 21	2034	506	62	1188
Badische Anilin and Soda Fabrik. (See Bohn, René, assignor.)						
Badische Anilin and Soda Fabrik. (See Knietzsch, Rudolph, assignor.)						
Badische Anilin and Soda Fabrik. (See Müller, Carl, assignor.)						
Badoni, Massimiliano, assignor to A. R. de Mural, Geneva, Switzerland. Box-fastener	493,203	Mar. 7	665	169	62	1489
Badoni, Massimiliano, assignor to A. R. de Mural, Geneva, Switzerland. Lock	504,292	Aug. 29	3373	843	64	1250
Badoni, Massimiliano, assignor to A. Revillod-De Mural, Geneva, Switzerland. Lock	501,639	July 18	1760	438	64	352
Badoni, Massimiliano, assignor to A. Revillod-De Mural, Geneva, Switzerland. Lock	501,640	July 18	1761	439	64	353
Badt, Francis B. (See Gruessner, Frank, assignor.)						
Badt, Francis B., Chicago, Ill. Multiphase railway system	489,597	Jan. 10	956	{ 248 249 }	{ 62 62 }	{ 213 213 }
Badt, Francis B., Chicago, Ill. Electric-lighting system	489,598	Jan. 10	959	249	62	214
Badt, Francis B., assignor to Western Electric Company, Chicago, Ill. Automatic electric cut-out	493,672	Mar. 21	1449	370	62	1672
Baehr, George, assignor to S. O'Connor, Brooklyn, N. Y. Electrical switch	489,553	Jan. 10	888	232	62	201
Baekeland, Leo H., New York, N. Y. Antiseptic compound	500,549	July 4	20	.....	64	6
Baer, Samuel H., Brooklyn, N. Y. Fan	490,532	Jan. 24	2476	638	62	544
Baer, Samuel H., Brooklyn, N. Y. Fan	509,535	Nov. 28	3696	747	65	1385
Bagby, George K., New Berne, N. C. Dental articulation-cup	502,164	July 25	2607	656	64	521
Baggesen, Carl E., New York, N. Y. Automatic safety attachment for street-cars	507,201	Oct. 24	2401	592	65	488
Baggett, Thomas A., Galveston, Tex. Refrigerator	509,281	Nov. 21	2143	{ 514 515 }	{ 65 65 }	{ 1192 1192 }
Bagley, Allen, Ypsilanti, Mich. Continuous rail	493,233	Mar. 7	714	183	62	1498
Bagley, Alonzo E., assignor of one-half to L. F. Loos and G. Gortner, Mechanicsville, Iowa. Bundle-carrier for harvesters	506,653	Oct. 17	1457	367	65	303
Bagley, Charles H., Thomaston, Conn., assignor, by mesne assignments, to R. E. Robbins, Boston, Mass., and T. M. Avery, Chicago, Ill., trustees. Stem winding and setting watch	503,516	Aug. 15	2111	529	64	980
Bagley, Charles H., Thomaston, Conn., assignor, by mesne assignments, to R. E. Robbins, Boston, Mass., and T. M. Avery, Chicago, Ill., trustees. Stem winding and setting watch	503,517	Aug. 15	2113	530	64	980
Bagley, Charles H., Thomaston, Conn., assignor, by mesne assignments, to R. E. Robbins, Boston, Mass., and T. M. Avery, Chicago, Ill., trustees. Stem winding and setting watch	508,800	Nov. 14	1309	326	65	1020
Bagley, Martin J., Lakeport, N. H. Currycomb	495,871	Apr. 18	2172	545	63	433
Baglin, William A. (See Yule and Baglin.)						
Baglin, William A., Brooklyn, N. Y., assignor to G. Yule, Newark, N. J., and Tweedy & Company, New York, N. Y. Machine for uniting nap-bats to hat-bodies	508,462	Nov. 14	724	193	65	918
Baglin, William A., Brooklyn, assignor of one-half to Tweedy & Co., New York, N. Y. Forming and sticking napping-bats and apparatus therefor	508,859	Nov. 14	1408	350	65	1038
Bagnall, John H., assignor of one-half to H. P. Swensen, Racine, Wis. Neck-yoke	506,898	Oct. 17	1869	465	65	379
Baguhn, Fredrick W., Owego, N. D. Draft-equalizer	495,953	Apr. 25	2288	577	63	471
Bagwell, John O. (See Rightor, William R., assignor.)						
Bahlsen, Julius, Berlin, Germany. Air-tight door for stoves, chimneys, &c.	506,387	Oct. 10	1026	{ 255 256 }	{ 65 65 }	{ 207 207 }
Bahret, John, Mount Vernon, N. Y. Clamp	489,782	Jan. 10	1228	322	62	269
Bailey, Alden L. (See Mitchell, James C., assignor.)						
Bailey, Andrew C., <i>et al.</i> (See Conver, William H., assignor.)						
Bailey, Charles A., assignor to J. and E. Stevens Company, Cromwell, Conn. Registering toy money-bank	489,860	Jan. 10	1330	347	62	292

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Bailey, Charles A., assignor to J. & E. Stevens Company, Cromwell, Conn. Toy money-bank	506,619	Oct. 10	1398	351	65	280
Bailey, Charles H., <i>et al.</i> (See Bailey, Henry E., assignor.)						
Bailey, Charles S., assignor of one-half to C. H. Reed, Boston, Mass. Tobacco-pipe	493,325	Mar. 14	883	225	62	1546
Bailey, Clarence W., San Francisco, Cal. Swing-joint	492,619	Feb. 28	2493	618	62	1294
Bailey, Elmer E., assignor of one-half to W. G. Smith, Philadelphia, Pa. Repeating air-gun	501,470	Oct. 24	2841	695	65	373
Bailey, Elon G., Redwood Falls, Minn. Vise and bench-hook	504,652	Sept. 5	541	138	64	1372
Bailey, Elon G., Redwood Falls, Minn. Paddle-wheel	505,784	Sept. 26	2478	625	64	1775
Bailey, Fortune L., Freeport, Ind., assignor to Boston Cash Register Company, Northampton, Mass. Cash register and indicator	493,571	Mar. 14	1280	327 328	62	1623
Bailey, Fortune L., Freeport, Ind., assignor to Boston Cash Register Company, Northampton, Mass. Cash register and indicator	504,293	Aug. 29	3374	844	64	1250
Bailey, Fortune L., assignor to Boston Cash Register Company, Northampton, Mass. Cash-registering machine	504,409	Sept. 5	157	41, 42	64	1299
Bailey, Fortune L., assignor to Boston Cash Register Company, Northampton, Mass. Detective device for cash-registering machines	506,618	Oct. 10	1396	350	65	280
Bailey, Fred M. (See Egan and Bailey.)						
Bailey, Henry E., assignor of two-thirds to R. O. Bassett and C. H. Bailey, Albany, N. Y. Apparatus for drawing liquids from barrels	501,512	Sept. 5	338	86	64	1333
Bailey, Horace H., Ottawa, Canada. Apparatus for feeding hydrocarbon or other oils into stoves, furnaces, &c.	505,871	Oct. 3	107	28	65	22
Bailey, Jackson D., <i>et al.</i> (See Conner, William H., assignor.)						
Bailey, James W., and J. T. McNorton, Burnet, Tex. Churn	506,300	Oct. 10	868	214	65	177
Bailey, John W. (See Morris and Bailey.)						
Bailey, Leonard, Hartford, Conn. Bookbinding	490,382	Jan. 24	2241	583	62	499
Bailey, Leonard S., West Potsdam, N. Y. Colter	505,018	Sept. 12	1167	299	64	1505
Bailey, Lorenzo A., <i>et al.</i> (See Planegin, Francis A., assignor.)						
Bailey, Samuel R., Amesbury, Mass. Spring connection for vehicles	499,086	June 6	590	141	63	1493
Bailey, Samuel R., Amesbury, Mass. Carriage-coupling	501,202	July 11	1067	270 271	64	210
Bailey, Sidney C., New Bedford, assignor of one-half to Northrop Loom Company, Hopedale, Mass., and Saco, Me. Shuttle-motion for looms	510,830	Dec. 12	1681	418	65	1739
Bailey, Sterling L., Chicago, Ill. Dry closet	507,202	Oct. 24	2403	592	65	488
Bailey, Thomas, New York, N. Y. Partition	504,858	Sept. 12	907	234	64	1455
Bailey, Walter M., New York, N. Y. Method of and apparatus for dredging	494,728	Apr. 4	317	80, 81	63	63
Bailey, William, Brooklyn, N. Y. Machine for stretching and drying shade-cloth	498,609	May 30	3590	889 890	63	1323
Bailey, William H., Salford, England. Relief-valve for steam-cylinders	508,593	Nov. 14	1010	248	65	962
Bailey, William W., New York, N. Y. Cable-crossing	510,151	Dec. 5	532	120 121	65	1508
Baillard, Edward V., New Utrecht, N. Y. Printing-telegraph	498,529	May 30	3161	858	63	1300
Baillie, Ellis H., <i>et al.</i> (See Sherman, Willis D., assignor.)						
Baillie, James L., Shawnee, Ohio. Instrument for measuring distances	499,950	June 20	2905	486	63	1768
Bain, Forée, Chicago, Ill. Dynamo-electric machine	493,745	Mar. 21	1577	401	62	1698
Bain, Forée, Chicago, Ill., assignor to S. S. Brown, Pittsburg, Pa. Forming coal-cutters	501,755	July 18	1963	466	64	387
Baines, Edward, assignor to himself, E. J. Mitchell, Brooklyn, and A. L. Mitchell, Rockville, N. Y. System for transmitting electric currents	493,673	Mar. 21	1451	370	62	1672
Bair, Albert M., Littleton, Colo. Gold-separator	496,391	May 2	7	2	63	620
Baird, Archie M., Topeka, Kans. Bolt-cutting machine	492,931	Mar. 7	252	64	62	1408
Baird, Carrie S., Brisbin, Pa. Dish-drainer	499,951	June 20	2007	487	63	1768
Baird, Charles W., Millersburg, Iowa. Hay rake and loader	508,395	Nov. 14	690	169 170	65	899
Baird, Charles W., Millersburg, Iowa. Side-delivery hay rake and loader	508,396	Nov. 14	692	170	65	900
Baird, Charles W., Millersburg, Iowa. Hay rake and loader	508,397	Nov. 14	694	171	65	900
Baird, Clement V. (See Port and Baird.)						
Baird, Cornelius E. (See Bowles, John L., assignor.)						
Baird, Fed. Gasburg, Va. Animal-trap	509,995	Dec. 5	257	60	65	1457
Baird, John E., Leonardsville, N. Y. Milk cooler and aerator	496,377	Apr. 25	2966	740	63	599
Baird, John V. (See McDonough, Alexander J., assignor.)						
Baird, Thomas F., Gasburg, Va. Seed planter and cultivator	491,510	Feb. 14	744	189	62	911
Baird, William W., Bloomington, Ill. Tramway	495,146	Apr. 11	1009	252	63	205
Bairstow, John. (See Fanning, John J., assignor.)						
Baken, Alanson G., Park City, Utah Ter. Car-coupling	497,044	May 9	1051	269	63	826
Baker, Albert, Fort Wayne, Ind. Apparatus for preserving foods	489,916	Jan. 17	1436	377 378	62	327
Baker, Albert R., deceased, Indianapolis, Ind.; M. C. Baker, administratrix. Advertising-blotter	499,197	June 13	763	182	63	1537
Baker, Allen S. (See Baker, John S. and A. S.)						
Baker, Allen S., Evansville, Wis. Skeleton tower	508,078	Nov. 7	159	45	65	788
Baker, Charles E. (See Baker, John S. and C. E.)						
Baker, Charles F. (See Curtis, George A., assignor.)						
Baker, Charles F. (See Thompson, James F., assignor.)						
Baker, Charles W., Waverly, Mich. Rope-buckle	511,576	Dec. 26	2982	727	65	2004
Baker, Edwin, Cardiff, England. Apparatus for determining the bearings and course of a ship	499,087	June 6	591	142	63	1494
Baker, Edwin, Cardiff, England. Apparatus for determining a ship's distance from an object	499,495	June 13	1263	301	63	1626
Baker, Elijah. (See Hartman and Baker.)						
Baker, Frederick H. (See Baker, Shervin, and Baker.)						
Baker, George G., and J. N. Wanich, Bloomsburg, Pa. Spring bed-bottom	507,057	Oct. 17	2124	527	65	426
Baker, George H. (See Drew, Charles E., assignor.)						
Baker, George M., Dayton, Ohio. Tedder-fork	505,807	Oct. 3	4	2	65	3
Baker, George S., London, England. Kneading-machine	502,392	Aug. 1	239	57	64	609
Baker, George W., Wilmington, Del. Machine for working hides and skins	497,941	May 23	2509	625 626 627	63	1116
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Thread-cutting attachment for sewing-machines	500,092	June 20	2222	941	63	1806
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Shuttle for sewing-machines	500,093	June 20	2223	542	63	1806
Baker, Halsey H., assignor of one-half to W. H. Rogers, Plainfield, N. J. Spoke-fastening	496,844	May 9	725	192	63	767
Baker, Hubert C., Hartford, Conn. Reversing driving mechanism	504,651	Sept. 5	538	138	64	1372
Baker, Hubert C., Hartford, Conn., and J. W. Free, New York, N. Y., assignors to American Malt Manufacturing Company, of West Virginia. Malting machinery	496,335	Apr. 25	2880	719 720	63	583

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Baker, Isaac F. (See Mansfield and Baker.)						
Baker, James D., Montreal, Canada. Plaster-board	493,961	Mar. 21	1936	493	62	1764
Baker, James H. (See Rogers and Baker.)						
Baker, James H., Allegheny, Pa. Platform-gear for wagons.	495,468	Apr. 18	1529	383	63	321
Baker, James H., Allegheny, Pa. Wagon running-gear.	509,354	Nov. 28	2280	553	65	1229
Baker, James H., G. F. Shevlin, and F. H. Baker, Saratoga Springs, N. Y. Pulp-strainer.	495,769	Apr. 18	2010	508	63	404
Baker, James H., G. F. Shevlin, and F. H. Baker, Saratoga Springs, N. Y. Shaft for wind- ing paper.	508,801	Nov. 14	1311	326	65	1021
Baker, James S., <i>et al.</i> (See Hooper, George W., assignor.)						
Baker, John, Muscatine, Iowa. Drive-chain	495,006	Apr. 11	751	191	63	159
Baker, John, Muscatine, Iowa. Can-filling machine	503,029	Aug. 8	1328	326	64	825
Baker, John, Muscatine, Iowa. Can-filling machine	503,030	Aug. 8	1330	327	64	825
Baker, John G., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadel- phia, Pa. Vegetable-cutter	509,642	Nov. 28	2785	670	65	1326
Baker, John L., Baltimore, Md. Curtain-fixture	492,705	Feb. 28	2622	649	62	1320
Baker, John L., Baird, Tex. Head-rest for chairs	494,617	Apr. 4	147	34	63	30
Baker, John S. and A. S., Evansville, Wis. Windmill	494,238	Mar. 28	2400	606	62	1867
Baker, John S. and C. E., Newberg, Oreg. Cooking and smoking apparatus	492,257	Feb. 21	1905	475	62	1162
Baker, Joseph M., Louisville, Ky. Wooden box	490,260	Jan. 24	2032	531	62	457
Baker, Joseph M., Louisville, Ky. Box	510,761	Dec. 12	1565	390	65	1718
Baker, Lewis J., Marietta, Minn. Guard-rail	509,788	Nov. 28	3020	730	65	1371
Baker, Melville M., Chestnut Mills, Tenn. Wagon-body	491,461	Feb. 7	662	166	62	875
Baker, Meta C., administratrix. (See Baker, Albert R.)						
Baker, Priscilla U. (See Baker, William C., assignor.)						
Baker, Robert, Dayton, Ind. Sash-fastener	499,817	June 20	1791	435	63	1731
Baker, Sidney F., Santa Barbara, Cal. Combination index device	499,599	Jan. 10	960	250	62	214
Baker, Silas, Paw Paw, Ill. Device for winding spring-motors	498,836	June 6	151	37	63	1419
Baker, Stewart E., Troy, N. Y. Apparatus for drying paper-board	493,467	Mar. 14	1097	281	62	1588
Baker, Thomas B., Canton, Ohio. Picture-frame clamp	500,364	June 27	2700	663	63	1902
Baker, William C., New York, N. Y. Heating apparatus	496,107	Apr. 25	2523	638	63	516
Baker, William C., New York, N. Y. Car-heater	498,924	June 6	314	73	63	1448
Baker, William C., New York, N. Y., assignor to P. U. Baker, Alpine, N. J. Radiator for heating buildings.	499,181	June 6	736	175	63	1518
Baker, William C., assignor of one-half to C. J. Brown, Baltimore, Md. Mouthpiece for cigars or cigarettes	499,695	June 13	1575	379	63	1679
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mower	500,550	July 4	21	8	64	6
Baker, William S. G., Baltimore, Md. Car-truck	509,355	Nov. 28	2283	553	65	1230
Baker, William T., and T. B. Doris, Providence, Ky. Crupper	493,572	Mar. 14	1287	329	62	1625
Balch, Frank C., Kalamazoo, Mich. Rail-joint	509,422	Nov. 28	2409	583	65	1252
Balcom, Clark, trustee, <i>et al.</i> (See Ducker, William M., assignor.)						
Balderson, John, Wankegan, Ill., assignor of one-half to H. A. Conrad, Kilbourn, Wis. Hanger for sliding doors	509,643	Nov. 28	2787	670	65	1326
Baldner, Charles E., assignor of one-half to W. N. Potter, Jr., Boston, Mass. Hemp-spin- ning machine	501,475	July 11	1498	377	64	288
Baldner, Frederick P., and H. D. Sabin, Xenia, Ohio. Rotary wheel-harrow	508,536	Nov. 14	920	226	65	944
Baldwin, Andrew, Viroqua, Wis. Sheathing-lath	501,397	July 11	1391	349	64	267
Baldwin, Charles B., Brooklyn, N. Y. Slotting-machine	493,674	Mar. 21	1452	370	62	1672
Baldwin, Cyrus W., Yonkers, N. Y., assignor, by mesne assignments, to National Com- pany, of Illinois. Elevator	499,496	June 13	1264	301	63	1626
Baldwin, George, assignor of one-half to P. Donohue, Indianapolis, Ind. Plow	504,294	Aug. 29	3377	844	64	1251
Baldwin, George W., Brooklyn, N. Y. Suspender-end	489,727	Jan. 10	1137	294	62	251
Baldwin, Hugh J. (See Lawrence and Letts, assignors.)						
Baldwin, Luther C., Manchester, N. H. Wire-coiling machine	507,979	Nov. 7	2	1	65	759
Baldwin, Lyman E., Lander, Wyo. Stovepipe attachment	502,269	Aug. 1	6	2	64	568
Baldwin, Marcns Y., Caldwell, N. J. Brake-shoe	491,697	Feb. 14	1037	262	62	972
Baldwin, Orrin R., Detroit, Mich. Fastening device for harrow-teeth	506,654	Oct. 17	1458	367	65	303
Baldwin, Ozro J., Youngsville, assignor of one-half to J. L. O'Donnell, Warren, Pa. Belt- fastener	501,266	July 11	1165	296	64	227
Baldwin, William D. (See Kirby, William A., assignor.)						
Baldwin, William D., administrator. (See Smith, Frederick H.)						
Baldwin, William J., Brooklyn, N. Y. Floor-plate	490,094	Jan. 17	1752	457	62	390
Baldy, Milo D. (See Hughes, Smith E., assignor.)						
Bales, Thomas M., Dublin, Ind. Fanning-mill	499,952	June 20	2007	487	63	1769
Balet, Joseph W., New York, N. Y. Bridge	495,621	Apr. 18	1767	445	63	363
Ballet, assignor to Sullivan Machinery Company, Claremont, N. H. Guide for the cylinders and cross-heads of stone-quarrying machinery	503,691	Aug. 22	2417	602	64	1050
Ball, Arthur W., <i>et al.</i> (See Trautman, Adam, assignor.)						
Ball, Arthur W., Galion, Ohio. Car-coupling	495,954	Apr. 25	2289	577	63	471
Ball, Charles A., Brooklyn, N. Y. Starting-gear for compound engines	511,186	Dec. 19	2322	568	65	1869
Ball, Charles A., Brooklyn, assignor to Ball Compound Locomotive Company, New York, N. Y. Balanced steam-engine	489,917	Jan. 17	1443	378	62	329
Ball, Charles H., East Windsor, Mass. Bridge	502,165	July 25	2608	656	64	521
Ball, Charles W., Commerce, Tex. Lifting-jack	510,230	Dec. 5	660	156	65	1535
Ball Compound Locomotive Company. (See Ball, Charles A., assignor.)						
Ball, David H., Renovo, Pa. Band-saw shingle-machine	499,698	June 20	1584	362	63	1605
Ball, Frederick J., Brooklyn, N. Y. Strawberry-short-cake bake-pan	495,872	Apr. 18	2173	545	63	433
Ball, Henry P., Schenectady, N. Y. Switch for electrical currents	494,750	Apr. 4	355	90	63	70
Ball, Henry P., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Adapter for lamp-sockets	498,374	May 30	3217	800	63	1256
Ball, Henry P., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Incandescent-lamp socket	501,485	July 18	1515	381	64	307
Ball, Henry P., Brooklyn, assignor to Edison General Electric Company, New York, N. Y. Electric-arc lamp	509,014	Nov. 21	1689	416	65	1106
Ball, Henry P., and A. Metzger, Schenectady, N. Y. Lamp-socket and key-holder therefor	498,758	June 6	8	3	63	1390
Ball, Henry P., and A. Metzger, Schenectady, assignors to General Electric Company, New York, N. Y. Lamp-socket	493,609	Mar. 14	1349	343	62	1637
Ball, James, assignor to Holyoke Envelope Company, Holyoke, Mass. Envelope-machine	491,935	Feb. 14	1405	350	62	1045
Ball, James C. (See Thompson and Ball.)						
Ball, Jesse W., Tyler Town, Miss. Plow sweep and shovel	490,798	Jan. 31	2919	750	62	645

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Ball, John G., Chesterville, Ohio. Weight-motor.....	493,053	Mar. 7	438	110	62	1446
Ball, Lorenzo D. (See Plouts and Ball.)						
Ball, Phineas, Worcester, Mass. Apparatus for purifying water.....	507,774	Oct. 31	3379	827	65	686
Ball, Richard L., Terre Haute Ind. Base-heating stove.....	489,843	Jan. 10	1314	343	62	288
Ball, Royal E., New York, N. Y. Carbon for electric-arc lamps.....	506,459	Oct. 10	1155	286	65	233
Ball, Samuel E., Winters, Cal. Fruit-gatherer.....	492,952	Mar. 7	283	72	62	1414
Ball, William E., Bridgeport, Ohio. Harvester-cutter.....	499,953	June 20	2009	487	63	1769
Ballance, John, assignor to himself, H. and H. Haltermann, New York, N. Y. Glass letter.....	503,937	Aug. 29	2782	697	64	1139
Ballard, Taylor O., Franklin, and J. C. Stewart, Greenwood, Ind.; said Stewart assignor to said Ballard. Can-filling machine.....	510,953	Dec. 19	1944	{ 474 475 }	{ 65 65 }	{ 1799 1799 }
Ballet, Ernest, Bordeaux, France. Insulating-coupling.....	493,883	Mar. 21	1787	456	62	1738
Balliet, Alfred P. (See Yeager, Luckenbach, and Balliet.)						
Balliet, John W. (See Semmel, Howard S., assignor.)						
Ballou, Barton A., Providence, R. I. Scarf-pin.....	492,522	Feb. 28	2334	579	62	1261
Ballou, Barton A., Providence, R. I. Stock for hinge-joints of pins or brooches.....	507,254	Oct. 24	2486	612	65	503
Ballou, Walter, North Attleborough, Mass. Link cuff-button.....	493,468	Mar. 14	1099	282	62	1588
Balreich, Charles A., Des Moines, Iowa. Car-coupling.....	505,378	Sept. 19	1750	454	64	1625
Balmes, Michael, Detroit, Mich. Machine for grinding gangue containing corundum.....	509,789	Nov. 28	3022	730	65	1371
Balsley, Upton H., Philadelphia, Pa. Switchboard for telephoning purposes.....	504,464	Sept. 5	245	64	64	1315
Balson, Harry L., St. Louis, Mo. Brick-machine.....	494,911	Apr. 4	610	{ 155 156 }	{ 63 63 }	{ 118 118 }
Balston, Clyde C., Brooklyn, N. Y., assignor to F. W. Barker, Dunellen, N. J. Pocket-knife.....	492,620	Feb. 28	2494	619	62	1294
Baltzell, Virginia C., Madison, Wis. Apparatus for hanging and adjusting window-curtains.....	492,755	Feb. 28	2697	669	62	1334
Balzer, Stephen M., New York, N. Y. Register to count the operations of mechanism.....	489,892	Jan. 10	1377	358	62	300
Balzer, Stephen M., New York, N. Y., assignor to Davids Machine Works, of New York. Register or counting device.....	489,703	Jan. 10	1102	285	62	244
Bambridge, George F., Toronto, Canada. Photograph-holder.....	490,059	Jan. 17	1696	441	62	377
Bammann, Johann. (See Ulrich and Bammann.)						
Bammann, Johann, and M. Ulrich, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Tetrazo dye.....	496,392	May 2	8	.....	63	620
Bammann, Johann, and M. Ulrich, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue substantive dye.....	498,759	June 6	9	.....	63	1390
Bammann, Johann, and M. Ulrich, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue tetrazo dye.....	498,873	June 6	224	.....	63	1432
Bammann, Johann, and M. Ulrich, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue tetrazo dye.....	498,874	June 6	226	.....	63	1432
Bammann, Johann, and M. Ulrich, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue tetrazo dye.....	499,198	June 13	764	.....	63	1538
Banan, Francis W., East Knox, Me. Seed-planter.....	503,938	Aug. 29	2783	698	64	1140
Bancroft, Alfred, Manchester, England. Transit-frame for velveteens or other pile fabrics.....	499,774	June 20	1723	{ 414 415 }	{ 63 63 }	{ 1718 1718 }
Bancroft, George W. (See Harris, Louie J., assignor.)						
Bancroft, George W., and C. R. Hawcroft, Chicago, Ill. Car-ventilator.....	491,068	Feb. 7	8	3	62	750
Bancroft, Henry N. (See Se Cheverell, Jean H., assignor.)						
Bancroft, John S., assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Machine for sharpening drills.....	508,268	Nov. 7	479	{ 115 116 }	{ 65 65 }	{ 846 846 }
Bancroft, Melvin, assignor to Quigley Furniture Company, Whitesborough, N. Y. Type-writer cabinet.....	505,586	Sept. 26	2149	543	64	1715
Bancroft, Melvin, assignor to Quigley Furniture Company, Whitesborough, N. Y. Type-writer cabinet.....	505,646	Sept. 26	2255	571	64	1734
Band, Henry F. (See Rosback and Band.)						
Banel, Alfred. (See Lehmann, Adolph J., assignor.)						
Banfield, William H., Irondale, Ohio. Cleaning and scouring hot rolls.....	511,493	Dec. 26	2850	689	65	1979
Banghart, Andrew B. (See Treat and Banghart.)						
Bangs, Edwin D., Milwaukee, Wis. Metallic railway-tie.....	494,314	Mar. 28	2513	634	62	1888
Bangs, Edwin D., Milwaukee, Wis. Lubricator.....	494,315	Mar. 28	2514	634	62	1889
Bangs, Edwin D., Milwaukee, Wis. Lubricator.....	503,925	Aug. 22	2759	691	64	1118
Bangs, Edwin D., Milwaukee, Wis. Metallic packing.....	506,028	Oct. 3	349	93	65	68
Banister, Charles. (See Hollingsworth and Banister.)						
Banks, George, Oakfield, Mich. Seat for agricultural machines or vehicles.....	493,573	Mar. 14	1287	329	62	1625
Banks, James, Port Blanchard, Pa. Coat-holder.....	496,289	Apr. 25	2797	700	63	567
Banks, Walter F., Milford, Conn. Electrical call-box.....	499,003	June 6	457	107	63	1471
Banks, William C. (See McGeorge and Banks.)						
Bannhr, Caesar R., West Cheshire, Conn. Machine for making paper boxes.....	508,594	Nov. 14	1011	{ 248 249 250 }	{ 65 65 65 }	{ 962 962 962 }
Bannister, Louis H., Pasadena, Cal. Casket-handle.....	498,610	May 30	3593	890	63	1324
Bannister, Oscar B., Jackson, Mich. Vehicle-hub.....	495,290	Apr. 11	1245	311	63	248
Banta, Henry J., Logansport, Ind. Fence-post.....	489,116	Jan. 3	208	55	62	48
Banta, William E., Springfield, Ohio. Wire-coupling.....	503,712	Aug. 22	2450	609	64	1057
Baptist, Daniel, Waverly, Ill. Gate.....	503,448	Aug. 15	2003	497	64	960
Baptist, William, New Orleans, La. Triple pile-driver.....	510,873	Dec. 12	1803	444	65	1759
Barbeau, Louis E., London, England. Device for turning bags.....	503,692	Aug. 22	2420	602	64	1051
Barber, Arthur J., Sodus, N. Y. Window-sash adjuster.....	497,296	May 16	1483	373	63	917
Barber, David A., G. Bates, W. Mabry, and H. T. Skelton, Cambridge, Mass. Pianoforte.....	494,051	Mar. 21	2076	531	62	1792
Barber, Edward A., Watertown, N. Y. Electric regulating switch.....	511,187	Dec. 19	2326	569	65	1869
Barber, Emmett P., Chicago, Ill. Compressed-air braking apparatus.....	494,772	Apr. 4	390	96, 97	63	77
Barber, Hiram, Chicago, Ill. Spring draft attachment.....	493,469	Mar. 14	1099	282	62	1589
Barber, Hiram, Chicago, Ill. Tongue-support.....	493,470	Mar. 14	1101	282	62	1589
Barber, Hiram, Chicago, Ill. Wagon-tongue support.....	506,655	Oct. 17	1460	367	65	303
Barber, Hiram, Chicago, Ill. Draft-spring.....	510,669	Dec. 12	1413	348	65	1689
Barber, John, Kansas City, Mo. Lamp-suspending device.....	494,116	Mar. 28	2192	561	62	1829
Barber, John C., St. Paul, Minn. Car-truck.....	506,460	Oct. 10	1155	287	65	233
Barber, Luther A. (See Twiss and Barber.)						
Barber, Olin M., Port Richmond, N. Y. Foothold for dust-pans.....	510,762	Dec. 12	1567	391	65	1718
Barbre, Jesse A., Brunswick, Ga. Fencing-machine.....	490,261	Jan. 24	2032	532	62	457
Barclay, James, Sioux City, Iowa. Safety-stop for engine-governors.....	492,258	Feb. 21	1906	{ 475 476 }	{ 62 62 }	{ 1162 1162 }
Barclay, John J., Elizabeth, assignor of one-half to W. W. Dashiell, Bergen Point, N. J. Steam-boiler.....	501,047	July 11	811	211	64	163
Barclay, Robert, Fort Howard, Wis. Wrist and finger exercising apparatus.....	505,745	Sept. 26	2414	610	64	1762

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Barclay, Robert L., Plattekill, N. Y. Machine for making drills	508,161	Nov. 7	299	74	65	813
Barclay, Samuel S. (See Shively and Barclay, assignors.)						
Barclay, Squire W. (See Shively and Barclay.)						
Barclay, Squire W., and C. W. Shively, Joliet, assignors to W. F. Barclay, Covell, Ill. Soil-pulverizer	500,109	June 27	2255	549	63	1823
Barclay, William F. (See Barclay and Shively, assignors.)						
Barclay, William P., Chicago, Ill., assignor of one-half to W. F. Pagels. Stone-sawing machine	497,400	May 16	1643	{ 415 416 }	{ 63 }	947
Bardeen, Charles W. (See Wells, Charles R., assignor.)						
Bardeen, George E., <i>et al.</i> (See Bryant, Noah, assignor.)						
Barden, Harvey E., <i>et al.</i> (See Carver, James W. and C. E., assignors.)						
Bardsley, Albert H. (See Hardcastle and Bardsley.)						
Bardsley, Edward E. (See Borzell and Bardsley.)						
Bardsley, Edward E., assignor of one-half to W. S. Bardsley, Philadelphia, Pa. Rotary fluid-motor	509,644	Nov. 28	2788	671	65	1327
Bardsley, William. (See Crofford and Bardsley.)						
Bardsley, Winfield S. (See Bardsley, Edward E., assignor.)						
Bardwell, Carroll. (See Scarborough and Bardwell.)						
Bardwell, Herbert T., Boston, Mass. Type-writing machine	496,507	May 2	177	49, 50	63	651
Barger, Robert N., Chicago, Ill. Billiard-cue	507,471	Oct. 24	2844	695	65	573
Barger, William M., Webster City, Iowa. Machine for stretching and removing fence-wire	495,873	Apr. 18	2173	546	63	433
Barker, Alfred, Richfield Springs, N. Y. Beam-calipers	496,679	May 2	459	123	63	703
Barker, Asbury, Peekskill, N. Y. Pneumatic regulating device	491,794	Feb. 14	1290	298	62	1001
Barker, Frederick W. (See Balston, Clyde C., assignor.)						
Barker, Henry C., assignor to H. C. Beckmann and J. Stocke, St. Louis, Mo. Brick-machine	498,203	May 23	2918	726	63	1188
Barker, Henry W., Elbow Lake, Minn. Drug-mixer	497,045	May 9	1052	269	63	826
Barker, Irving, Springfield, Ill. Dump-car	489,211	Jan. 3	351	99	62	80
Barker, Irving, Springfield, Ill. Rotary tippie for dump-cars	502,805	Aug. 8	956	233	64	757
Barker, James, Philadelphia, Pa. Rubbing belt or apron for carding-engines	489,281	Jan. 3	462	128	62	101
Barker, John A., Pasadena, Cal. Wrench	495,577	Apr. 18	1701	428	63	352
Barker, Milan S., Eugene, Oreg. Trap-gun	509,716	Nov. 28	2901	702	65	1347
Barker, Peleg, assignor of one-half to A. E. Hall, Kearney, Nebr. Hame	503,758	Aug. 22	2528	629	64	1073
Barker, Perd A., and F. A. Reynolds, Los Angeles, assignors to C. S. Hardy, San Diego, Cal. Refrigerator-car	509,836	Nov. 28	3096	748	65	1385
Barker, Valentine S. (See Corser, Lorenzo D., assignor.)						
Barker, Wendell A., Chicago, Ill. Car starter and brake	501,756	July 18	1964	486	64	387
Barker, William A. (See Bessing and Barker.)						
Barker, William S., Troy, Ohio. Well or cistern cleaner and water-purifier	498,966	June 6	331	91	63	1459
Barkhaus, Frederick W., Jr., Wright's, Cal. Apparatus for distributing water for irrigation	494,455	Mar. 28	2741	687	62	1929
Barkley, James, <i>et al.</i> (See Campbell, Henry, assignor.)						
Barkley, James, Carlyle, Ill. Buckle	491,462	Feb. 7	662	166	62	875
Barkley, William S. (See Seaton, Benjamin C., assignor.)						
Barksdale, Edward C., <i>et al.</i> (See Crowley, Joseph L., assignor.)						
Barkwell, William S. B. (See Hayes and Lewis, assignors.)						
Barler, Augustus C., Fremont, Nebr. Blacking outfit	491,974	Feb. 21	1465	365	62	1071
Barlow, Herndon O., Duluth, Minn. Vegetable slicer and grater	497,009	May 9	1001	258	63	817
Barlow, John E., assignor of one-half to C. R. Paul, Philadelphia, Pa. Lighting device	505,185	Sept. 19	1442	371	64	1568
Barlow, John H., New Haven, Conn. Bullet-mold	489,580	Jan. 10	929	241	62	208
Barlow, John W., Quincy, Ill. Corn-planter	510,231	Dec. 5	661	157	65	1535
Barlow-Massicks, Thomas G., Prescott, Ariz. Ter. Brake for road-vehicles	509,645	Nov. 28	2789	671	65	1327
Barnard, George E., Fitchburg, Mass. Mail-marking machine	501,816	July 18	2048	{ 504 505 }	{ 64 }	401
Barnard, George L., Milwaukee, Wis. Electric signaling device for hose	511,188	Dec. 19	2327	570	65	1870
Barnard, W. T. (See Cornand, Albert F. M., assignor.)						
Barnes, Benj. F. (See Barnes, William A., assignor.)						
Barnes, Burr F., Circleville, Ohio. Elevated-railway system	510,878	Dec. 19	1810	448	65	1773
Barnes, Burr F., and J. G. Smith, Circleville, Ohio. Sheet-feeding mechanism	503,275	Aug. 15	1730	{ 426 427 427 428 }	{ 64 }	911
Barnes, Burr F., and J. G. Smith, Circleville, Ohio. Sheet-feeding mechanism	503,276	Aug. 15	1732	{ 428 428 }	{ 64 }	912
Barnes, Charles E., Paterson, N. J. Hook and eye	491,399	Feb. 7	562	142	62	855
Barnes, Dana A., Schenectady, N. Y. Valve-gear for compound engines	501,986	July 25	2317	579	64	466
Barnes, David L., assignor to Congdon Brake Shoe Company, Chicago, Ill. Car-coupling	496,810	May 2	672	178	63	738
Barnes, David L., Chicago, assignor to Fox Solid Pressed Steel Company, Joliet, Ill. Truck-frame	505,152	Sept. 19	1394	358	64	1559
Barnes, Edgar C., Jr., New York, N. Y. Time-alarm bed	507,578	Oct. 31	3058	{ 747 748 }	{ 65 }	624
Barnes, Elbridge F. (See Abbott, William W., assignor.)						
Barnes, George, Allegheny, Pa. Portable scaffold	499,699	June 20	1586	382	63	1696
Barnes, George P., London, England. Apparatus for producing marks upon paper	507,608	Oct. 31	3108	{ 759 760 777 }	{ 65 }	635
Barnes, George P., London, England. Paper-making machine	507,643	Oct. 31	3177	{ 778 778 }	{ 65 }	648
Barnes, Henry J., Oxville, Ill. Vehicle-brake	489,189	Jan. 3	318	87, 88	62	72
Barnes, John A., Cleveland, Ohio. Packing for joints	505,084	Sept. 19	1291	333	64	1541
Barnes, John A., Cleveland, Ohio. Cash register and indicator	507,097	Oct. 24	2194	543	65	451
Barnes, John E. L. (See Sloan and Barnes.)						
Barnes, John L., Indianapolis, Ind. Feed mechanism for sawmills	509,859	Dec. 5	10	2	65	1413
Barnes, John S., assignor of one-half to J. S. Ellis, Detroit, Mich. Canopy for bicycles	504,900	Sept. 12	971	250	64	1467
Barnes, Joseph W., Maury, Ind. Gate-post	495,291	Apr. 11	1246	311	63	248
Barnes, Joshua B., Springfield, Ill. Smoke-burner	491,975	Feb. 21	1467	365	62	1071
Barnes, R. G. (See Crane, George C., assignor.)						
Barnes, Thomas, Lowell, Mass. Life-guard for street-cars	504,485	Sept. 5	284	73	64	1323
Barnes, William A., Plantsville, assignor to B. F. Barnes, Meriden, Conn. Bell	495,129	Apr. 11	981	246	63	201
Barnes, William F., Orlando, Fla. Making rubber stamps or casts	489,448	Jan. 10	723	194	62	168
Barnes, William M. (See Buck and Barnes.)						
Barnet, David H. (See Brockington, George, assignor.)						
Barnett, David L., Toronto, Canada. Envelope	496,385	Apr. 25	2977	743	63	602
Barnett, George, <i>et al.</i> (See Gosling, Henry J., assignor.)						
Barnett, Harry T., London, England. Electrical excitation of vacuum-tubes	494,239	Mar. 28	2403	606	62	1867
Barnett, Henry, <i>et al.</i> (See Gosling, Henry J., assignor.)						
Barnett, James D., Leann, Mo. Combination-tool	500,551	July 4	22	8	64	6

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Barnett-Record Company. (See Mayo, Edward D., assignor.)						
Barney, George F., Southborough, Mass. Mallet	495,607	Apr. 18	1743	439	63	358
Barney, Henry P., District of Columbia. Steam-cooker	496,290	Apr. 25	2798	700	63	567
Barney, James E., Hyde Park, Mass. Apparatus for drying wool	507,304	Oct. 24	2579	634	65	522
Barnhart, Daniel K., Gaines, Pa. Dust-pan	492,455	Feb. 28	2216	554	62	1237
Barnhart, James H., et al. (See Kidd, Gideon P., assignor.)						
Barnsdale, Oswald. (See Tyers and Barnsdale.)						
Barnum, Henry H. (See Guilbert, John M., assignor.)						
Barnum, Russell S., assignor to A. C. Martin, Chicago, Ill. Car-coupling	503,939	Aug. 29	2784	698	64	1140
Barnum, William T., New Haven, Conn. Electrotrope	489,704	Jan. 10	1104	285	62	245
Baron, John, Linwood, Ohio. Permutation-padlock	494,541	Apr. 4	4	1	63	3
Baron, Samuel. (See Strassner, Hermann, assignor.)						
Barr, Andrew, Bothwell, assignor to G. Struthers, Hamilton, Scotland. Step-ladder	510,108	Dec. 5	448	100	65	1494
Barr Cash and Package Carrier Company. (See Albach, William H., assignor.)						
Barr Cash and Package Carrier Company. (See Barr, Samuel W., assignor.)						
Barr Cash and Package Carrier Company. (See Lippy, David, assignor.)						
Barr Cash and Package Carrier Company. (See Weaver, Henry M., assignor.)						
Barr, Frank S., et al. (See Werline, Henry E., assignor.)						
Barr, Fred, et al. (See Porter, George B., assignor.)						
Barr, J. Irving, et al. (See Porter, George B., assignor.)						
Barr, Mary L., Indianapolis, Ind. Folding bed	508,907	Nov. 21	1527	371	65	1074
Barr, Samuel W., Mansfield, Ohio. Cash and package carrier apparatus	490,533	Jan. 24	2477	638 639	62	545
Barr, Samuel W., Mansfield, Ohio. Curve for store-service tracks	509,015	Nov. 21	1690	417	65	1106
Barr, Samuel W., assignor to Barr Cash and Package Carrier Company, Mansfield, Ohio. Cash-carrier apparatus	500,552	July 4	23	9	64	7
Barraclough, Thomas C., London, and T. T. Heaton, Chesterfield, England. Process of and machinery for producing metal barrel-bodies	495,147	Apr. 11	1010	252 253	63	205
Barraclough, Thomas C., and T. T. Heaton, London, England. Bung, valve, or stopper, &c.	505,587	Sept. 26	2151	544	64	1715
Barraclough, William, and A. Rhodes, Stanningley, England. Tool-holder for lathes	495,576	Apr. 18	1700	428	63	352
Barrath, Edward, assignor to Victor Key-Opening Can and Machinery Company, Chicago, Ill. Sheet-metal can	507,305	Oct. 24	2581	635	65	522
Barrath, Edward, assignor to Victor Key-Opening Can and Machinery Company, Chicago, Ill. Sheet-metal can	507,306	Oct. 24	2582	635	65	522
Barrath, Edward, assignor to Victor Key-Opening Can and Machinery Company, Chicago, Ill. Sheet-metal can	507,307	Oct. 24	2583	635	65	522
Barrath, Edward, assignor to Victor Key-Opening Can and Machinery Company, Chicago, Ill. Sheet-metal can	507,960	Oct. 31	3681	914 915	65	742
Barré, Aimé. (See Currier, Edward, assignor.)						
Barret, Frederick A., assignor of one-fourth to J. Lippe, St. Louis, Mo. Electro-galvanic adhesive plaster	496,244	Apr. 25	2730	683 684	63	554
Barrett, Addison D., Norfolk, Va. Vulcanizing apparatus	507,980	Nov. 7	5	2	65	759
Barrett, Charles L., Kent City, Mich. Land-roller	488,980	Jan. 3	10	3	62	5
Barrett, Charles W., Lemoore, Cal. Lemon-squeezer	492,259	Feb. 21	1907	476	62	1162
Barrett, Edward, assignor to himself and G. R. Bidwell, New York, N. Y. Pneumatic tire	493,675	Mar. 21	1454	371	62	1673
Barrett, Frank A., Newman Grove, Nebr. Special point for tubular wells	492,181	Feb. 21	1786	446	62	1137
Barrett, Frank A., Newman Grove, Nebr. Stand-point for tubular wells	492,182	Feb. 21	1788	446	62	1137
Barrett, Frederick W., assignor to Barrett Publishing Company, Springfield, Ohio. Tally-sheet	505,304	Sept. 19	1636	423	64	1605
Barrett, Horatio C. (See Hipwood, Barrett, and Porter.)						
Barrett, James, trustee. (See Wheeler, Benjamin F., assignor.)						
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Machine for covering wires	505,379	Sept. 19	1752	454 455	64	1626
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Machine for covering wire	505,380	Sept. 19	1757	455	64	1627
Barrett, Josiah, Allegheny, Pa. Oil-well-drilling apparatus	495,689	Apr. 18	1877	470	63	380
Barrett, Mora M., and J. F. Daly, San Francisco, Cal. Gas-engine attachment	510,879	Dec. 19	1812	448	65	1774
Barrett, Patrick J., assignor of one-half to J. F. Frawley, president, Boston, Mass. Cut-out	499,497	June 13	1266	301	63	1626
Barrett, Patrick J., assignor of one-half to J. F. Frawley, president, Boston, Mass. Electric arc lamp	502,166	July 25	2609	657	64	521
Barrett Publishing Company. (See Barrett, Frederick W., assignor.)						
Barrett, Samuel, Keighley, England. Ironing board or cylinder for ironing-machines	508,595	Nov. 14	1016	250	65	963
Barrett, Thomas. (See Crisp, Copeland, and Barrett.)						
Barrett, William A., Jr. (See Allen, Edward H., assignor.)						
Barringer, Daniel M., Philadelphia, Pa. Gun-sight	494,240	Mar. 28	2404	606	62	1867
Barrow, Benjamin D., Danville, Va. Pneumatic safety-lock for breech-loading guns	496,589	May 2	307	83	63	675
Barrow, Jacob, Windfall, assignor to J. S. Moore, Muncie, Ind. Oil-burner	499,088	June 6	593	142	63	1494
Barrow, Jacob F., Parole, assignor to W. C. Ditman, Baltimore, Md. Production of lime	506,029	Oct. 3	350	93	65	68
Barrow, Thaddeus J., Duluth, Minn. Car-brake	496,245	Apr. 25	2734	684	63	554
Barrow, Thomas E., Mansfield, Ohio. Store-service apparatus	496,147	Apr. 25	2578	648 649	63	525
Barrow, Thomas E., Mansfield, Ohio. Car stop and retainer for store-service apparatus	496,148	Apr. 25	2580	649	63	526
Barry, Charles E., New York, N. Y. Rosette cut-out	493,884	Mar. 21	1788	456	62	1738
Barry, David F. (See Fitzgerald and Barry.)						
Barry, Frank. (See Brower, James F., assignor.)						
Barry, Herbert A. L., London, England. Drill-brace	504,147	Aug. 29	3131	783	64	1204
Barry, James K., Syracuse, assignor of one-half to J. A. Anger, New York, N. Y. Bracket	500,525	June 27	2942	722	63	1946
Barry, James K., Syracuse, assignor of one-half to J. A. Anger, New York, N. Y. Cover for boxes	505,213	Sept. 19	1489	388	64	1577
Barry, John F., et al. (See Troast, William F., assignor.)						
Barry, Michael H., and D. M. Cahill, Danvers, Mass. Baggage-carrier	493,348	Mar. 14	910	233	62	1552
Barry, Nicholas, Jr., Muscatine, Iowa. Plumber's trap	492,260	Feb. 21	1909	476	62	1163
Barry, Nicholas, Jr., Muscatine, Iowa. Lead-pipe joint or soldering nipple	497,622	May 16	1995	499	63	1009
Barry, Nicholas, Jr., and P. J., Muscatine, Iowa. Grease-trap	492,261	Feb. 21	1911	477	62	1163
Barry, Patrick J. See Barry, Nicholas, Jr., and P. J.)						
Barry, Richard F., Newton, Mass. Machine for setting lacing studs or hooks	504,295	Aug. 29	3379	845	64	1251
Barry, William H., Paterson, N. J. Garbage-receptacle	510,464	Dec. 12	1034	247	65	1620
Barstow, William S. (See Maillonx and Barstow.)						
Bartel, Rudolph F., Bayonne, N. J. Brake	508,269	Nov. 7	481	116	65	846
Bartelmes, Benjamin, Brooklyn, N. Y. Switch-operating device	496,715	May 2	512	136	63	712
Bartels, Ferdinand, Berlin, Germany. Machine for smoothing and polishing pile fabrics	508,802	Nov. 14	1311	326 327	65	1021
Bartels, Friedrich, Hoheneggelsen, Germany. Plow	508,908	Nov. 21	1529	372	65	1074

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Barten, William H., North Boston, N. Y. Type-writing machine.....	499,498	June 13	1268	302	63	1626
Barthel, Adolph, <i>et al.</i> (See Susemihl, Francis G., assignor.)						
Barthel, Gustav, Dresden, Germany. Lamp or burner.....	506,201	Oct. 10	689	174	65	141
Barthels, Georg, Hamburg, Germany. Mirror-placard.....	506,580	Oct. 10	1345	337	65	270
Barthold, Allen H., Philadelphia, Pa. Dish handle and support.....	511,189	Dec. 19	2329	570	65	1870
Barthold, Ferdinand, Milwaukee, Wis. Bottling-siphon.....	504,513	Sept. 5	339	86	64	1333
Bartholomew, George E. (See Gibbons and Bartholomew.)						
Bartholomew, George E., Russell, N. Y. Washing-machine.....	498,223	May 30	2955	736	63	1210
Bartholomew, Gilbert A., Maumee, assignor of one-half to P. A. Haun, Delphos, Ohio. Rail-joint.....	506,899	Oct. 17	1871	465	65	379
Bartholomew, Grove S., Garvanza, Cal. Wire-fence lock and stay.....	501,240	July 11	1123	285	64	219
Bartholomew, Isaac H., Northford, Conn. Secondary-battery electrode.....	493,007	Mar. 7	373	93	62	1432
Bartholomew, Seth, Burr Oak, Mich. Bug-exterminator.....	495,654	Apr. 18	1827	457	63	372
Bartholomew, Thomas W., Danville, Pa. Filling-indicator for lamps.....	505,186	Sept. 19	1444	372	64	1568
Bartholomew, Thomas W., Danville, Pa. Filling-indicator for lamps.....	510,311	Dec. 5	783	190	65	1558
Bartlett, Alfred, Auckland, New Zealand. Time-indicator and signal for races.....	495,770	Apr. 18	2012	509	63	405
Bartlett, Charles C., New Brighton, N. Y., assignor to Orford Copper Company, of New Jersey. Producing and separating sulphide of nickel from ores containing nickel.....	499,314	June 13	936	.....	63	1568
Bartlett, Charles M., Chicago, Ill. Level.....	501,641	July 18	1763	439	64	353
Bartlett, Charles O., Cleveland, Ohio. Carbon-trimming machine.....	500,553	July 4	25	9, 10	64	7
Bartlett, Charles O., Cleveland, Ohio. Chain conveyer.....	505,431	Sept. 26	1849	475	64	1657
Bartlett, Eayre O., Joplin, Mo. Making sublimed-lead pigments.....	496,038	Apr. 25	2413	610	63	494
Bartlett, Frank L., Portland, Me. Furnace for burning coal-screenings.....	493,854	Mar. 21	1745	444	62	1730
Bartlett, Frank V., St. Paul, Minn. Type-writing machine.....	501,909	July 25	2207	550	64	445
Bartlett, George H., Bethlehem, Pa. Tool-holding box.....	498,455	May 30	3342	832 833	63	1280
Bartlett, George H., assignor of one-half to J. S. Moyer, Bethlehem, Pa. Noiseless attachment for school-slates.....	498,456	May 30	3345	833	63	1280
Bartlett, James, Toledo, Ohio. Temperature-indicator.....	489,212	Jan. 3	352	99 100 269	62 63	80
Bartlett, Jeremy, Collins, N. Y. Sheet-metal press.....	495,192	Apr. 11	1085	270	63	219
Bartlett, Jonathan B. L., Boston, Mass. Apparatus for protecting buildings from lightning.....	494,286	Mar. 28	2476	624	62	1880
Bartley, Samuel. (See Chamberlain, Marcus W., assignor.)						
Bartliff, Charles A., Memphis, Tenn. Speaking-tube.....	501,486	July 18	1517	381	64	307
Bartliff, Charles A., Memphis, Tenn. Speaking-tube.....	501,487	July 18	1518	381	64	307
Barton, Alexander, Boston, Mass. Toy savings-bank.....	496,393	May 2	10	3	63	620
Barton, Alfred, Boston, Mass. Sash-fastener.....	491,505	Feb. 7	724	183	62	888
Barton, Delbert E., San Francisco, Cal. Cultivator.....	500,702	July 4	270	73	64	51
Barton, Delbert E., Los Angeles, Cal. Washing and cleaning apparatus for fruit.....	508,860	Nov. 14	1412	350 351	65	1039
Barton, Edwin W., Lawrence, Mass. Pulp beating and mixing engine.....	503,069	Aug. 8	1384	342	64	835
Barton, George W., Bethlehem, Ky. Cartridge-belt.....	501,642	July 18	1764	439	64	353
Barton, Richard T., assignor to R. T. Barton Company, New Haven, Conn. Lamp-burner.....	499,499	June 13	1275	302	63	1627
Bartram, Walker B., Redding, assignor of one-half to M. Chittenden, Danbury, Conn. Diaphragm water-meter.....	509,508	Nov. 28	2578	623 624	65	1287
Bartruff, Edwin T., Keokuk, Iowa. Bridle-bit.....	501,987	July 25	2318	579	64	466
Bartsch, Wilhelm J., Dresden, Germany. Ore-dressing apparatus.....	491,672	Feb. 14	996	251	62	963
Basch, David, New York, N. Y. Corset-shield.....	489,783	Jan. 10	1229	322	62	270
Baschy, Henri, Hamburg, Germany. Apparatus for removing boiler-scale.....	507,203	Oct. 24	2405	593	65	489
Bascom, Austin T., assignor of one-half to J. K. Cummins, Sidney, Ohio. Paper-folding machine.....	497,745	May 16	2182	545 546 547	63	1044
Bash, Charles, assignor of one-half to S. Hipkiss, Boston, Mass. Route-indicator.....	509,609	Nov. 28	2736	661	65	1317
Baskerville, Herbert E., Detroit, Mich. Umbrella attachment for bicycles.....	498,224	Mar. 30	2956	737	63	1210
Baskott, Elisha F., McFall, Mo. Trough for salting stock.....	490,095	Jan. 17	1754	457	62	390
Bass, Robert T., Danville, Va. Tobacco casing and spraying machine.....	490,262	Jan. 24	2034	532 533	62	458
Bass, Samuel H., Oakland, Cal. Window frame and sash.....	492,655	Feb. 28	2552	632	62	1305
Bassett, Charles F., and I. S. Dement, Chicago, Ill. Autographic register.....	505,260	Sept. 19	1552	405 406	64	1589
Bassett, Edward F., Seymour, Conn. Folding table.....	510,232	Dec. 5	663	157	65	1535
Bassett, George B., Buffalo, N. Y. Disk water-meter.....	501,203	July 11	1068	271 272	64	210
Bassett, Horace P., Warren, Ohio. Car-brake.....	505,381	Sept. 19	1760	456	64	1627
Bassett, Monroe, Union City, Pa. Broom-corn-sizing machine.....	511,494	Dec. 26	2852	690	65	1979
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Safety-guard for cars.....	492,932	Mar. 7	254	64, 65	62	1409
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Armature for motors and generators.....	493,349	Mar. 14	912	234	62	1552
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Car-brake.....	494,751	Apr. 4	357	90	63	71
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Snow-sweeper.....	508,668	Nov. 14	1122	276 277	65	934
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Trolley for electric railways.....	508,669	Nov. 14	1123	277	65	985
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Ball thrust-bearing.....	508,670	Nov. 14	1124	278	65	985
Bassett, Norman C., Lynn, Mass., assignor to General Electric Company, of New York. Commutator connection.....	501,049	July 11	815	212	64	164
Bassett, Richard O., <i>et al.</i> (See Bailey, Henry E., assignor.)						
Bassett, Royal M. (See Bassett, Sheldon H., assignor.)						
Bassett, Sheldon H., Brooklyn, N. Y., assignor to himself, and R. M. Bassett, Birmingham, Conn. Apparatus for conveying and drying.....	501,048	July 11	813	211	64	163
Bassford, Isaac F., assignor of one-half to A. Docter, Milwaukee, Wis. Mowing-machine cutter-bar.....	493,054	Mar. 7	440	111	62	1446
Bassler, John H., Myerstown, Pa. Electric welding apparatus.....	498,735	May 30	3838	946 947	63	1366
Bassler, John H., Myerstown, Pa. Method of and apparatus for uniting metals.....	499,277	June 13	876	212 213	63	1557
Bassler, John H., Myerstown, Pa. Metal-working.....	501,038	July 4	790	207	64	144
Bast, Johann G., Brooklyn, N. Y. Bookbinding and book.....	495,771	Apr. 18	2015	509	63	405
Bastand, Charles T., London, England. Stove-grate.....	496,291	Apr. 25	2799	700	63	567

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Bastin, William H., Murphysborough, Ill. Measuring-vessel.....	503,571	Aug. 22	2214	554	64	1014
Baswitz, Carl, Berlin, Germany. Removing copper from textile parchments.....	506,966	Oct. 17	1975		65	399
Batcheller, Josiah W., St. Joseph, Mo. Boring-tool.....	508,803	Nov. 14	1313	327	65	1021
Batchelor, George, Fundsbury, England. Arrangement for drying slurry by waste heat from cement-kilns.....	507,052	Oct. 17	2126	528	65	426
Bate, James R., S. H. Shadbolt, G. R. and C. B. Houghton, Cincinnati, Ohio, assignors, by mesne assignments, to said Bate. Machine for cutting excelsior.....	495,239	Apr. 11	1158	290	63	233
Bate, William T., Conshohocken, Pa. Gas-generating apparatus.....	499,155	June 6	690	165 166	63	1510
Bate, William T., Conshohocken, Pa. Gas scrubber and purifier.....	499,156	June 6	693	166	63	1511
Bate, William T., Conshohocken, Pa. Gas-furnace.....	499,157	June 6	694	167	63	1511
Bate, William T., Conshohocken, Pa. Gas-generating apparatus.....	507,981	Nov. 7	6	2, 3	65	760
Bateman, Daniel C., Cleckheaton, England. Apparatus for hardening and tempering steel wire.....	503,398	Aug. 15	1933	480 696	64	948
Bateman, Richard W., Halifax, England. Boot-nailing machine.....	507,472	Oct. 24	2845	697 698	65	573
Bates, Albert J., Joliet, Ill. Cut-off for steam-engines.....	505,153	Sept. 19	1395	358	64	1559
Bates, Albert J., Joliet, Ill. Automatic safety-stop for engines.....	508,671	Nov. 14	1125	278	65	985
Bates Chester M., Lehman, Pa. Combined elevator and carrier.....	491,511	Feb. 14	746	189 190	62	912
Bates, Edwin G., New York, N. Y., assignor to Bates Manufacturing Company, of New York. Numbering-machine.....	489,449	Jan. 10	724	194	62	168
Bates, Francis G., Philadelphia, Pa. Metallurgical furnace.....	502,167	July 25	2611	657 658	64	522
Bates, George. (See Barber, Bates, Mabry, and Skelton.)						
Bates, Henry A., Yonkers, N. Y. Shifting clevis for plows.....	494,729	Apr. 4	321	81	63	63
Bates, Henry A., Yonkers, N. Y. Bobbin-holder for sewing-machine shuttles.....	505,305	Sept. 19	1637	423	64	1605
Bates, Henry A., New York, N. Y., assignor to J. R. Leeson & Co., Boston, Mass. Combined spool-holder and tension.....	490,096	Jan. 17	1755	458	62	391
Bates, James H., Hoboken, N. J. Conduit electric railway.....	492,737	Feb. 28	2667	661 662	62	1329
Bates, James H., Hoboken, N. J. Incandescent electric lamp.....	503,108	Aug. 8	1453	358	64	848
Bates, Joseph W., Minneapolis, Minn. Electrical supply system for railways.....	503,566	Aug. 15	2197	549	64	995
Bates, Lindon W., Chicago, Ill. Dredger.....	503,732	Aug. 22	2421	617	64	1063
Bates, Lindon W., Chicago, Ill. Dredger.....	503,733	Aug. 22	2423	617 618	64	1063
Bates, Lindon W., Chicago, Ill. Dredger.....	503,734	Aug. 22	2485	618 619	64	1064
Bates Manufacturing Company. (See Bates, Edwin G., assignor.)						
Bates, Onward, and B. B. Carter, assignors to themselves and W. W. Chrisie, Chicago, Ill. Device for stopping and derailling cars.....	498,611	May 30	3594	890	63	1324
Bates, Sadie M., assignor to G. F. Hall, Newark, and L. M. Thompson, Montclair, N. J. Luggage-carrier for velocipedes.....	499,903	June 20	1940	471	63	1757
Bates, William N., Atlantic, Iowa. Dust-pan.....	497,401	May 16	1645	416	63	947
Bates, Zervah E., Grand Rapids, Mich. Game apparatus.....	507,092	Oct. 24	2202	544	65	453
Bates, Zervah E., and M. E. Collins, Grand Rapids, Mich. Hook and eye.....	489,520	Jan. 10	849	221	62	193
Bates, Zervah E., and M. E. Collins, Grand Rapids, Mich. Hook and eye.....	509,347	Nov. 21	2258	546	65	1214
Bath, John, Hyde Park, Mass. Calipers.....	499,199	June 13	766	182	63	1538
Batters, Edward, and M. Duggan, Toronto, Canada. Stovepipe airing and drying rack.....	499,089	June 6	594	142	63	1494
Battley, Sumter B., New York, N. Y. Aerial machine.....	502,168	July 25	2613	658	64	522
Battles, Edwin W., et al. (See Losey, James, assignor.)						
Bauche, Gustave and H., Paris, France. Cloth-napping machine.....	494,052	Mar. 21	2077	531	62	1792
Bauche, Henri. (See Bauche, Gustave and H.)						
Bauder, Godfrey W., Sheldon, Iowa. Wagon-box strap.....	493,055	Mar. 7	441	111	62	1446
Bauer, Cornelius, Cincinnati, Ohio. Valve for carriage-tops.....	498,152	May 23	2823	706	63	1173
Bauer, Ferdinand, St. Louis, Mo. Automatic self-arrester ice-can filler.....	501,398	July 11	1392	349	64	267
Bauer, Max, Greenville, N. J. Ground-glass attachment for cameras.....	503,518	Aug. 15	2114	530	64	980
Bauer, Theodor, Berlin, and G. Mendheim, Munich, Germany. Coke and carbonizing oven.....	504,548	Sept. 5	395	100 101	64	1343
Baugh, Edward H., and C. W. Selvidge, Mexia, Tex. Hoisting attachment for wagon-beds.....	496,471	May 2	127	34	63	642
Baugh, John B., Detroit, Mich. Box-pile for making bar-iron.....	510,763	Dec. 12	1568	391	65	1718
Baughner, George W., Milford, Ind. Thill-coupling.....	492,507	Feb. 28	2317	574	62	1257
Baughman, Nathan, Hammersley Fork, assignor of one-half to R. E. Sandbach, Wellsborough, Pa. Clothes-pin.....	496,768	May 2	596	159	63	726
Baum, Christian, St. Genevieve, Mo. System of shelving.....	494,835	Apr. 4	504	126	63	97
Baum, Clarence M., Philadelphia, Pa. Apparatus for purifying steam and removing extraneous matter therefrom.....	505,085	Sept. 19	1293	333	64	1541
Baum, Clarence M., Philadelphia, Pa. Steam-trap.....	506,866	Oct. 17	1714	431	65	351
Baum, Edward F., Harrisburg, Pa. Extension-table.....	507,401	Oct. 24	2736	671	65	552
Baum, Friedrich, assignor of one-half to F. Hirschfeld, Vienna, Austria-Hungary. Clock-key.....	497,422	May 16	1676	423	63	953
Baum, Georg, Arbon, Switzerland. Embroidering-machine.....	498,925	June 6	316	74	63	1448
Baum, Hugo, Berlin, Germany. Stop-valve or stop-valve mechanism.....	493,806	Mar. 21	1679	428	62	1717
Baum, Jacob, assignor to Victor Safe and Lock Company, Cincinnati, Ohio. Metal-bending machine.....	492,858	Mar. 7	129	32	62	1383
Baum, James B., and O. F. Sensabaugh, Durango, Colo. Car-coupling.....	492,376	Feb. 21	2085	521	62	1197
Baumert, Paul. (See Wegener, Carl, assignor.)						
Baumgaertel, Carl G., Dresd n, Germany. Closet.....	508,079	Nov. 7	162	45	65	788
Baumgarten, Albert. (See Molchior, Herman, assignor.)						
Baumgarten, Albert, et al. (See Morgan and Redlinger, assignors.)						
Baumgarten, Constant, St. Louis, Mo. Belt-holder.....	492,738	Feb. 28	2668	662	62	1329
Baumgarten, Theodore L., assignor of one-half to F. C. Prindle, Hornellsville, N. Y. Nail for fastening hides.....	511,671	Dec. 26	3132	765	65	2030
Baumgartner, Johann J., St. Fiden, and H. Dreifuss, St. Gall, Switzerland. Cigar or cigarette holder.....	491,631	Feb. 14	937	235	62	951
Baumgartner, John F., et al. (See Whitacre, William C., assignor.)						
Bausch, George, Syracuse, N. Y. Eyeglass-guard. (Reissue).....	11,389	Nov. 14	1522	370	65	1057
Bausch, John J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Frame for eyeglasses.....	489,358	Jan. 3	574	155	62	123
Bausch & Lomb Optical Company. (See Bausch, John J., assignor.)						
Baxendale, Arthur S., Selangor, England. Dynamo-electric machine.....	494,836	Apr. 4	505	127	63	97
Baxter, Alfred E., and A. G. Mather, Milwaukee, Wis. Spiral conveyer.....	504,193	Aug. 29	3217	801	64	1220

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Baxter, Alfred E., and A. G. Mather, Milwaukee, Wis. Conveyer	511,315	Dec. 19	2535	{ 617 618 }	65	1908
Baxter, Channing, <i>et al.</i> (See Newman, Wilson J., assignor.)						
Baxter, George. (See McBean, McLaughlin, Corkhill, and Baxter.)						
Baxter, Hartley C. (See Stickney and Baxter.)						
Baxter, Henry E., <i>et al.</i> (See Newman, Wilson J., assignor.)						
Bay, Gabriel, Port Marly, France. Syringe	498,760	June 6	11	3	63	1390
Bayer, Heinrich, Hamburg, Germany. Leg-straightening device	507,775	Oct. 31	3381	828	65	686
Bayler, Adolph, assignor to L. Raffioer, New York, and C. H. Schott, Brooklyn, N. Y. Braiding-machine	500,685	July 4	244	66	64	46
Bayler, Adolph, assignor to L. Raffioer, New York, and C. H. Schott, Brooklyn, N. Y. Stop mechanism for spool-carriers	504,796	Sept. 12	802	204	64	1433
Bayless, Robert N., New York, N. Y. Commutator-brush holder	504,901	Sept. 12	973	{ 250 251 }	64	1467
Bayless, Arzela M., Chicago, Ill. Copy-holder	497,485	May 16	1785	449	63	971
Bayless, William C. (See Watkins and Bayless.)						
Bayley, Charles H., Boston, Mass. Cigar-box moistener	505,261	Sept. 19	1556	406	64	1589
Bayley, Haller H., <i>et al.</i> (See Hume, Thomas J., assignor.)						
Bayley, Richard W., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Fluid-pressure brake	493,904	Mar. 21	1818	{ 462 463 }	62	1744
Bayley, William. (See Whiteley and Bayley.)						
Bayley, William, Springfield, Ohio. Hand corn-sheller	497,486	May 16	1786	449	63	971
Bayley, William, assignor to Toronto Reaper and Mower Company, Springfield, Ohio. Grain-binding machine	497,111	May 9	1156	{ 296 297 }	63	845
Bayliss, Major W., Washington, D. C. System of heating	499,412	June 13	1134	271	63	1602
Baynes, William, Jasper, Mo. Eaves-trough hanger	511,035	Dec. 19	2069	512	65	1821
Bayrer, William J., assignor to Peck, Stow & Wilcox Company, Southington, Conn. Machine for cutting and bending sheet metal	490,060	Jan. 17	1697	{ 442 443 }	62	378
Bazemore, Julius H., Gray, Ga. Frogless automatic railway-switch	507,874	Oct. 31	3543	{ 871 872 }	65	716
Bazille, John A., and G. W. Partridge, St. Paul, Minn. Cleaning compound	507,473	Oct. 24	2849		65	574
Bazin, Ernest, Paris, France. Roller vessel or boat	507,099	Oct. 24	2203	544	65	453
Beach, Clifton H., Pittsburg, Pa. Tool for finishing the necks and mouths of bottles	491,069	Feb. 7	11	4	62	751
Beach, Edward S., trustee. (See White, Frederick, assignor.)						
Beach, Edwin R., Jersey City, N. J., and H. A. Berger, Brooklyn, N. Y. Check-punch	490,894	Jan. 31	3064	787	62	675
Beach, Elias, assignor to himself and P. Hughes, Chicago, Ill. Mop-wringer	499,717	Nov. 28	2903	702	65	1348
Beach, George W., trustee. (See Dietz, Henry F., assignor.)						
Beach, John E., Stafford, Kans. Harrow for listed corn	508,398	Nov. 14	697	171	65	901
Beach, Myron W. (See Mosher, Oscar M., assignor.)						
Beach, Oliver B., Stony Creek, Conn. Bicycle-bell	504,902	Sept. 12	975	251	64	1468
Beack, Andrew R., <i>et al.</i> (See Campbell, Carl T., assignor.)						
Beacon, Thomas. (See Johnson, William, assignor.)						
Beadle, Jesse, Shickshinny, assignor of one-half to E. A. Daddow, St. Clair, Pa. Miner's squib	502,946	Aug. 8	1199	295	64	801
Beadle, Thomas P., Climax, Mich. Car-coupling	509,590	Nov. 28	2703	654	65	1311
Beal, Moses. (See Driggs, George W., assignor.)						
Beal, Moses, Elyria, Ohio. Drilling machinery	510,880	Dec. 19	1813	448	65	1774
Beal, Welcome B., Boston, Mass. Life-saving vehicle	503,572	Aug. 22	2216	554	64	1014
Beal, William C., assignor of one-half to D. E. Maxwell, Fernandina, Fla. Car-coupling	507,982	Nov. 7	8	3	65	760
Beal, William K., assignor to J. R. Floyd & Sons, New York, N. Y. Gas-scrubber	510,396	Dec. 12	920	221	65	1599
Beale, Oscar J., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Lathe attachment	493,807	Mar. 21	1681	428	62	1717
Beall, Frank, assignor of one-half to H. Crea, Decatur, Ill. Steamer for tempering wheat	510,954	Dec. 19	1946	475	65	1799
Beall, John N., assignor of one-half to J. W. Miller, Jacksonville, Ill. Door-securer	504,653	Sept. 5	542	139	64	1372
Beals, Erle V., Muskegon, Mich. Matrix-making machine	490,263	Jan. 24	2037	{ 533 534 535 }	62	458
Beals, Erle V., Detroit, Mich. Apparatus for perforating strips for actuating type-rings	509,860	Dec. 5	12	3, 4	65	1413
Beals, Joseph J. (See Pool and Beals.)						
Beam, Amanda L., <i>et al.</i> (See Beam, Jacob B., assignor.)						
Beam, Aron M. (See Calhoun and Beam.)						
Beam, Jacob B., assignor to A. L. Beam and G. I. Palmer, Big Run, Pa. Washing-machine	511,321	Dec. 26	2549	{ 621 622 }	65	1924
Beam, Oren H., assignor of one-half to C. F. Knapp, Allegheny, Pa. Nut-lock	504,296	Aug. 29	3380	845	64	1251
Beam, Charlie E., assignor to P. M. Reagan, Chattanooga, Tenn. Car-coupling	497,066	May 9	1089	279	63	833
Beam, Edward D., Arlington, Mass. Feed-bag	495,215	Apr. 11	1115	279	63	225
Beam, George W., Philadelphia, Pa. Perfumery or other bottle	493,962	Mar. 21	1936	493	62	1764
Beam, Ivory, Brookline, Mass. Car-fender	509,646	Nov. 28	2790	671	65	1327
Beard, Arthur H., Manchester, Ala. Electric motor	510,059	Dec. 5	370	82	65	1479
Beard, John J. (See Carter and Beard.)						
Beard, Lewis W., Decorah, Iowa. Lubricator	497,297	May 16	1485	374	63	918
Beard, Lewis W., Decorah, Iowa. Windmill	510,497	Dec. 12	1083	261	65	1630
Beard, Luke, Cambridge, Mass. Butter-dish	493,326	Mar. 14	884	226	62	1546
Beard, Max C. (See Howe, Henry L., assignor.)						
Beard, Robert R., London, England. Gas regulator or governor	502,064	July 25	2445	614	64	489
Beard, William J., Ponders End, assignor to Corticine Floor Covering Company, Limited, London, England. Machine for the manufacture of floor-cloth	508,463	Nov. 14	786	{ 193 194 195 }	65	919
Beardsley, Backus A., Waterville, N. Y. Hop-picking machine	503,190	Aug. 15	1596	{ 392 393 }	64	888
Beardsley, Charles B., New York, N. Y. Lathe attachment	493,008	Mar. 7	373	93	62	1432
Beardsley, Charles B. and C. H., Brooklyn, N. Y. Bottling apparatus	509,647	Nov. 28	2791	{ 671 672 }	65	1327
Beardsley, Charles E., Ottawa, Ohio. Tablet-molding machine	506,807	Oct. 17	1716	432	65	351
Beardsley, Charles H. (See Beardsley, Charles B. and C. H.)						
Beardsley, Henry C., New Duluth, assignor to C. Hurd, Duluth, Minn. Refrigerator	498,612	May 30	3596	891	63	1324
Beardsley, Henry C., New Duluth, assignor of one-half to C. Hurd, Duluth, Minn. Door-latch	510,397	Dec. 12	922	222	65	1599
Beardsley, Oscar E., Trempealeau, Wis. Drain-valve attachment for pumps	507,961	Oct. 31	3682	915	65	742
Beardsley, William N., and A. D. Moulton, Bridgeport, Conn. Mouth-whistle	497,759	May 23	2225	557	63	1067
Bearman, John, Elderslie, Canada. Pea-harvester	503,031	Aug. 8	1332	{ 327 328 }	64	825
Beasley, William F., <i>et al.</i> (See Shaffer, Richard M., assignor.)						
Beasley, William F., Oxford, N. C. Indicator-lock	499,501	June 13	1279	303	63	1628

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Beasley, William F., Baltimore, Md. Indicator-lock	499,500	June 13	1276	302	63	1628
Beasley, William F., Baltimore, Md. Keyhole-guard	499,502	June 13	1281	303	63	1628
Beasley, William F., Baltimore, Md. Lock	499,503	June 13	1284	303	63	1629
Beasley, William F., Baltimore, Md. Keyhole-guard	499,504	June 13	1287	304	63	1630
Beasley, William F., Baltimore, Md. Lock	499,505	June 13	1292	304	63	1630
Beater, Alfred G., Philadelphia, Pa. Inking and cleaning apparatus for die-stamping	504,465	Sept. 5	248	65	64	1316
Beaton, Allan J., New Britain, Conn. Pipe-hanger	497,512	May 16	1831	461	63	979
Beaton, Thomas A., <i>et al.</i> (See Whitel, Russel B., assignor.)						
Beattie, Hans S. (See Winslow, Stewart, assignor.)						
Beatty, John T., Philadelphia, Pa. Lock	505,214	Sept. 19	1490	388	64	1577
Beatty, Thomas. (See Drey, Wilfred J., assignor.)						
Beatty, Thomas M., Quincy, Ill. Paint-mixer	507,059	Oct. 17	2128	538	65	426
Beaty, J. H. M., Columbia, S. C. Dust-proof sash-frame	498,225	May 30	2958	737	63	1210
Beaty, William A., Plant City, Fla. Phosphate-washer	492,262	Feb. 21	1912	477	62	1163
Beaudet, Leo C., Mount Vernon, N. Y. Eucharistic water-ceruet.	500,843	July 4	493	128	64	90
Beaudry, Zotique, Lynn, Mass. Burnishing-tool	510,398	Dec. 12	922	232	65	1599
Beaumont, David, New York, N. Y. Fountain-pen	491,795	Feb. 14	1191	298	62	1001
Beaumont, David W., New York, N. Y. Stylographic pen	507,348	Oct. 24	2651	651	65	535
Beaumont, Charles M., Hull, England. Toy soldier	505,344	Sept. 19	1692	436	64	1615
Beaumont, Franklin S. (See Johnson, Alexander A., assignor.)						
Beaumont, James W., Waterbury, Conn. Anvil for eyelet-setting	494,542	Apr. 4	6	1	63	3
Beaumont, James W., Waterbury, Conn. Garment-supporter	502,393	Aug. 1	241	57	64	610
Beaumont, James W., Waterbury, Conn. Button	508,498	Nov. 14	850	210	65	931
Beaumont, John W., St. Louis, Mo. Concrete wall	504,194	Aug. 29	3219	801	64	1220
Beaumont, Thomas C., assignor to Henry Huber Company, New York, N. Y. Stench-trap	491,330	Feb. 7	447	115	62	833
Beaupre, Bruno, St. Paul, Minn. Dust-guard for journal-bearings	498,736	May 30	3841	947	63	1366
Beaupre, Bruno, St. Paul, Minn. Roller-bearing	498,737	May 30	3842	947	63	1366
Beauregard, Napoleon. (See Wagner and Beauregard.)						
Beauregard, Victor, Boston, Mass. Wire-bending machine	496,472	May 2	128	34, 35	63	642
Beausheue, Stanislas D., <i>et al.</i> (See Prosser, Joseph W., assignor.)						
Beauvalet, Ernest E. and L. C., Paris, France. Electric-arc lamp	495,772	Apr. 18	2016	510	63	405
Beauvalet, Léon C. (See Beauvalet, Ernest and L. C.)						
Beaver, William G., assignor of two-thirds to T. Evans and J. C. Garrison, Hillsborough, Tex. Clothes-pounder	492,774	Mar. 7	4	1	62	1359
Beavis, Arthur J., Aspen, Colo. Uterine dilator	507,060	Oct. 17	2129	528	65	427
Beazell, Ella W., Beaver, Pa. Fastening for barrel or other hoops	500,844	July 4	495	128	64	90
Beazley, Joseph O., Baltimore, Md., assignor to Standard Heater Company, of West Virginia. Hydrocarbon-burner	504,297	Aug. 29	3380	845	64	1251
Becannon, Charles W., New York, N. Y. Combined match and ticket case	498,875	June 6	227	54	63	1433
Beckard, David. (See Boucher, John, assignor.)						
Beckmann, Albertina, Cincinnati, Ohio. Slate-ruler	509,356	Nov. 28	2284	554	65	1230
Bechtold, William, New York, N. Y. Machine for manufacturing articles of glass	493,808	Mar. 21	1682	428 } 429 }	62	1717
Beck, August. (See Hertel and Beck.)						
Beck, Charles R. R., Baltimore, Md. Druggist's still	509,282	Nov. 21	2144	515	65	1192
Beck, David, and R. W. Levitt, McLuney, Ohio. Fire-escape	493,574	Mar. 14	1288	329	62	1625
Beck, Frederick, New York, N. Y. Printing block or roller	490,061	Jan. 17	1699	443	62	378
Beck, Isaac. (See Gohrt, Hermann, assignor.)						
Beck, Jacob P., assignor of one-half to A. White, Lock Haven, Pa. Saw-set	507,523	Oct. 31	2949	723	65	605
Beck, John H., and E. E. Reilly, Peru, Ind. Milk-cooler	492,183	Feb. 21	1788	447	62	1138
Beck, Lewis B., assignor of one-half to J. L. Higginbotham, Cumberland City, Ky. Car-coupling	508,127	Nov. 7	245	62	65	804
Beck, Michael, Minneapolis, assignor of one-half to J. Wolsfeld, Long Lake, Minn. Combined oil-gas generator and burner	503,399	Aug. 15	1934	421	64	948
Beck, Niels L., Brayton, Iowa. Harrow	491,400	Feb. 7	563	142	62	856
Beck, Warren F., Knoxville, Pa., assignor, by mesne assignments, to Eureka Cash and Credit Register Company, Elmira, N. Y. Cabinet for holding money, coupons, &c.	511,231	Dec. 19	2391	533	65	1282
Becker, August, New York, N. Y. Machine for transferring glue to paper	498,502	May 30	3421	849	63	1294
Becker, Charles, Little Berger, Mo. Combination-tool	511,107	Dec. 19	2190	538	65	1845
Becker, Charles G., Westfield, Mass. Whip	491,512	Feb. 14	748	190	62	912
Becker, Christian H. (See King and Becker.)						
Becker, Ferdinand W., Philadelphia, Pa. Box or case for bottles	511,672	Dec. 26	3133	766	65	2030
Becker, Frederick G., Peoria, Ill. Twine-making machine	495,409	Apr. 18	1531	383	63	321
Becker, Frederick G., Peoria, Ill. Twine-making machine	507,100	Oct. 24	2205	544 } 545 }	65	454
Becker, Heinrich. (See Vonhaus and Becker.)						
Becker, Henry S., assignor of two-thirds to J. A. Armstrong and I. A. Saltsman, Charlottesville, Va. Stop-motion for knitting-machines	509,283	Nov. 21	2145	515 } 516 }	65	1192
Becker, John, Fitchburg, Mass. Milling-machine	489,282	Jan. 3	463	129	62	102
Becker, John, Kynulga, Ala. Apparatus for purifying liquors by electrolysis	493,809	Mar. 21	1685	430	63	1718
Becker, John D., Peoria, Ill. Bronze	490,706	Jan. 31	2772		62	618
Becker, John J., Scranton, Pa. Cigar-machine	494,619	Apr. 4	150	35, 36	63	31
Becker, Margaret J., Cohoes, N. Y. Window-cleaner	492,899	Mar. 7	204	50	62	1399
Becker, Oscar R., Reading, Pa. Dumping-wagon	493,350	Mar. 14	913	234	62	1552
Becker, Philip A., Piqua, Ohio. Picture-holder	498,761	June 6	12	3	63	1391
Becker, William, Chicago, Ill. Guitar	493,810	Mar. 21	1687	430	62	1718
Beckerle, William, Danbury, Conn. Machine for blocking hats	509,284	Nov. 21	2149	516 } 517 }	65	1193
Beckert, William, Allegheny, Pa. Combined jack and truck	493,811	Mar. 21	1688	430	62	1718
Beckett, John R., Jr., Bradford, Mass., assignor to Q. W. and I. E. Booth, Rochester, N. Y. Turning-machine	509,423	Nov. 28	2410	583 } 584 }	65	1253
Beckett, Thomas T., Toledo, Ohio, assignor to himself and J. Howe. Smoke-consumer	499,004	June 6	401	108	63	1472
Beckley, John, Sr., Royal Centre, Ind. Corn-crib	499,200	June 13	768	182 } 183 }	63	1538
Beckley, Joseph C., Dayton, Ohio. Clothes-drier	503,573	Aug. 22	2217	554	64	1015
Beckman, Peter, Bucksport, Me. Antifriction-bearing	491,401	Feb. 7	565	142	62	856
Beckmann, Henry C., <i>et al.</i> (See Barker, Henry C., assignor.)						
Beckmann, Henry C., <i>et al.</i> (See Fernhaltz, Emil, assignor.)						
Beckwith, Erwin G., Washington, D. C. Railway-torpedo	501,399	July 11	1396	349	64	267
Beckwith, Giles A., Waterford, Conn. Lock	506,461	Oct. 10	1158	287	65	234
Beckwith, Grove R., and W. F. McCollum, Minneapolis, Minn. Coin-operated lung-tester	511,285	Dec. 19	2489	606 } 607 }	65	1900
Beckwith, Nelson, Cambridge, Mass. Elevator	499,700	June 20	1587	382 } 383 }	63	1696

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Beckwith, Nelson, Somerville, Mass. Elevator.....	502,270	Aug. 1	7	3	64	568
Beckwith, William G., assignor to Daniel Pratt Gin Company, Prattville, Ala. Belt-tightener for cotton-gins.....	493,204	Mar. 7	665	170	62	1489
Bedard, Joseph A., Detroit, Mich. Shirt.....	488,981	Jan. 3	11	3	62	5
Bedbury, George W., Alameda, and E. F. Badgley, San Francisco, Cal.; said Bedbury assignor to said Badgley. Composition of matter for water-pipes.....	506,356	Oct. 10	968	.....	65	196
Bedell, Charles H., Swarthmore, Pa., assignor to Electro-Dynamic Company of Philadelphia, of Pennsylvania. Automatic switch.....	493,009	Mar. 7	375	93	62	1433
Bedford, Alexander L. (See Walker, William J., assignor.)						
Bedford, Alexander L. (See Walker and Bedford.)						
Bedford, Alexander L., assignor of one-half to W. J. Walker, St. Louis, Mo. Wrench....	511,190	Dec. 19	2330	570	65	1870
Bedford, Jeff. W. (See Booklin, Reinhold, assignor.)						
Bedford, Jeff. W. (See Oehrlie, Emanuel, assignor.)						
Bedgood, George A., assignor of one-half to J. C. Mullen, Cincinnati, Ohio. Gutter-tile....	494,620	Apr. 4	153	36	63	31
Bedgood, George A., Cincinnati, assignor of one-half to H. Varwig, Carthage, Ohio. Making concrete pavements.....	510,233	Dec. 5	664	157	65	1536
Bedingfield, Fleming A. O., Mutford, England. Quoit-peg.....	493,746	Mar. 21	1579	402	62	1692
Bednarz, Anton, New Lisbon, Wis. Heat-regulator for ovens.....	505,345	Sept. 19	1693	436	64	1615
Bedwell, Frederick L., London, England. Support for telegraph-cables.....	490,534	Jan. 24	2479	639	62	545
Beebe, Alvaro N., King City, Cal. Combined weed-cutter and land-leveler.....	506,764	Oct. 17	1649	413	65	338
Beebe, Dillon, assignor to D. Beebe, Jr., Newark, N. J. Combined faucet attachment, bung, and bush.....	495,718	Apr. 18	1930	485	63	389
Beebe, Dillon, assignor to D. Beebe, Jr., Newark, N. J. Faucet and vent bung and bushing.....	495,719	Apr. 18	1932	485	63	390
Beecher, Edwin N., Marion, assignor to H. H. and C. H. Clark, R. W. Bemis, and W. H. Cummings, Southington, Conn. Machine for tapping or reaming blanks.....	504,903	Sept. 12	978	252	64	1468
Beecher, Lina, Batavia, N. Y. Railway system.....	507,402	Oct. 24	2737	672	65	552
Beeching, David G., New York, N. Y. Illuminating-tile.....	510,831	Dec. 12	1652	418	65	1739
Beehler, Charles W., assignor to A. Kuehne, St. Louis, Mo. Hydrothermal mining process.....	497,513	May 16	1832	462	63	980
Beehler, Charles W., assignor to A. Kuehne and F. Hausperger, St. Louis, Mo. Fire-grate.....	493,056	Mar. 7	441	111	62	1446
Beehler, Charles W., assignor to American Novelty Manufacturing Company, St. Louis, Mo. Box-fastener.....	493,057	Mar. 7	442	111	62	1447
Beekly, Israel B., assignor of one-half to J. H. Garey, Carleton, Nebr. Pruning implement.....	499,701	June 20	1589	384	63	1696
Beekman, Gerard, New York, N. Y. Reaping or mowing machine.....	490,781	Jan. 31	2894	742 743	62	640
Beekman, Gerard, New York, N. Y. Reaping or mowing machine.....	490,782	Jan. 31	2896	743 744	62	641
Beekman, Gerard, New York, N. Y. Cotton-harvesting device.....	493,010	Mar. 7	376	94	62	1433
Beekman, Gerard, New York, N. Y. Cotton-harvester.....	495,007	Apr. 11	751	191	63	159
Beekman, Gerard, New York, N. Y. Car-coupling.....	495,655	Apr. 18	1828	457 458	63	372
Beekman, Gerard, New York, N. Y. Mechanical movement.....	495,656	Apr. 18	1830	458	63	373
Beekman, Gerard, New York, N. Y. Flexible shafting.....	497,905	May 23	2455	613 614	63	1107
Beekman, Gerard, New York, N. Y. Mechanism for actuating pickers for cotton-harvesters.....	501,669	July 18	1809	450 450 451 452	64	360 361
Beekman, Gerard, New York, N. Y. Cotton-harvester.....	501,670	July 18	1811	451 452	64	361
Beekman, Gerard, New York, N. Y. Picker-actuating mechanism for cotton-harvesters.....	501,671	July 18	1815	452 453	64	361
Beekman, Gerard, New York, N. Y. Car-coupling link.....	503,116	Aug. 15	1479	363	64	865
Beekman, Gerard, New York, N. Y. Mowing-machine.....	509,285	Nov. 21	2153	517 518	65	1194
Beeler, Charles H., Jr., Philadelphia, Pa. Combined routing, ruling, and tinting machine.....	506,089	Oct. 3	448	117 118	65	87
Beeler, George, Garlington, Kans. Slat-and-wire-fence machine.....	489,139	Jan. 3	238	66	62	55
Beeman, Frank A., assignor of two-thirds to C. A. Carpenter and E. A. Handy, Cleveland, Ohio. Switch-stand.....	491,463	Feb. 7	663	166 167	62	875
Beeman, Marcus M., Syracuse, N. Y. Binding.....	490,819	Jan. 31	2946	756	62	651
Beeman, Marcus M., Syracuse, N. Y. Dress-stay.....	507,875	Oct. 31	3545	872	65	717
Beemer, Daniel S. (See Swartz and Beemer.)						
Beemer, John B. (See McGuire and Beemer.)						
Beenck, Peter H., Jennings, Mo. Mail-box.....	507,474	Oct. 24	2849	698	65	574
Beer, Ludwig, assignor to T. Fellner, Munich, Germany. Adjustable stand for curtains and blinds.....	498,226	May 30	2959	737 738	63	1211
Beer, Peter, Detroit, Mich. Machine for making match-splint cards.....	497,746	May 16	2186	547	63	1044
Beermaker, John, Wahoo, Nebr. Mowing-machine.....	507,962	Oct. 31	3683	915 916	65	742
Beers, Andrew. (See Linabury, Charles E., assignor.)						
Beers, Charles L., Scranton, Pa. Bolt-cutter.....	500,184	June 27	2413	588	63	1851
Beers, Franklin H., Newark, N. J. Ceiling-fan.....	492,523	Feb. 28	2335	579 580	62	1261
Beers, Franklin H., Newark, N. J. Electric motor.....	492,524	Feb. 28	2338	580	62	1261
Beers, Franklin H., Newark, N. J., assignor to E. Hayes, New York, N. Y. Machine for splitting feathers.....	490,468	Jan. 24	2369	613	62	523
Beers, Frederic C. (See Beers, Ira F. and F. C.)						
Beers, George W., assignor of one-half to W. D. Beers, Wilkes-Barré, Pa. Power-actuated cigar-tip-cutter.....	495,216	Apr. 11	1116	279	63	225
Beers, Ira F. and F. C., Elmira, N. Y. Thermostatic damper-regulator.....	509,348	Nov. 21	2259	546	65	1214
Beers, John E. (See Jennings, Oscar S., assignor.)						
Beers, Louis G., Chicago, Ill. Flower-stand.....	494,730	Apr. 4	322	81, 82	63	64
Beers, William D. (See Beers, George W., assignor.)						
Beers, William L. and H. O. Howland, Rhineland; said Beers assignor to H. O. Howland, Oshkosh, Wis. Scissors-sharpener.....	511,397	Dec. 26	2698	654	65	1951
Beerstecher, Leonard E. C. J., The Hague, Netherlands. Railway-train protector.....	507,349	Oct. 24	2652	652	65	536
Beery, Samuel M., Chicago, Ill., assignor to Consolidated Car-Heating Company, Wheeling, W. Va. Hose-coupling.....	494,316	Mar. 28	2516	634	62	1889
Beery, Samuel M., assignor to Beery Valve Company, Chicago, Ill. Air-brake hose-coupling.....	509,114	Nov. 21	1863	457	65	1139
Beery Valve Company. (See Beery, Samuel M., assignor.)						
Beesley, Edward, Sr., and E. and E. Beesley, Jr., Newark, N. J., assignors to T. and G. M. Stone. Machine for cutting fur from pelts.....	495,470	Apr. 18	1532	384	63	321
Beesley, Ellis, Jr. (See Beesley, Edward, Sr., and E. and E. Beesley, Jr.)						
Beetison, Israel, Ashland, Nebr. Shoe-fastener.....	500,048	June 20	2160	524	63	1795

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Beggs, David F. (See Lynch, Patrick H., assignor.)						
Begtrup, Julius, assignor to J. H. McEwen, Ridgway, Pa. Engine-governor	510,312	Dec. 5	784	190	65	1558
Begtrup, Julius, assignor of one-half to J. H. McEwen, Ridgway, Pa. Engine-governor	510,313	Dec. 5	786	190	65	1558
Begtrup, Julius, assignor to J. H. McEwen, Ridgway, Pa. Engine-governor	510,314	Dec. 5	788	190	65	1559
Begtrup, Julius, assignor of one-half to J. H. McEwen, Ridgway, Pa. Engine-governor	510,315	Dec. 5	788	191	65	1559
Begtrup, Julius, assignor of one-half to J. H. McEwen, Ridgway, Pa. Safety-stop for governors	510,316	Dec. 5	790	191	65	1560
Behel, Edmund B., and F. C. Jenkins, Cunningham, Kans. Grain-header	509,648	Nov. 28	2793	672	65	1328
Behler, Oswald, Gross Guhran, Germany. Adding-machine	494,618	Apr. 4	148	35	63	31
Behlen, Charles A., Cincinnati, Ohio. Vehicle-dash	500,845	July 4	496	129	64	91
Behlen, Charles A., Cincinnati, Ohio. Carriage-dash	500,989	July 4	717	188	64	130
Behlert, Lorenz R., Baltimore, Md. Coal-dumping wagon	510,670	Dec. 12	1414	{ 348 349 }	65	1689
Behmer, Daniel, Santa Rosa, assignor of two-thirds to A. Blaich, San Francisco, Cal. Pruning implement	500,526	June 27	2942	722	63	1946
Behn, John F., and G. A. Wegner, Buffalo, N. Y. Congealer for ice-making machines	505,588	Sept. 26	2153	{ 544 545 }	64	1715
Behne, Ernst, St. Louis, Mo. Basket	505,694	Sept. 26	2340	592	64	1749
Behr, Arno, Chicago, Ill. Making starch and cattle-food	491,234	Feb. 7	283		62	802
Behr, Claus F. J., Wakefield, Mass. Chair	490,334	Jan. 24	2164	564	62	484
Behr, Hans C., San Francisco, Cal. Variable transmitting gearing	491,866	Feb. 14	1301	321	62	1024
Behr, Hans C., San Francisco, Cal. Dynamometer	498,837	June 6	152	37	63	1419
Behrenfeld, George, Heron Lake, Minn. Hay-press	505,999	Oct. 3	309	80	65	60
Behrens, Charles W., Lancaster, Ohio. Hay-rack	502,220	July 25	2696	680	64	538
Behrens, Friedrich D., Cincinnati, Ohio. Buckle-shield	509,718	Nov. 28	2205	703	65	1348
Behrens-Senegalden, George A., Lichterfelde, Germany. Pianoforte	496,845	May 9	727	193	63	768
Beidler, Frank M., Upper Sandusky, Ohio. Whip-socket	503,340	Aug. 15	1847	457	64	932
Beiermeister, Frederick, Jr. (See Beiermeister, John M., assignor.)						
Beiermeister, John M., assignor of one-half to F. Beiermeister, Jr., Troy, N. Y. Apparatus for starching fabrics	493,905	Mar. 21	1821	464	62	1744
Beiersdorf, Paul C., Altona, Germany. Treating gutta-percha or balata	508,560	Nov. 14	955		65	951
Beimling, Henry F., assignor to H. Disston & Sons, Incorporated, Philadelphia, Pa. Miter-box	506,090	Oct. 3	450	118	65	88
Beinke, George, assignor of one-half to E. E. Dale, Toledo, Ohio. Water-gage safety attachment	497,564	May 16	1913	481	63	994
Beiser, William, Marseilles, Ill. Pulverizer	509,357	Nov. 28	2284	554	65	1230
Beisheim, Henry, Jersey City, N. J. Mat	496,216	Apr. 25	2686	674	63	545
Beland, Frank, Cairo, Ill. Electric time cut-out	505,808	Oct. 3	5	2	65	4
Bélanger, Victor, Boston, assignor of one-half to J. Quincy, Quincy, Mass. Sprocket-wheel	504,466	Sept. 5	285	73	64	1323
Belcher, George E., Stoughton, Mass. Last-block fastener	493,394	Mar. 14	980	252	62	1567
Belcher, Gilbert L., Oakland, Cal. Shaving-brush	510,152	Dec. 5	525	121	65	1509
Belden Machine Company. (See Scranton, George H., Jr., assignor.)						
Belding, Thomas C., Canton, Ohio. Fillet	508,399	Nov. 14	698	171	65	901
Belfield, Reginald, London, England, assignor to G. Westinghouse, Jr., Pittsburg, Pa. Electric-arc lamp	511,495	Dec. 26	2854	690	65	1979
Belisario, Edward H., et al. (See Hodgkinson, Thomas C., assignor.)						
Bell, Alfred H. (See Carter and Bell.)						
Bell, Arthur F. L., assignor to California Petroleum and Asphalt Company, San Francisco, Cal. Extracting and refining asphaltum, &c	505,416	Sept. 19	1817	469	64	1638
Bell, Arthur F. L., assignor to California Petroleum and Asphalt Company, San Francisco, Cal. Centrifugal liquid-separator	508,270	Nov. 7	481	{ 116 117 }	65	847
Bell, Charles, Stroudsburg, Pa. Connector	507,403	Oct. 24	2738	672	65	553
Bell, Charles A. (See Rayburn and Bell.)						
Bell, George E., West Somerville, Mass. Air-brush spoon	498,227	May 30	2960	738	63	1211
Bell, John M., Tacoma, Wash. District-telegraph return-signal key	497,942	May 23	2511	627	63	1117
Bell, John T., Dayton, Ohio. Harrow	496,811	May 2	673	178	63	738
Bell, Louis, Boston, Mass., assignor to General Electric Company, of New York. Synchronism-indicator	502,695	Aug. 8	763	185	64	721
Bell, Louis, Boston, Mass., assignor to General Electric Company, of New York. Multiphase motor	504,904	Sept. 12	984	253	64	1470
Bell, Louis, assignor to General Electric Company, Boston, Mass. Multiphase motor	505,505	Sept. 26	1975	507	64	1680
Bell, Louis, assignor to General Electric Company, Boston, Mass. Regulator for dynamo-electric machines	510,465	Dec. 12	1036	248	65	1620
Bell, Oro A., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Preparing cables for multiple switchboards	501,859	July 18	2107	521	64	412
Bell, Oro A., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Manufacture of cables for multiple switchboards	505,798	Sept. 26	2500	631	64	1780
Bell, Oro A., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Automatic signal for trunk-lines of telephone-exchanges	507,983	Nov. 7	9	4	65	760
Bell, Thompson R., Indianapolis, Ind. Fluid-pressure regulator	489,176	Jan. 3	292	81	62	67
Bell, Upton. (See Bishop, George, assignor.)						
Bell, William H., U. S. Army. Trenching-tool	506,091	Oct. 3	451	118	65	88
Bell, Winslow M., Milton, N. Y. Electric stop-motion for knitting-machines	491,004	Jan. 31	3249	831	62	710
Bellamy, Charles H., South Hadley Falls, Mass. Method of and apparatus for marbling or coloring paper, &c	492,933	Mar. 7	255	65	62	1409
Bellamy, Charles L., Arlington, N. J. Vehicle-spring	497,487	May 16	1788	450	63	971
Bellamy, John H., New York, N. Y. Filter	494,837	Apr. 4	506	127	63	98
Bellamy, William H. (See Schnepf, John, assignor.)						
Bellinger, Albert D., assignor to himself and H. B. Cole, Black River Falls, Wis. Rotary engine	491,402	Feb. 7	565	143	62	856
Bellon, David, McKownville, N. Y. Car-coupling	502,650	Aug. 1	674	163	64	690
Bellows, Henry N. (See Link, Harvey L., assignor.)						
Bells, Robert T., Birkenhead, assignor to E. W. Quirk and J. Sharp, Liverpool, England. Pipe-joint	498,876	June 6	228	54	63	1433
Belser, James H., assignor to Wood & Willard, Marlborough, Mass. Elevator	489,359	Jan. 3	575	{ 155 156 }	62	123
Belt, Cornelius T., Washington, D. C. Egg-crate	495,773	Apr. 18	2017	510	63	406
Beltman, Arnold A. (See Learmonth and Beltman.)						
Bement, Edward P. (See Hoggson and Bement.)						
Bement & Sons, E. (See Ovenshire, Elijah A., assignor.)						
Bement, William O., assignor to Wire Goods Company, Worcester, Mass. Garment-hanger	495,926	Apr. 18	2246	566	63	448
Bement, William O., assignor to Wire Goods Company, Worcester, Mass. Die for rolling screw-threads	510,109	Dec. 5	449	{ 100 101 }	65	1494

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Bemis & Call Hardware and Tool Company. (See Bemis, William S., assignor.)						
Bemis, Edgar W., Worcester, Mass., assignor to Pratt & Whitney Company, Hartford, Conn. Milling-machine	506,620	Oct. 10	1400	{ 351 352 }	65	281
Bemis, Edwin L. (See Elliott, Bemis, and Ward.)						
Bemis, Leonard W. (See Harris, Clinton O., assignor.)						
Bemis, Robert W., et al. (See Beecher, Edwin N., assignor.)						
Bemis, Sumner A., and G. M. Hoadley, Springfield, Mass. Car-brake	497,514	May 16	1833	462	63	980
Bemis, William S., assignor to Bemis & Call Hardware and Tool Company, Springfield, Mass. Die for the manufacture of wrenches	498,204	May 23	2919	727	63	1189
Bemis, William S., assignor to Bemis & Call Hardware and Tool Company, Springfield, Mass. Combined pipe and monkey wrench	501,860	July 18	2109	521	64	413
Benard, Georges. (See Heftler and Benard.)						
Benas, Marie, New York, N. Y. Necktie-box	495,008	Apr. 11	753	191	63	159
Benberger, Frank. (See Mitchell and Benberger.)						
Benbow, Thomas C., Walden, Colo. Car-coupling	495,449	Apr. 11	1488	374	63	293
Bender, Albert N., and J. J. Schoenecker, Milwaukee, Wis. Fly-trap	511,108	Dec. 19	2191	539	65	1845
Bender, Frank, Armourdale, Kans. Car-coupling	491,976	Feb. 21	1468	366	62	1072
Bender, Fritz, assignor to A. Leonhardt & Co., Mülheim, near Frankfort-on-the-Main, Germany. Blue dye	494,838	Apr. 4	507	.....	63	98
Bender, Fritz, assignor to A. Leonhardt & Co., Mülheim, Germany. Orange dye	493,305	Aug. 15	1784	.....	64	921
Bender, Fritz, and M. Kämmerer, assignors to A. Leonhardt & Co., Mülheim-on-the-Main, Germany. Yellow-red dye	489,623	Jan. 10	988	.....	62	921
Bender, Harriet, Denver, Colo. Garden-seed drill	493,146	Mar. 7	581	145	62	1473
Bender, Hubert H. (See Bender, John O. and H. H.)						
Bender, John O. and H. H., Fayetteville, N. Y. Transplanter	490,942	Jan. 31	3153	808	62	691
Bendure, William H., and S. Tilbery, assignors of one-third to J. H. Hartman, Fort Wayne, Ind. Sleigh attachment for bicycles	490,240	Jan. 17	1997	523	62	438
Benecke, Adelbert O., Newark, N. J. Resistance-box	511,266	Dec. 19	2491	607	65	1900
Benedict, Arthur J., administrator. (See Smith, George H.)						
Benedict & Burnham Manufacturing Company. (See Hallas, James G., assignor.)						
Benedict, Francis D., Haverhill, Mass., assignor, by mesne assignments, to Reece Button Hole Machine Company, Portland, Me. Buttonhole-finishing machine	490,062	Jan. 17	1700	{ 443 444 }	62	378
Benedict, Hiram A., Brooklyn, N. Y. Photographic camera	493,747	Mar. 21	1580	402	62	1698
Benedict, John C., New Albany, Kans. Check-row corn-planter	506,462	Oct. 10	1160	288	65	234
Benedikt, Julius, and I. Klein, Vienna, Austria-Hungary. Horse-hitching device	506,656	Oct. 17	1461	367	65	304
Benesh, Joseph, assignor of one-half to W. G. Adams, Racine, Wis. Grain-screen	506,657	Oct. 17	1462	368	65	304
Benfield, Joseph, Walsall, England. Die for making horseshoes	490,734	Jan. 31	2812	{ 721 722 }	62	625
Bengough, George, et al. (See Chavasse, James J., assignor.)						
Benham, Arthur D., Chicago, Ill. Wire-rope drum-reel	503,227	Aug. 15	1658	407	64	898
Benham, P. A. (See Odgers, George L., assignor.)						
Benham, William B., Washington, D. C. Water-filter	498,967	June 6	383	91	63	1459
Benitez, Manuel, New York, N. Y. Columbian egg-puzzle	496,716	May 2	514	137	63	712
Benjamin, Edwin, assignor to F. S. Benjamin and H. L. Litchfield, Chicago, Ill. Automatic boiler-cleaner	497,046	May 9	1052	269	63	826
Benjamin, Fred S., et al. (See Benjamin, Edwin, assignor.)						
Benjamin, George H. (See Raabe, Carl, assignor.)						
Benjamin, George H., New York, N. Y., assignor to Siemens & Halske, Berlin, Germany. Incandescent lamp	495,240	Apr. 11	1160	290	63	233
Benjamin, George H., New York, N. Y., assignor to Siemens & Halske, Berlin, Germany. Electric-railway trolley	506,463	Oct. 10	1161	288	65	234
Benjamin, John M., and R. C. Simmons, Lawrence, assignors to C. F. Brown, trustee, Reading, Mass. Nail separating and feeding device	503,895	Aug. 22	2712	{ 681 682 }	64	1108
Benjamin, Lyde W., assignor to M. E. Benjamin, Boston, Mass. Broom moistener and bridle.	497,747	May 16	2189	548	63	1045
Benjamin Machine Company. (See Hackney, Herbert, assignor.)						
Benjamin, Miriam E. (See Benjamin, Lyde W., assignor.)						
Benjamin, Newton, Elmira, N. Y. Railway-tie	505,019	Sept. 12	1168	300	64	1505
Benjamin, Newton, Elmira, N. Y. Railway-tie	505,020	Sept. 12	1170	300	64	1505
Benn, Harrison. (See Smith, Edward, assignor.)						
Benners, Edwin H., Elizabeth, N. J. Roller-bearing	498,228	May 30	2961	738	63	1211
Bennett, Albert J., Woonsocket, R. I. Radiator-shelf	502,871	Aug. 8	1060	260	64	777
Bennett, Albert J., Woonsocket, R. I. Radiator attachment	505,589	Sept. 26	2155	545	64	1716
Bennett, Allan T., Chicago, Ill. Apparatus for the manufacture of gas	493,855	Mar. 21	1746	445	62	1730
Bennett, Allan T., Chicago, Ill. Gas-burner	493,856	Mar. 21	1748	445	62	1730
Bennett Amalgamator Manufacturing Company. (See Bennett, Erastus S., assignor.)						
Bennett, Claude, Decatur, Mich. Milk-rail	500,094	June 20	2325	542	63	1206
Bennett, Darius, Nelsonville, Ohio. Bu .per for mine-cars	496,846	May 9	728	193	63	768
Bennett, David T., Trenton, N. J. Conductor support and insulator	503,519	Aug. 15	2115	{ 530 531 }	64	980
Bennett, Edwin H., Jr., Bayonne, N. J. Electric fan	510,466	Dec. 12	1038	218	65	1621
Bennett, Erastus S., assignor to Bennett Amalgamator Manufacturing Company, Denver, Colo. Dredge	493,226	Mar. 7	703	{ 180 181 }	62	1496
Bennett, Francis E., Philadelphia, Pa. Garment-hook	493,011	Mar. 7	377	94	62	1433
Bennett, Francis E., Philadelphia, Pa. Garment-fastener	511,577	Dec. 26	2983	727	65	2004
Bennett, George H., Cincinnati, Ohio. Bracket for electric-light wires	489,861	Jan. 10	1332	348	62	292
Bennett, George W., assignor to himself and J. C. Klock, Bennettsville, La. Cane-loading apparatus	506,967	Oct. 17	1976	489	65	399
Bennett, Henry B. (See Jordan, Linwood F., assignor.)						
Bennett, Henry L., assignor to H. Page, Philadelphia, Pa. Disinfecting device	500,734	July 4	326	87	64	61
Bennett, Henry P., Phoenix, Ariz. Ter. Excavator	501,400	July 11	1397	{ 349 350 }	64	267
Bennett, Herbert D., assignor to National Time Register Company of Ohio, Columbus, Ohio. Workman's time-recorder	506,410	Oct. 10	1067	{ 265 266 }	65	216
Bennett, Jesse, Chicago, Ill., assignor to American Patents Company, Philadelphia, Pa. Boxing-glove	500,049	June 20	2161	524	63	1795
Bennett, John A., assignor of one-half to J. A. Brooks, Cohoes, N. Y. Undergarment	503,520	Aug. 15	2116	531	64	980
Bennett, Richard, New York, N. Y. Trousers-stretcher	494,241	Mar. 28	2405	607	62	1868
Bennett, Thomas, Kenosha, Wis. Digging implement	506,900	Oct. 17	1872	466	65	379
Bennett, Thomas B., Oriole, Mo. Ladder	506,411	Oct. 10	1069	266	65	216
Bennett, Thomas G., assignor to Winchester Repeating Arms Company, New Haven, Conn. Cartridge-shell	503,117	Aug. 15	1480	364	64	866
Bennett, Walter E. (See Hardman, Fred H., assignor.)						
Bennett, Walter E., assignor to Morley Button Sewing Machine Company, Boston, Mass. Machine for sewing on buttons	511,496	Dec. 26	2856	691	65	1920

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Bennett, Wellington, Chicago, Ill. Awning.....	510,881	Dec. 19	1816	448	65	1774
Bennett, Will F., Logansport, Ind. Tobacco-pipe.....	496,769	May 2	597	160	63	726
Bennett, Willis, Parish, assignor to C. H. Sprague and J. L. Newton, Watertown, N. Y. Coin-controlled vending-machine.....	492,756	Feb. 28	2698	670	62	1335
Bennor, Joseph, Philadelphia, Pa. Knitting-machine.....	499,648	June 13	1508	362	63	1668
Benoit, Edouard J. J. B., and J. Soler y Vila, Paris, France. Process of and apparatus for separating oleine or stearine from suet.....	498,375	May 30	3219	800	63	1256
Benoit, Louis, Barmen, Germany. Transferring drawings to stones, &c.....	493,812	Mar. 21	1689	.....	62	1718
Berthroth, Henry, Putnam county, Ohio. Reel for grain-binders.....	507,255	Oct. 24	2487	{ 612 613 }	{ 65 65 }	{ 504 504 }
Bensel, Charles E., New York, N. Y. Cut-off for steam fire-engines.....	504,654	Sept. 5	543	139	64	1373
Benson, Arza M., Cleveland, Ohio. Machine for hollowing staves.....	501,910	July 25	2209	551	64	446
Benson, Arza M., Cleveland, Ohio. Machine for dressing rived staves.....	502,271	Aug. 1	10	3	64	568
Benson, Cyrus M., Portland, Me. Pointing-trowel.....	502,872	Aug. 8	1061	261	64	777
Benson, Edgar O., Providence, R. I. Feeder for tack or nail machines.....	495,774	Apr. 18	2018	510	63	406
Benson, Elias M., Baltimore, Md. Means for operating elevator-doors.....	496,039	Apr. 25	2414	{ 610 611 }	{ 63 63 }	{ 495 495 }
Benson, George H. (See Lucas, Louis L., assignor.)						
Benson, James C., Alcony, Ohio. Grain-separator.....	504,466	Sept. 5	249	65	64	1316
Benson, Joseph R., Sonora, Tex. Thill-coupling.....	489,407	Jan. 3	643	174	62	138
Bentnick, Eliza J., and J. A. Renner, Galveston, Tex. Digging-machine.....	509,286	Nov. 21	2155	513	65	1195
Bentley, Charles E., New York, N. Y. Broom-holder, &c.....	497,402	May 16	1645	416	63	947
Bentley, Edward M., New York, N. Y. Switch for electric railways.....	508,672	Nov. 14	1126	278	65	985
Bentley, Edward M., Boston, Mass., assignor to General Electric Company, of New York. Electric-circuit breaker.....	490,762	Jan. 31	2861	734	62	633
Bentley, Edward M., assignor to General Electric Company, Boston, Mass. System of electric distribution.....	502,272	Aug. 1	12	3	64	568
Bentley, Jeffrey O., Philadelphia, Pa. Air-filtering apparatus.....	489,450	Jan. 10	727	194	62	169
Bentley, William, and J. D. Fuller, Lethbridge, Canada. Twine-holder cup and take-up.....	494,287	Mar. 28	2477	625	62	1880
Benton, George P., et al. (See Gard and Wing, assignors.)						
Benton, John B. (See Ehrlich and Benton.)						
Benton, John B., Elizabeth, N. J., and J. A. Keyes, New York, N. Y. Liquid measuring and delivering apparatus.....	495,657	Apr. 18	1831	458	63	373
Benton, John B., Elizabeth, N. J., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Register and calculator.....	511,322	Dec. 26	2550	{ 622 623 }	{ 65 65 }	{ 1924 1924 }
Benton, Otis B., Cleveland, Ohio. Closed-conduit electric railway.....	508,199	Nov. 7	363	89	65	826
Bentz, Ernest, Manchester, C. and A. Edmeston, and E. Grether, deceased, Salford, England; H. Orth, Washington, D. C., administrator of said Grether. Apparatus for and process of bleaching, &c.....	507,404	Oct. 24	2739	{ 672 673 }	{ 65 65 }	{ 553 553 }
Bentz, M. S. (See Hillabold, Charles D., assignor.)						
Berziger Brothers. (See Koehler, Charles S., assignor.)						
Beracierto, Andrés, Matanzas, Cuba. Pantaloon-hanger.....	511,578	Dec. 26	2984	727	65	2004
Beracierto, Andrés, Matanzas, Cuba. Trousers-hanger.....	511,579	Dec. 26	2985	728	65	2004
Berbecker & Co., Julius. (See Morris, Thomas, assignor.)						
Berbecker, Julius, Plainfield, N. J. Picture-hanger.....	500,365	June 27	2702	663	63	1902
Berens, Stanislaus, Western Springs, assignor of one-half to E. Stein, Chicago, Ill. Auto-graphic register.....	508,080	Nov. 7	163	46	65	789
Berenter, Henry A., New York, N. Y. Billiard or pool table.....	503,261	Aug. 15	1709	{ 420 421 }	{ 64 64 }	{ 908 908 }
Berg, Alexander, assignor of one-fourth to S. Loewenstein, St. Louis, Mo. Cigar-vending machine.....	497,623	May 16	1997	499	63	1009
Berg, John A. P., Moline, Ill. Heating-furnace.....	503,641	Aug. 22	2340	584	64	1036
Berg, Per Torsten, Munhall, Pa. Tonga.....	499,702	June 20	1500	384	63	1686
Berg, Peter V. P., Copenhagen, Denmark. Centrifugal milk-tester.....	506,838	Oct. 17	1768	444	65	361
Berg, Tava. (See Jönsson and Berg.)						
Bergel, Leopold. (See Rauppach and Bergel.)						
Bergen, George B., Elgin, Ill. Pencil.....	498,001	May 23	2604	651	63	1133
Bergener, Charles, assignor to C. T. Ham Manufacturing Company, Rochester, N. Y. Street-lamp.....	506,968	Oct. 17	1977	{ 489 490 }	{ 65 65 }	{ 400 400 }
Bergener, Charles, assignor to C. T. Ham Manufacturing Company, Rochester, N. Y. Lantern.....	507,706	Oct. 31	3267	799	65	665
Berger, Henry A. (See Beach and Berger.)						
Berger Manufacturing Company. (See Berger, Wilson C., assignor.)						
Berger, Paul, Chicago, Ill. Door-operating device.....	503,782	Aug. 22	2559	637	64	1079
Berger, William F., Moravia, N. Y. Revolving bookcase.....	491,277	Feb. 7	342	87	62	814
Berger, William H., Wyncote, and D. B. Rock, Fairfield, Pa., assignors to said Berger. Snow guard and breaker for roofs.....	507,776	Oct. 31	3381	828	65	626
Berger, William H., Wyncote, Pa., and E. Newman, Bridgeport, Conn., assignors to said Berger. Roof-collar clamp for vent-pipes.....	507,777	Oct. 31	3383	828	65	626
Berger, Wilson C., assignor to Berger Manufacturing Company, Canton, Ohio. Sheet-metal roofing.....	505,021	Sept. 12	1172	300	64	1506
Bergfels, Henry, Newark, N. J. Bicycle-seat spring.....	490,097	Jan. 17	1757	458	62	391
Bergfels, Henry, Newark, N. J. Bicycle-seat spring. (Reissue).....	11,350	July 11	1512	380	64	291
Bergh, Thorwald H., assignor of one-half to J. H. Field, Minneapolis, Minn. Check cash-register.....	496,632	May 2	379	102	63	688
Berghoff, John T., St. Joseph, Mo. Fracture apparatus.....	505,382	Sept. 19	1761	{ 456 457 }	{ 64 64 }	{ 1628 1628 }
Berghold, Alexander, Louisville, Ky. Fireplace water-heater.....	500,554	July 4	29	10	64	7
Bergier, Gabriel, Lyons, France. Reeling silk.....	496,108	Apr. 25	2525	638	63	516
Bergin, Edward, Davenport, Iowa. Cylinder drain-valve.....	502,602	Aug. 1	596	142	64	675
Bergman, W. C. (See Parsons, George W., assignor.)						
Bergmann, Franz. (See Kraus, Rudolf, assignor.)						
Bergmann, Franz J., Neheim, Germany. Distilling wood-waste.....	504,264	Aug. 29	3327	.....	64	1241
Bergmann, Ignaz, Fort Madison, Iowa. Pen.....	503,896	Aug. 22	2716	682	64	1110
Bergmann, Sigmund. (See Dempster, John T., assignor.)						
Bergmann, Sigmund. (See Eckert and Bergmann.)						
Bergmann, Sigmund. (See Hazelton, Frederic D., assignor.)						
Bergmann, Sigmund. (See Noll, Augustus, assignor.)						
Bergmann, Sigmund, New York, N. Y. Electric-arc lamp.....	501,757	July 18	1967	486	64	387
Bergmann, Sigmund, New York, N. Y. Carbon-holder for electric-arc lamps.....	501,758	July 18	1968	486	64	388
Bergmann, Sigmund, New York, N. Y. Carbon-holder for electric-arc lamps.....	501,911	July 25	2211	551	64	446
Bergmann, Sigmund, New York, N. Y. Carbon-holder for arc lamps.....	502,273	Aug. 1	14	4	64	569
Bergmann, Sigmund, New York, N. Y. Electric-arc lamp.....	505,383	Sept. 19	1766	457	64	1628
Bergqvist, Axel F., Fairfield, Iowa. Aerial vessel.....	506,969	Oct. 17	1978	490	65	400

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Bergreen, Rudolph, Roitzsch, Germany. Slicing-machine for beet-roots, &c.	490,223	Jan. 17	1967	{ 515 516 }	62	432
Berkan, Rudolf, assignor to W. Koehler, Vienna, Austria-Hungary. Machine for ornamenting hangings	510,110	Dec. 5	451	101	65	1495
Berkheimer, Henry K. (See Essler and Berkheimer.)						
Berle, Carl. (See Martignoni, Johann, assignor.)						
Berlin, Frederick, Detroit, Mich. Harrow attachment, &c.	489,213	Jan. 3	356	100	62	81
Berlin Iron Bridge Company. (See Stearns, William E., assignor.)						
Berliner, Abraham D., Rock Island, Ill. Electric belt	501,861	July 18	2110	521	64	413
Berlinerblau, Joseph, Sosnowice, Russia, assignor to F. von Heyden Nachfolger, Radebeul, Germany. Paraphenetol-carbamide and making same.	489,728	Jan. 10	1138	.....	62	251
Berlo, Peter J. (See Fairbanks and Berlo.)						
Bernel, Joseph, Middle Village, N. Y. Axle-nut	500,464	June 27	2842	706	63	1928
Bernardi, Frank, Mokelumne Hill, Cal. Double-acting hydraulic engine	507,405	Oct. 24	2743	673	65	554
Bernardin, Alfred L., assignor to Bernardin Metallic Cork Company, Evansville, Ind. Bottle-uncapping tool	501,050	July 11	816	212	64	164
Bernardin Metallic Cork Company. (See Bernardin, Alfred L., assignor.)						
Berndes, Gustav F. (See Wiberg, Knut E., assignor.)						
Berne, Arthur W., assignor of one-half to W. H. Walsh, New York, N. Y. Railway danger-signal	495,193	Apr. 11	1087	270	63	220
Bernel, Ferdinand. (See Wiesenfeld, Robert S., assignor.)						
Bernhardt, Carl. (See Vollhering and Bernhardt.)						
Bernhardt, Charles, assignor of one-half to W. H. Altman, Chicago, Ill. Electric fire-alarm	501,905	July 18	2189	544	64	426
Bernheim, Charles H., Conover, assignor of one-half to B. Shemwell, Lexington, N. C. Adjustable nut and drill ratchet-wrench	501,862	July 18	2111	521	64	413
Bernheim, Gustav. (See Flocke, Robert, assignor.) (Reissue.)						
Berner, Hermann C., Providence, R. I. Hair-crimper	495,292	Apr. 11	1247	311	63	249
Bernstein, Benny, New York, N. Y. Gate-latch	489,918	Jan. 17	1446	379	62	329
Bernstein, Benny, New York, N. Y. Fastening for garments	491,070	Feb. 7	13	4	62	751
Bernstein, Benny, New York, N. Y. Bolt	495,658	Apr. 18	1834	{ 458 459 }	63	373
Bernstein, Benny, New York, N. Y. Sash-fastener	495,659	Apr. 18	1835	459	63	373
Bernstein, Benny, New York, N. Y. Truck	497,943	May 23	2513	027	63	1117
Bernström, John, assignor to Aktiebolaget Separator, Stockholm, Sweden. Crank connection for centrifugal separators	489,140	Jan. 3	239	66	62	55
Bernz, Otto. (See Story, Herbert, assignor.)						
Berri, William, Brooklyn, N. Y. Matrix and matrix-assembling mechanism	499,278	June 13	880	213	63	1557
Berridge, Isaac L. (See Fair, William F., assignor.)						
Berrien, Benjamin G., Jr., Newark, N. J. Pouncing-roll	499,703	June 20	1592	{ 384 385 }	63	1697
Berrigan, John J., Avon, N. Y. Cream-separator	501,039	July 4	793	208	64	144
Berrigan, John J., Avon, N. Y. Centrifugal creamer	501,040	July 4	795	208	64	145
Berrigan, William H., Jr., New York, N. Y. Push-button	504,148	Aug. 29	3132	783	64	1204
Berrigan, William H., Jr., New York, N. Y. Manufacturing fastening devices	506,202	Oct. 10	690	174	65	142
Berrigan, William H., Jr., Jersey City, N. J., assignor of one-half to C. G. F. Wahle, Jr., New York, N. Y. Push-button	500,110	June 27	2256	549	63	1823
Berrini, Ernest, Tacoma, Wash. Egg-cutter	490,133	Jan. 17	1821	475	62	405
Berrini, Ernest, Portland, Oreg. Coin holding and delivering device	507,876	Oct. 31	3545	872	65	717
Berry, Charles E., Cambridge, Mass. Deflector and ventilator for passenger-cars	500,555	July 4	30	10	64	8
Berry, Charles M., assignor to E. D. Middlekauff, San Francisco, Cal. Bracket for incandescent lights	510,317	Dec. 5	791	191	65	1560
Berry, David R., Rockaway, N. J. Air-valve	499,956	June 20	2011	498	63	1769
Berry, Edgar H., New York, N. Y. Type-writing machine	498,100	May 23	2750	{ 687 688 }	63	1159
Berry, Frederick E., Milwaukee, Wis. Dental engine	489,117	Jan. 3	210	56	62	48
Berry, Frederick H., Milwaukee, Wis. Switch for operating shunt-wound electric motors	492,456	Feb. 28	2217	555	62	1237
Berry, John S. (See Quinn and Berry.)						
Berry, John S., Tyler, Tex. Railway signal and crossing-gate	502,394	Aug. 1	242	57, 58	64	610
Berry, John W., assignor of one-half to C. C. Warren, Hattiesburg, Miss. Nut-lock	496,847	May 9	729	193	63	768
Berry, Leander, Haverhill, Mass. Bicycle	494,839	Apr. 4	508	127	63	98
Berry, Louis M., Boston, Mass. Sprinkler	489,408	Jan. 3	644	174	62	138
Berry, R. P. (See Appelmann, Erastus W., assignor.)						
Berry, Richard L., and J. M. Oliver, Orangeburg, S. C. Roller-bearing	491,867	Feb. 14	1302	321	62	1024
Berry, Robert C. (See Adkins and Berry.)						
Berry, Seneca L., San Francisco, Cal. Water-wheel	493,239	Mar. 14	732	188	62	1520
Berry, William O., assignor of one-half to D. E. Gordon, Caro, Mich. Foot-vise for anvils	507,061	Oct. 17	2130	529	65	427
Bersbach, Emil, Woodbridge, and A. W. Zietlow, Elizabeth, N. J., assignors to Columbian Register Company, of New Jersey. Pocket-counter for miscellaneous items	501,596	July 18	1687	421	64	340
Berscheid, Bernard B., Joliet, Ill. Thrashing-machine	496,848	May 9	730	194	63	769
Bert, Gustave W., Chicago, Ill. Bicycle-support	507,062	Oct. 17	2131	529	65	427
Berthier, Peter E., Lakeland, La. Steam-engine	506,765	Oct. 17	1650	{ 413 414 }	65	339
Berthon, Louis A., Paris, France, assignor to Société Générale des Téléphones, (Réseaux) Téléphoniques et Constructions Électriques.) Restoring system for annunciators	504,797	Sept. 12	802	{ 205 206 }	64	1433
Berthon, Louis A., Paris, France, assignor to Société Générale des Téléphones, (Réseaux) Téléphoniques et Constructions Électriques.) Multiple-commutator apparatus for telephone systems	506,658	Oct. 17	1463	368	65	304
Berlin, Anguste, Paris, France. Neckscarf	490,820	Jan. 31	2947	757	62	651
Bertou, Camille L. C., Paris, France. Precipitating oxide of tin from solutions	489,624	Jan. 10	989	.....	62	221
Bertoux, Jean, Fontainebleau, France. Velocipede	495,293	Apr. 11	1248	311	63	240
Bertram, August, Brooklyn, N. Y. Street-sweeping machine	491,278	Feb. 7	343	87	62	814
Bertram, August F., Wellsville, Ohio. Shoe	493,813	Mar. 21	1689	430	62	1719
Bertram, Herman, Halle-on-the-Saale, Germany. Machine for dividing dough	507,063	Oct. 17	2132	529	65	427
Bertram, Louis, Berlin, Germany. Apparatus for extracting glue	501,759	July 18	1969	487	64	388
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Sole-sewing machine	502,873	Aug. 8	1062	{ 261 262 }	64	777
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Sewing-machine	502,874	Aug. 8	1065	262	64	777
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Sewing-machine	502,875	Aug. 8	1066	262	64	777
Bertrand, Pierre H., Paris, France. Coating iron with magnetic oxide	510,318	Dec. 5	792	.....	65	1560
Bertrand, Pierre H., Paris, France. Depositing metal upon metal	510,376	Dec. 5	877	.....	65	1577
Bertsch, Charles A., Cambridge City, Ind. Metal-bending machine	510,764	Dec. 12	1569	391	65	1718

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Besly, Charles H. (See Gardner, Frederick N., assignor.)						
Besly, Charles H., Chicago, Ill. Paper-file	490,707	Jan. 31	2773	{ 712 713 }	62	618
Besly, Charles S. (See Gardner, Frederick N., assignor.)						
Besse, Thomas H., Buffalo, N. Y. Ice-cream freezer	493,906	Mar. 21	1824	465	62	1744
Bessing, Theodore, Los Angeles, Cal. Gymnastic apparatus	494,912	Apr. 4	612	156	63	118
Bessing, Theodore, Los Angeles, Cal. Gymnastic apparatus	498,376	May 30	3320	801	63	1257
Bessing, Theodore, and W. A. Barker, Los Angeles, Cal. Display-shelf and carpet-elevator	493,542	Mar. 14	1923	313	62	1612
Bessing, Theodore, and W. A. Barker, Los Angeles, Cal. Combined display-shelf and elevator	495,164	Apr. 11	1041	259	63	211
Bessonette Cotton Compress Manufacturing Company. (See Bessonette, William T., assignor.)						
Bessonette, William T., Temple, assignor of one-half to W. A. Patterson, Lampasas, Tex. Cotton-press	492,132	Feb. 21	1702	{ 423 424 }	62	1119
Bessonette, William T., Temple, assignor to Bessonette Cotton Compress Manufacturing Company, Waco, Tex. Cotton-press	508,909	Nov. 21	1530	{ 372 373 }	65	1074
Best, Charles J., and W. A. Hall, Seattle, Wash., assignors to Chemical Garbage Reduction Company, Chicago, Ill. Apparatus for treating garbage or like wastes	501,760	July 18	1971	487	64	388
Best, Charles J., and W. A. Hall, Seattle, Wash., assignors to Chemical Garbage Reduction Company, Chicago, Ill. Treating garbage or like wastes	501,761	July 18	1972	{ 487 488 }	64	388
Best, Clearmont V., assignor of one-half to Sun Vapor Street Light Company, Canton, Ohio. Blower for carburetors	502,244	July 25	2746	{ 693 694 }	64	547
Best, Daniel, San Leandro, Cal. Gas-engine motor for cars	496,717	May 2	514	137	63	712
Best, Daniel, San Leandro, Cal. Gas-engine ignitor	496,718	May 2	517	138	63	713
Best, George B., Englewood, N. J. Child's carriage	492,656	Feb. 28	2554	633	62	1306
Best, Thomas C., Chicago, Ill. Steam-boiler	498,949	June 6	350	84, 85	63	1453
Best, Thomas C., Chicago, Ill. Feed-water heater for steam-boilers	503,521	Aug. 15	2118	{ 531 532 }	64	981
Besthoff, Samuel J., New York, N. Y. Cinder-shovel	510,765	Dec. 12	1570	391	65	1719
Bethune, Joseph, Chicopee Falls, Mass. Bicycle-saddle	502,110	July 25	2518	631	64	503
Bettendorf, Joseph W., Springfield, Ohio. Metal wheel and making the same	496,633	May 2	381	103	63	689
Bettendorf, William P., Davenport, Iowa. Metallic frame for wagons	508,200	Nov. 7	365	90	65	526
Bettingen, Paulina, New York, N. Y. Bust-form	492,263	Feb. 21	1913	477	62	1164
Bettini, Gianni, New York, N. Y. Nickel-in-the-slot machine	497,906	May 23	2457	{ 614 615 }	63	1107
Betts, Albert C., Brunswick, assignor of one-half to J. D. Spicer, Troy, N. Y. Joint for board sidings	494,543	Apr. 4	7	1	63	4
Betts, Alfred, assignor to Betts Machine Company, Wilmington, Del. Drilling-machine	493,471	Mar. 14	1102	282	62	1589
Betts, Benjamin B., assignor of one-third to E. A. Kolbe, St. Louis, Mo. Trolley-wire hanger	507,064	Oct. 17	2134	530	65	427
Betts, Lewis F., Brooklyn, N. Y., assignor of one-half to R. E. Dietz Company, of New York. Oil-store	497,760	May 23	2227	557	63	1067
Betts, Lewis F., assignor to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Tubular lantern	498,420	May 30	3278	817	63	1268
Betts Machine Company. (See Betts, Alfred, assignor.)						
Beugler, Edwin F. (See Holmes and Beugler.)						
Bevan, Joseph H. (See Veazie and Bevan.)						
Bever, Alexander, Spokane, Wash. Glove-cabinet	503,306	Aug. 15	1786	440	64	921
Bevin Brothers Manufacturing Company. (See Wells, John C., assignor.)						
Bexell, John A., and V. O. Peterson, Rock Island, Ill. Combination-lock	510,234	Dec. 5	664	158	65	1536
Beyenbach, Wilhelm. (See Majewski and Beyenbach.)						
Beyer, Bruno, Grossenhain, Germany. Treating raw silk	489,919	Jan. 17	1448	-----	62	329
Beyer, Louis, assignor of one-half to M. Ruppert, Washington, D. C. Propelling apparatus for vessels	505,725	Sept. 26	2479	625	64	1776
Biaggi y Dias, Antonio, Havana, Cuba. Automatic time lighting device	489,428	Jan. 3	680	183	62	146
Biardot, Alphonse. (See Placide, Navarre, assignor.)						
Bibb, John T., Tacoma, Wash. Buggy-top	489,451	Jan. 10	729	195	62	169
Bibb, John T., Tacoma, Wash. Pipe-union	489,784	Jan. 10	1230	332	62	270
Bibb, John T., Tacoma, Wash. Current-motor	500,465	June 27	2843	700	63	1928
Bice, David E., La Crosse, Wis. Machine for grinding rotary cutters	504,655	Sept. 5	545	139	64	1373
Bichowsky, Emmo C. (See Winston and Throop, assignors.)						
Bickerstaff, Elmer M., Milledgeville, Pa. Combined saw set, gage, and jointer	504,656	Sept. 5	547	140	64	1373
Bickford, James A., Lock Haven, Pa. Vehicle-brake	510,766	Dec. 12	1571	392	65	1719
Bickle, Henry J., Gladstone, assignor of one-half to E. F. Hutchings, Winnipeg, Canada. Harness-snap	508,910	Nov. 21	1532	373	65	1075
Bickley, John H., West Medway, Mass., assignor to F. E. Anderson, East Orange, N. J. Feeder for scouring and washing apparatus	494,405	Mar. 28	2670	670	62	1917
Biddle, Leopold, Raton, N. Mex. Ter. Boiler-fue expander	500,466	June 27	2845	700	63	1928
Bidwell, Benson, Philadelphia, Pa., assignor, by mesne assignments, of one-half to B. Bidwell, trustee. Conduit electric railway	504,549	Sept. 5	398	102	64	1344
Bidwell, George R. (See Barrett, Edward, assignor.)						
Bidwell, George R. (See Fisher, William C., assignor.)						
Bie, Moritz. (See Schnellen, Adolf, assignor.)						
Biederman, Henry, New York, N. Y. Frame for pictures or cards	505,872	Oct. 3	111	28	65	32
Biedinger, Nicholas. (See Ehlen, Charles, assignor.)						
Bieg, Frederick C., Alexandria, Va., and E. Theiss, Washington, D. C. Attachment for type-writing machines	489,920	Jan. 17	1448	379	62	330
Biegel, Robert H., and D. C. Phillips, Denver, Colo. Adjustable guard for eyeglasses	511,261	Dec. 19	2444	596	65	1892
Biehn, Frank A., Chicago, Ill. Fire-ladder	503,362	Aug. 15	1886	{ 467 468 }	64	939
Biehn, Frank A., Chicago, Ill. Fire-ladder	510,111	Dec. 5	452	{ 101 102 }	65	1495
Bielefeldt, Max, Coswig, Germany. Cartridge-loading machine	504,699	Sept. 12	640	163	64	1403
Bielefeldt, Max, Coswig, Germany. Hygroscopic painting	511,191	Dec. 19	2331	-----	65	1870
Biengräber, Carl J. P., Hamburg, Germany. Cover-fastening for pots	505,432	Sept. 26	1850	476	64	1658
Bierbaum, Herman H., Dayton, Ohio. Device for operating car-brakes	503,118	Aug. 15	1482	364	64	866
Bierce, Will W., Montgomery, Ala. System of tracks for transferring cotton-bales	492,319	Feb. 21	1996	497	62	1181
Bierley, Henry A., Lexington, Ky. Electric illuminated sign	505,346	Sept. 19	1694	436	64	1615
Bierley, Henry A., assignor to Leader Cash Register Company, Lexington, Ky. Cash-register. (Reissue)	11,319	Apr. 4	745	189	63	142
Bierley, Henry A., assignor to Leader Cash Register Company, Lexington, Ky. Cash-register	507,256	Oct. 24	2488	613	65	504
Biganess, Charles, Quincy, Mass. Stone-planer	496,719	May 2	518	138	63	713

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Bigelow Carpet Company. (See Ayers, Samuel C., assignor.)						
Bigelow, Lucius S., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Ink fountain for paper-ruling machines.	509,861	Dec. 5	18	4	65	1414
Bigelow, Myron T., Grand Rapids, Mich. Carpet-stretcher.	494,773	Apr. 4	393	97	63	77
Bigeon, Charles, Cincinnati, Ohio. Folding crib.	506,659	Oct. 17	1465	369	65	304
Biggar, John S., Whitesborough, Cal. Gas-engine.	491,403	Feb. 7	569	143	62	857
Bigger, Thomas J. (See Clough and Bigger.)						
Biggers, Lee P., Palmersville, Tenn. Fence.	510,767	Dec. 12	1573	392	65	1719
Biggerstaff, William A. (See Penny and Biggerstaff.)						
Biggs, Frederick J., assignor to Tubular Lock Syndicate, Limited, London, England. Lock-case.	503,400	Aug. 15	1936	481	64	948
Bigler, James, Newburg, N. Y. Signal-buoy.	508,400	Nov. 14	699	172	65	901
Bignall, Burnett B., Aurora, Ill. Roof connection for ventilating-pipes.	501,643	July 18	1765	439	64	353
Bigney, James A. (See Regnoll, Bigney, and Sweet.)						
Bildt, Carl W., Worcester, Mass. Feed device for gas-producers.	498,229	May 30	2962	738 739	63	1211
Bilgram, Hugo. (See Willson and Bilgram.)						
Bilgram, Hugo, Philadelphia, Pa., assignor to Comas Machine Company, Salem, Va. Cigar-cotto-machine.	506,412	Oct. 10	1070	266 267	65	216
Bill, Jeremiah C., Willimantic, Conn. Let-off mechanism for looms.	493,058	Mar. 7	443	112	62	1447
Bill, William, Montreal, Canada. Wrench.	491,513	Feb. 14	748	190	62	912
Billberg, Carl O. C. (See Winand and Billberg.)						
Billberg, Carl O. C., Philadelphia, Pa. Commutator-brush.	490,183	Jan. 17	1897	494	62	419
Billberg, Carl O. C., Philadelphia, Pa. Electrical switch.	506,092	Oct. 3	452	118 119	65	88
Billig, Carl F., Alt-Chemnitz, Germany. Spring-holder for vehicle lamps.	501,401	July 11	1398	350	64	268
Billingham, Francis, Brooklyn, N. Y. Money-receptacle.	507,984	Nov. 7	13	4	65	761
Billings, Alvah G., assignor of two-thirds to G. W. Fritz and C. A. Grow, Lake Park, Wash. Automatic brake.	489,452	Jan. 10	730	195	62	169
Billings, Charles E., Hartford, Conn. Drill-cluck.	493,857	Mar. 21	1749	445	62	1731
Billings, John D., New York, N. Y., assignor to Southern Horse and Mule Shoe Manufacturing Company, Strasburg, Va. Machine for bending horseshoe-blanks.	498,838	June 6	154	37, 38	63	1419
Billings, John D., New York, N. Y., assignor to Southern Horse and Mule Shoe Manufacturing Company, Strasburg, Va. Machine for forming horseshoe-blanks.	498,839	June 6	157	38	63	1420
Billings, John H., New York, N. Y. Shirt-adjuster.	489,921	Jan. 17	1451	379	62	330
Billingsley, Percy L., Reddick, Fla. Orange-sorting machine.	508,911	Nov. 21	1533	373	65	1075
Billington, Edward R., Liverpool, England. Woven-wire mattress.	493,147	Mar. 7	582	146	62	1473
Billington, Theophilus, Dallas, Tex. Desk or cabinet.	494,406	Mar. 28	2671	670	62	1917
Billon, Louis C., et al. (See Smith, Emory B., assignor.)						
Billups, George C., Norfolk, Va. Cabinet for type-writers.	500,185	June 27	2414	588	63	1851
Billups, Jonathan E., Cardiff, England. Construction of permanent ways for railways or tramways.	500,366	June 27	2703	663	63	1903
Billups, Jonathan E., Cardiff, England. Crossing for railways and tramways.	510,399	Dec. 12	925	222	65	1600
Billwiller, Carl F., Hottingen, Switzerland. Navigable air-ship.	507,609	Oct. 31	3109	760	65	635
Bilz, John A., Pleasanton, Cal. Two-wheeled vehicle.	494,752	Apr. 4	358	91	63	71
Binder, Gottlob, Philadelphia, Pa. Lubricator.	504,700	Sept. 12	640	163	64	1403
Binder, Gottlob, Philadelphia, Pa. Ironing-machine.	506,660	Oct. 17	1466	369	65	305
Bindewald, Ernst. (See Kruenke and Bindewald.)						
Birford, Edgar P., Cincinnati, Ohio. Electric-trolley-wire crossing.	506,149	Oct. 3	553	144	65	107
Bing, Samuel, Humansville, Mo. Invoice-holder.	506,808	Oct. 17	1717	432	65	351
Bingham, Calista, Padua, Ill. Knending and cooling board.	491,977	Feb. 21	1469	366	62	1072
Bingham, Charles F., Buffalo, N. Y. Green-sand core.	507,406	Oct. 24	2744	674	65	554
Bingham, Wells A. (See Liddell, William, assignor.)						
Bingham, William F., Monticello, Iowa. Watch-bow fastener.	493,814	Mar. 21	1690	431	62	1719
Bingham, William F., Monticello, Iowa. Watch-key.	493,815	Mar. 21	1692	431	62	1719
Binghamton Wagon Company. (See Cleland, John S., assignor.)						
Binney, Charles R. (See Stuart, Herbert A., assignor.)						
Binns, Robert, South Windham, Conn. Music-rack.	498,950	June 6	355	85	63	1454
Binsse & Hanschild. (See Petsch, Frank, assignor.)						
Binsse, Henry, Newark, N. J. Gearing for lathes.	504,657	Sept. 5	548	140	64	1373
Bippart, Achill, and J. H. Theberath, assignors to Bippart & Co., Newark, N. J. Jewel-setting.	506,621	Oct. 10	1402	352	65	281
Bippart & Co. (See Bippart and Theberath, assignors.)						
Birch, Frank C., San Francisco, Cal., assignor of one-half to L. Rosenfeld, New York, N. Y. Hoisting and conveying machinery.	489,785	Jan. 10	1231	322	62	270
Birch, William, Manchester, England. Apparatus for cleansing sewage, &c.	491,796	Feb. 14	1192	298	62	1002
Birchall, Thomas, assignor to B. Eastwood, Paterson, N. J. Self-adjustable supporting-rod for shuttle-boxes.	489,922	Jan. 17	1451	380	62	330
Bird, Adoniram J., Rockland, Me. Punching-cutter.	506,661	Oct. 17	1469	376	65	305
Bird, Charles B., Sioux City, Iowa. Wire gate.	499,279	June 13	881	213	63	1558
Bird, Edward J., Big Stone Gap, Va. Limekiln, cupola, or metallurgical furnace.	507,204	Oct. 24	2406	593	65	489
Bird, Fletcher M., Wenatchee, Wash. Hay-loader.	511,109	Dec. 19	2193	539	65	1845
Bird, George M., Boston, Mass. Metallic car.	490,469	Jan. 24	2370	613	62	523
Bird, Henry, Plymouth, England. Manufacturing purple-ore bricks.	490,535	Jan. 24	2479		62	545
Bird, Henry J., Hoboken, N. J., and G. Kadenberger, Cleveland, Ohio, assignors to said Bird. Disintegrating vegetable substances.	505,936	Oct. 3	205		65	41
Bird, John. (See Purling, William, assignor.)						
Bird, Richard C. (See Page and Bird.)						
Bird, William O., Cambridge, Mass. Playing-card.	502,089	July 25	2484	624	64	497
Birdsall, Edgar M., assignor to M. Birdsall, Buffalo, N. Y. Hose-reel.	495,720	Apr. 18	1933	486 487	63	390
Birdsall, Mary. (See Birdsall, Edgar M., assignor.)						
Birge, George K., Buffalo, N. Y. Apparatus for printing and bronzing wall-paper.	491,303	Feb. 7	403	103 104 418 419	62	824
Birkenstock, John W., New York, N. Y. Machine for polishing marble or granite.	510,882	Dec. 12	1684		65	1739
Birkett, Edward J. (See Graham and Birkett.)						
Birke, John, Groveland, Ill. Door or shutter opener.	504,318	Sept. 5	9	3	64	1272
Birkin, William A. G., Nottingham, England. Reciprocating electric drill.	494,053	Mar. 21	2079	531	62	1792
Birkin, William A. G., Nottingham, England. Process of and solvent for separating precious metals from their ores.	494,054	Mar. 21	2081		62	1793
Birubann, William L., Boston, Mass. Trussers.	498,951	June 6	355	85	63	1454
Bisbee, Sylvester, Madelia, Minn. Machine for cleaning grain.	510,768	Dec. 12	1573	392 393	65	1719

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Bisbing, Ingham W., and J. E. Gerhart, Philadelphia, Pa. Safety attachment for cars	504,798	Sept. 12	504	205	64	1434
Bischoff, Ferdinand F., Thiensville, Wis. Egg-case	489,118	Jan. 3	211	56	62	49
Bisco, Henry, Leicester, Mass. Stop mechanism for card-setting machines	494,774	Apr. 4	395	98	63	78
Bisel, Joseph J., Philadelphia, Pa. Combined letter-port cover and name-plate	511,722	Dec. 26	3216	729	65	2046
Bisel, Joseph J., assignor of one-half to A. B. Clemmer and I. S. Stover, Philadelphia, Pa. Trunk	504,514	Sept. 5	340	86	64	1333
Bisel, Joseph J., assignor of one-half to A. B. Clemmer and I. S. Stover, Philadelphia, Pa. Wardrobe-fixture	508,596	Nov. 14	1017	250	65	963
Bisel, Joseph J., assignor of one-half to A. B. Clemmer and I. S. Stover, Philadelphia, Pa. Garment-supporting bracket	508,861	Nov. 14	1414	351	65	1039
Bisel, Joseph J., assignor of one-half to A. B. Clemmer and I. S. Stover, Philadelphia, Pa. Clothes-drier	509,349	Nov. 21	2260	546	65	1214
Bisel, Joseph J., assignor of one-half to A. B. Clemmer and I. S. Stover, Philadelphia, Pa. Garment-supporting bracket	511,550	Dec. 26	2986	728	65	2004
Bishop, Albert T., Southington, Conn. Floor or ceiling plate for pipes	511,036	Dec. 19	2070	513	65	1821
Bishop, Emiline. (See Haggemuller, Franklin F., assignor.)						
Bishop, George, assignor of one-half to U. Bell, Brule, Wis. Sled	511,192	Dec. 19	2331	570 } 571 }	65	1871
Bishop, James C., Marble Falls, Tex. Car-coupling	495,874	Apr. 18	2175	546	63	434
Bishop, John H., et al. (See Kammerer, Karl L., assignor.)						
Bishop, John M. (See Bishop, William W. and J. M.)						
Bishop, Newton J., Sturgis, Ky. Gate	500,050	June 20	2162	524 } 525 }	63	1796
Bishop, Robert H., and W. Down, assignors to General Patents Company, Limited, London, England. Receptacle for coins	494,731	Apr. 4	324	82	63	64
Bishop, Samuel B. (See Jones, Bishop, and Du Pont.)						
Bishop, W. B. (See Carey, John, assignor.)						
Bishop, William W., Powell's Station, Tenn. Type	499,507	June 13	1298	305	63	1631
Bishop, William W., Powell's Station, Tenn., and J. M. Bishop, Washington, D. C. Type-setting machine	499,506	June 13	1295	304	63	1631
Bispham, George R. (See Roth and Bispham.)						
Bissell, Edward J. (See Bissell, Nathaniel J., and E. J.)						
Bissell, Nathaniel J., Hartland, and E. J. Bissell, Milford, Mich. Blanket-retaining device	504,701	Sept. 12	643	163	64	1404
Bissinger, Benjamin, Chattanooga, Tenn. Pocket for trousers	503,363	Aug. 15	1888	468	64	939
Bither, Walter V., Boston, Mass. Last and clamp for heel-nailing machines	497,010	May 9	1903	258	63	817
Bitner, Harry, Chicago, Ill. Toaster	492,517	Feb. 28	2328	578	62	1259
Bitner, Harry, Chicago, Ill. Pedal-movement for bicycles	510,671	Dec. 12	1416	349	65	1689
Bitner, Harry, assignor to A. and E. W. Wickey, Chicago, Ill. Horse-power	495,009	Apr. 11	753	191 } 192 }	63	159
Bittinger, Hans, Regensburg, Germany. Machine for separating middlings and flour	502,696	Aug. 8	765	186	64	755
Bivans, John. (See Knight, Lucian, assignor.)						
Bizi, Charles, Selma, Cal. Cultivator	491,632	Feb. 14	938	236	62	952
Biorkander, Gustav O., Eau Claire, Wis. Pegging-jack	508,862	Nov. 14	1415	351	65	1039
Bjorneby, Gunnerus L., Grafton, N. D. Flow attachment	507,475	Oct. 24	2851	699	65	574
Bjurlberg, Petrus, et al. (See Lundberg, Rudolph, assignor.)						
Blache, Paul, Paris, France. Machine for making cigarette-mouthpieces	493,472	Mar. 14	1103	283 } 284 }	62	1589
Blache, Paul V. M., Paris, France. Machine for manufacturing tubes of cigarette-paper	492,264	Feb. 21	1915	477 } 478 }	62	1164
Black & Clawson Company. (See Black and Carey, assignors.)						
Black, David W., Butler, Pa. Rope-socket	499,954	June 20	2009	488	63	1769
Black, David W., Butler, Pa. Rope-socket	499,955	June 20	2010	488	63	1769
Black, Edwin H., Campbell, Cal. Tree-protector	503,759	Aug. 22	2529	629	64	1073
Black, Frank X., and J. L. Carey, assignors to Black & Clawson Company, Hamilton, Ohio. Expansion-pulley	498,613	May 30	3597	891	63	1325
Black, John, Washburn, Mo. Cheese hoop and cutter	499,626	June 13	1477	355	63	1663
Black, John L., Chambersburg, Pa. Ribbon-holder	489,360	Jan. 3	578	156	62	124
Black, John M., London, England. Ticket bell-punch	509,287	Nov. 21	2156	518	65	1195
Black, John W., Glasgow, Scotland. Speaking-tube apparatus	493,059	Mar. 7	445	112	62	1447
Black, Joseph, Jr., assignor to J. Black & Sons, Philadelphia, Pa. Hosiery	490,241	Jan. 17	1998	523	62	438
Black, Robert. (See Havey, Cornelius M., assignor.)						
Black & Sons, Joseph. (See Black, Joseph, Jr., assignor.)						
Black, Stephen S., Pasadena, Cal. Lawn-sprinkler	505,086	Sept. 19	1294	334	64	1542
Black, Walter A. (See Umbenhauer, Charles C., assignor.)						
Black, William J., and G. H. Ligo, Indian Run, Pa. Car-coupling	507,707	Oct. 31	3268	799	65	665
Black, William L., Fort McKavett, Tex. Compensating pump-spring	495,294	Apr. 11	1250	312	63	249
Black, William M., assignor of one-half to J. M. Dovel, Urbana, Ohio. Fence-post	504,658	Sept. 5	549	140	64	1374
Black, William S. (See Adler and Black.)						
Black, William S., assignor to G. W. Warfield and H. Rohr, Baltimore, Md. Registering-ballot-box	499,869	June 20	1884	458 } 459 }	63	1747
Blackall, Robert C., et al. (See Smith, Henry C., assignor.)						
Blackburn, Albert C. (See Sanger, George E., assignor.)						
Blackburn, George W., Palmyra, N. J. Insulator	504,059	Aug. 29	2987	746	64	1176
Blacker, Murray M., Amelia Court-House, Va. Eaves-trough and support	503,119	Aug. 15	1482	364	64	866
Blackhall, Edward W. (See Anderson, Robert S., assignor.)						
Blackledge, Robert. (See Edwards and Blackledge.)						
Blackledge, John W., Indianapolis, Ind. Show-case	489,705	Jan. 10	1105	285	62	245
Blackman, Frederick E. (See Saum and Blackman.)						
Blackman, Henry, New York, N. Y. Apparatus for recovering alkali	492,382	Feb. 28	2099	523 } 524 }	62	1213
Blackman, Henry, New York, N. Y. Apparatus for recovering alkali	497,088	May 9	1120	287	63	238
Blackman, Thomas G., Jr., Ozark, Ala. Car-coupling	502,274	Aug. 1	15	4	64	569
Blackmer, Frederick W., Windham, Me. Mower	489,214	Jan. 3	358	100	62	81
Blackmer, James A., Chicago, Ill. Folding bed	506,662	Oct. 17	1470	370	65	306
Blackmore, Francis E. (See Palmer and Blackmore.)						
Blackmore, George C., Newark, N. J. Floor or ceiling plate for steam or water pipes	510,833	Dec. 12	1686	419	65	1740
Blackmore Heating Company. (See Blackmore, Joseph J., assignor.)						
Blackmore, Henry S. (See Hollingshead, William B., assignor.)						
Blackmore, Henry S., Mount Vernon, N. Y. Manufacturing hydrogen gas	497,700	May 16	2123		63	1032
Blackmore, Henry S., Mount Vernon, N. Y. Process of and apparatus for dissociating salts of alkalies by electrolysis	508,804	Nov. 14	1314	327	65	1021
Blackmore, Henry S., Mount Vernon, N. Y. Process of and apparatus for dissociating soluble salts by electrolysis	510,834	Dec. 12	1687	419	65	1740

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Blackmore, Joseph J., assignor to Blackmore Heating Company, Newark, N. J. Tubular air-warmer	490,763	Jan. 31	2862	734	62	634
Blackshaw, Wilfrid W., assignor of one-eighth to E. Totman and V. P. Wardwell, Duluth, Minn. Toy hoop	503,191	Aug. 15	1600	393	64	888
Blackstone, Edward C., Stamford, England. Swath-turner	501,131	July 11	959	245	64	89
Blackstone, Richard, Central City, S. D. Hopper-bottom car	500,846	July 4	497	129	64	91
Blackwell, Francis O., Boston, Mass. Side guard for vehicles	493,327	Mar. 14	885	226	62	1546
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-railway block system	492,457	Feb. 28	2321	555	62	1238
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Brake apparatus for electrically-propelled cars	508,673	Nov. 14	1127	278	65	925
Blackwood, Helge W., et al. (See Lundberg, Rudolph, assignor.)						
Blades, Henry. (See Normington and Blades.)						
Blaesius, Richard G., Watertown, Wis. Extension-table slide	503,192	Aug. 15	1601	393	64	889
Blaeske, Richard, Berlin, Germany. Button-fastener	494,456	Mar. 28	2742	688	62	1929
Blaich, Adolph. (See Behmer, Daniel, assignor.)						
Blaine, George E., Alliance, Ohio. Pavement	511,497	Dec. 26	2859	691	65	1980
Blair Camera Company. (See Blair and Kelley, assignors.)						
Blair, D. W., Jr. (See Blair, William A., assignor.)						
Blair, Ellen, et al. (See Fontaine, Patrick H., assignor.)						
Blair, Frederick S., Nashville, Tenn. Apparatus for drying	508,363	Nov. 7	626	153	65	874
Blair, Grant, Curfew, Pa. Car-coupling	509,719	Nov. 28	2906	703	65	1348
Blair, Harry R., and J. B. Giffen, Sacramento, Cal. Computing-scale	510,319	Dec. 5	793	191	65	1560
Blair, J. D., et al. (See Fontaine, Patrick H., assignor.)						
Blair, John, Ardrea, Canada, assignor to L. C. Dillman, F. Wilson, and D. G. Eaton, Spokane, Wash. Recovering gold	492,133	Feb. 21	1705	424	62	1120
Blair, John, Brooklyn, N. Y. Fountain-pen	509,862	Dec. 5	19	4	65	1414
Blair, John R., Schenectady, N. Y. Spoon-holder	510,835	Dec. 12	1688	419	65	1740
Blair, Lemuel P. (See Wallace, Eugene, assignor.)						
Blair, Thomas H., and F. H. Kelley, assignors to Blair Camera Company, Boston, Mass. Photographic camera	491,920	Feb. 14	1380	344 345	62	1040
Blair, Thomas H., and F. H. Kelley, assignors to Blair Camera Company, Boston, Mass. Camera-shutter	491,921	Feb. 14	1382	345 346	62	1040
Blair, William A., assignor of one-half to D. W. Blair, Jr., Chicago, Ill. Crease or seam dampener	491,331	Feb. 7	448	116	62	833
Blaiddell, Mary F. W., Franklin, Me. Combined trunk and couch	499,704	June 20	1593	385	63	1697
Blake, Arthur M., New York, N. Y. Indicator for carriages	498,101	May 23	2753	688	63	1160
Blake, Burdine, London, Ohio. Driving-rein and tail-holder	507,476	Oct. 24	2851	699	65	574
Blake, Charles E. (See Whitlock, Alma, assignor.)						
Blake, Charles E., Sr., San Francisco, Cal. Surgical forceps for dental use	491,464	Feb. 7	666	167	62	876
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps	491,514	Feb. 14	750	191	62	912
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps	491,515	Feb. 14	751	191	62	913
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps	491,516	Feb. 14	752	191	62	913
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps	491,517	Feb. 14	752	191	62	913
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps	491,518	Feb. 14	753	192	62	913
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps	491,519	Feb. 14	754	192	62	913
Blake, Christopher, Irvington, N. J. Washboard	497,112	May 9	1158	297	63	845
Blake, Edgar W. (See Hanlon, Edward L., assignor.)						
Blake, Edward A., Chicago, Ill. Printing-press	503,713	Aug. 22	2451	609 610 611	64	1057
Blake, Edward T., assignor of one-half to F. R. Schwegler, Denver, Colo. Paper-clip	501,863	July 18	2112	522	64	413
Blake, George H., Portland, assignor of one-half to J. N. Winslow, Deering, Me. Composition for roofing	498,840	June 6	160		63	1420
Blake, Henry T., Manitou, Colo. Pitcher-carrying basket	499,775	June 20	1723	415	63	1719
Blake, Ira G., Worcester, Mass. Time-lock	504,427	Sept. 5	190	49	64	1306
Blake, John H., New York, N. Y. Damper-regulator	504,659	Sept. 5	551	141	64	1374
Blake, John W., and G. E. Gilhaus, assignors to United States Fire Supply Company, Kansas City, Kans. Fire-ladder	497,262	May 9	1384	351 352	63	886
Blake, Joseph M., Buffalo, N. Y. Lumber-wagon	495,194	Apr. 11	1088	270 271	63	220
Blake, Laura A., East Templeton, Mass. Shears	499,705	June 20	1595	385	63	1697
Blake, Lucien I., Lawrence, Kans. Signaling between vessels upon water	506,150	Oct. 3	555	144	65	107
Blake, Marshall E. (See Maloon and Blake.)						
Blake, Rufus W. (See Terew, Joseph F., assignor.)						
Blake, Thomas J., Pittsburg, Pa. Starching-machine	501,476	July 11	1499	377 378	64	282
Blake, William B., Bedford, Ohio. Combined cane and umbrella	500,051	June 20	2163	525	63	1796
Blakeley, John D., Toledo, and L. Bowser, Cygnet, assignors to J. A. Dailey, Toledo, Ohio. Hydrocarbon-burner and means for supplying fuel thereto	495,295	Apr. 11	1251	312	63	250
Blakeman, William N., Jr., Mount Vernon, N. Y. Imparting drying properties to fatty oils	496,987	May 9	969		63	812
Blakeman, William N., Jr., Mount Vernon, N. Y. Thickening drying-oils	496,988	May 9	970		63	812
Blakeman, William N., Jr., Mount Vernon, N. Y. Hastening the drying action of drying-oils	496,989	May 9	971		63	812
Blakeman, William N., Jr., Mount Vernon, N. Y. Utilizing metallic and earthy oxides and salts as pigments or paints	496,990	May 9	972		63	812
Blakeman, William N., Jr., Mount Vernon, N. Y. Imparting drying properties to oils	496,991	May 9	974		63	812
Blakeslee, George S., Chicago, Ill. Dish-washing machine	506,030	Oct. 3	351	93, 94	65	69
Blakeslee, Harvey D. (See Latta, Emmet G., assignor.)						
Blakesley, Gilbert H., assignor to Blakesley Novelty Company, Bristol, Conn. Garter	504,410	Sept. 5	161	42	64	1300
Blakesley, John H., London, England. Fireproof girder and joist	503,642	Aug. 22	2341	584	64	1036
Blakesley Novelty Company. (See Blakesley, Gilbert H., assignor.)						
Blakey, Mildred, Hazelwood, Pa. Protector for pipe-threads	509,115	Nov. 21	1865	457	65	1140
Blakey, Robert C., Vienna, Austria-Hungary. Sowing-machine	495,083	Apr. 11	865	221	63	180
Blamyer, Frances M., Olema, Cal. Meat-broiler	503,307	Aug. 15	1786	441	64	921
Blanc, William, Camden, N. J. Lifting device	502,051	July 11	817	212 213	64	164
Blanchard, Allen I., Chicago, Ill., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	489,177	Jan. 3	294	81, 82	62	67
Blanchard, Ephraim, Logan, Utah Ter. Washing-machine	496,770	May 2	598	160	63	726
Blanchard, Frank S., Worcester, Mass. Index for telephones	498,503	May 30	3423	849	63	1294
Blanchard, George, Newburg, N. Y. Foundation for light-houses and other heavy structures in deep water	502,845	Aug. 8	1024	250 251	64	769
Blanchard, George W., Waterville, Me. Carpet-stretcher	501,132	July 11	960	245	64	189

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Blanchard, Helen A., New York, N. Y. Securing reeds or cords to the edges of materials	496,929	May 9	886	232	63	747
Blanchard, Helen A., New York, N. Y. Sewing-needle	500,556	July 4	361	11	64	8
Blanchard, Jerome B., Denver, Colo. Potato-digger	503,201	Nov. 7	367	90	65	826
Blanchard, Paul, Arnaudville, La. Road-scraper	494,317	Mar. 28	2518	634	62	1889
Blanchard, Willie N. (See Richard and Blanchard.)						
Blanche, Henry B., Malvern, assignor to R. L. Malcolm, Melbourne, Victoria. Street-cleaning machine	506,809	Oct. 17	1719	{ 432 433 748 749 }	{ 65 65 }	352 1385
Bland, Henry, Leichardt, near Sydney, New South Wales. Sheep-shearing machine	509,837	Nov. 28	3100			
Bland, John M. D., assignor of one-half to H. Ruhnstroth, La Grande, Oreg. Combined rail-joint and nut-lock	505,564	Sept. 26	2107	534	64	1706
Blaudy, Alfred A., London, England. Sole	504,660	Sept. 5	553	141	64	1374
Blank, Ferdinand J., Cold Spring, Wis. Spring-draft device	493,240	Mar. 14	733	188	62	1520
Blankinsop, Thomas. (See Hanes and Blankinsop.)						
Blankner, William, Chicago, Ill. Extension-table	498,230	May 30	2965	739	63	1211
Blanks, George W. and B. Lefebvre, Sydney, New South Wales. Dry-press-brick machine	507,477	Oct. 24	2852	699	65	574
Blanton, Joseph D., Dot, Ga. Rail-joint	493,816	Mar. 21	1693	431	62	1719
Blanton, Tullius B., Taylor, Tex. Milk-cooler	508,202	Nov. 7	368	90	65	827
Blasberg, Eugen, Dusseldorf, Germany. Ladder	503,120	Aug. 15	1484	365	64	866
Blasi, Joseph M., San Francisco, Cal. Shaving-mug	511,323	Dec. 26	2553	623	65	1924
Blasser, Ernest, Boston, Mass. Switch for electric lights	503,693	Aug. 22	2421	606	64	1051
Bláthy, Otto T., Buda-Pesth, Austria-Hungary. Transformer-motor	497,113	May 9	1159	{ 297 298 }	{ 63 63 }	845
Blaze, Robert W., Pittsburg, Pa. Glass-mold	508,597	Nov. 14	1018	251	65	963
Blessing, Charles A., Philadelphia, Pa. Water-closet	498,102	May 23	2754	688	63	1160
Blessing, Francis X. (See Blessing, Frank, assignor.)						
Blessing, Frank, Lancaster, assignor to F. X. Blessing, Reading, Pa. Chuck	489,862	Jan. 10	1333	348	62	292
Blessing, James H., Albany, assignor to New York Filter Company, New York, N. Y. Coagulant-feeder	510,112	Dec. 5	456	{ 102 103 }	{ 65 65 }	1496
Bley, Jacob H., New York, N. Y. Suspenders	502,111	July 25	2520	632	64	503
Blieckensderfer, George C., Stamford, Conn. Type-writing machine	491,071	Feb. 7	14	4, 5	62	751
Blinke, August M., et al. (See Trece, Laurence J., assignor.)						
Bligh, Samuel L., Custards, Pa. Holdback for vehicles	511,498	Dec. 26	2860	691	65	1960
Bliss, Aaron P., et al. (See Crackel, William H., assignor.)						
Bliss & Co., John. (See Bliss, John, assignor.)						
Bliss, Collins P., New York, N. Y. Furnace-grate	504,195	Aug. 29	3220	802	64	1221
Bliss, Edward M., Worcester, Mass. Sole	497,067	May 9	1090	280	63	833
Bliss, John, Brooklyn, assignor to J. Bliss & Co., New York, N. Y. Compensation-balance for timepieces	492,184	Feb. 21	1790	447	62	1138
Bliss, Samuel B., Riverside, Cal. Raisin-seeder	509,649	Nov. 28	2793	672	65	1328
Blass, William H., Kansas City, Mo. Flue and chimney cleaner	500,467	June 27	2846	701	63	1928
Blits, Harry I., New York, N. Y. Apparatus for preserving fruits	507,778	Oct. 31	3385	828	65	687
Blits, Harry I., New York, N. Y. Hygienic vapor and hot-air renovator	510,235	Dec. 5	666	158	65	1536
Bliven, John F., East Greenwich, R. I. Stove-protector	504,319	Sept. 5	10	4	64	1273
Block, Bertha A. J., Racine, Wis. Wood horse-collar and manufacture of same	511,193	Dec. 19	2333	571	65	1871
Bloch, Jacob. (See Wolf, John, Jr., assignor.)						
Bloch, Jacob. (See Wolf and Bloch.)						
Bloch, Israel, New York, N. Y. Oil-stove	500,735	July 4	327	87	64	61
Block, Louis, New York, N. Y. Brine-tank for artificial-ice manufacture	501,316	July 11	1239	312	64	240
Blockburger, John L., Pasadena, Cal. Orange or fruit cleaning machine	502,651	Aug. 1	675	163	64	790
Blodgett, John W., assignor to himself and Abbott Machine Company, Chicago, Ill. But-tonhole attachment for sewing-machines	490,735	Jan. 31	2813	{ 722 723 }	{ 62 62 }	625
Blodgett, William H. (See Southworth and Blodgett.)						
Bloede, Victor G., Baltimore, Md. Dyeing and printing	499,649	June 13	1509		63	1668
Bloede, Victor G., assignor to Victor G. Bloede Company, Baltimore, Md. Dyeing black	506,663	Oct. 17	1472		65	306
Blog, Solomon, et al. (See Keller, Gottlieb, assignor.)						
Blomberg, Frank, Memphis, Tenn. Hydraulic press	506,464	Oct. 10	1164	{ 288 289 }	{ 65 65 }	235
Blome, Adolph, Hoboken, N. J., assignor of one-half to G. A. Schürmann, New York, N. Y. Bookbinding	496,992	May 9	975	253	63	812
Blomé, Jonas E., Landing, N. J., assignor to Bloménte Manufacturing Company, New York, N. Y. Making blasting compounds	495,178	Apr. 11	1062		63	215
Blomé, Jonas E., Landing, N. J., assignor, by mesne assignments, to Unique Powder Company, New York, N. Y. Manufacture of blasting compounds	506,031	Oct. 3	352		65	69
Blomé, Jonas E., Landing, N. J., assignor, by mesne assignments, to Unique Powder Company, New York, N. Y. Blasting compound	506,032	Oct. 3	353		65	69
Bloménte Manufacturing Company. (See Blomé, Jonas E., assignor.)						
Blomshield, John H., West Bay City, Mich. Car-replacer	502,806	Aug. 8	957	233	64	757
Blood, Aretas, et al. (See Tripp, Thomas, assignor.)						
Blood, Benjamin P., Amsterdam, N. Y. Sidesaddle	491,831	Feb. 14	1239	310	62	1012
Blood, Charles N., Anamosa, Iowa. Stump-extractor	508,401	Nov. 14	702	172	65	902
Blood, John B., Lynn, Mass., assignor to General Electric Company, of New York. Regulating electric locomotives	501,488	July 18	1519	382	64	308
Blood, John B., Lynn, assignor to General Electric Company, Boston, Mass. Winding coils for dynamo-electric armatures	503,449	Aug. 15	2005	497	64	960
Blood, John B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Rheostat	508,674	Nov. 14	1129	279	65	986
Blood, Mary L. (See Blood, Maurice E., assignor.) (Reissue.)						
Blood, Maurice E., assignor to M. L. Blood, Kalamazoo, Mich. Parcel-carrier for bicycles. (Reissue.)	11,301	Jan. 17	2026	529	62	444
Bloom, David H., et al. (See Lyle, Jefferson Y., assignor.)						
Bloom, Jacob C., et al. (See Seymour, William S., assignor.)						
Bloomberg, William, New York, N. Y. Suspender-end	504,661	Sept. 5	555	141	64	1375
Bloomberg, Martin W. (See Niles, Jesse E., assignor.)						
Bloomer, Charles T., New York, N. Y. Telephone-transmitter	492,883	Mar. 7	178	43	62	1393
Bloomer, Charles T., New York, N. Y. Telephone	493,907	Mar. 21	1825	465	62	1744
Bloomfield, John W. (See Crane and Bloomfield.)						
Bloss, Richard P., Palmer, N. Y. Machine for removing the bark from logs	489,178	Jan. 3	300	83	62	68
Blow, Richard T., et al. (See Moran, Michael, assignor.)						
Blue, Angus. (See Blue, John, assignor.)						
Blue, Dennis S. (See Gusdorf and Blue.)						
Blue, John, et al. (See Woodfall, Owensby H., assignor.)						
Blue, John, assignor of one-half to A. Blue, Laurinburg, N. C. Fertilizer-distributor and cotton-planter	507,985	Nov. 7	13	4	65	761

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Bluemel, Charles W., E. A., and F. H., London, England. Cover or case for chain-gear of velocipedes.	507,670	Oct. 31	3215	786	65	655
Bluemel, Ernest A. (See Bluemel, Charles W., E. A., and F. H.)						
Bluemel, Frank H. (See Bluemel, Charles W., E. A., and F. H.)						
Blum, Joseph, Chicago, Ill. Dumping-wagon.	498,504	May 30	3424	850	63	1294
Blumenthal, Louis, New York, N. Y. Extension wardrobe-bed.	498,614	May 30	3598	891	63	1325
Blumer, James, Brooklyn, N. Y. Corrugating-tool.	501,644	July 18	1766	440	64	354
Blumle, Frank X. (See Thompson, Walter B., assignor.)						
Blunck, John, Elmendorf, Tex. Plow.	502,697	Aug. 8	767	186	64	722
Blunden, Osmond G., London, England. Apparatus for preparing peat for fuel.	506,151	Oct. 3	557	144	65	108
Bunt, William S., Upper Montclair, N. J. Hydraulic massage apparatus.	511,008	Dec. 19	2035	503	65	1814
Blydenburgh, Charles M. (See Duryea, Edwin G., assignor.)						
Blydenburgh, Charles M., Riverhead, N. Y. Nail-extractor.	506,465	Oct. 10	1168	290	65	236
Blydenburgh, Charles M., Riverhead, N. Y. Hammer and nail-extracting device.	510,525	Dec. 12	1126	273	65	1637
Boal, Thomas M., et al. (See Cooper, Harry, assignor.)						
Boalich, George, et al. (See Kennedy, Robert J., assignor.)						
Board, Ellsworth M., trustee, et al. (See Ludwig, Oscar, assignor.)						
Board, James L., et al. (See Ludwig, Oscar, assignor.)						
Board, James L., Chicago, Ill. Conveying apparatus.	506,357	Oct. 10	969	240	65	196
Boardman, Alphonso F., Brooklyn, N. Y. Guide for fishing-lines.	506,093	Oct. 3	454	119	65	89
Boardman, Alphonso F., Brooklyn, N. Y. Fishing-reel.	506,094	Oct. 3	455	119	65	89
Boardman, Arthur F., Souersville, assignor of one-half to J. T. Hicks, Boston, Mass. Magneto apparatus.	510,320	Dec. 5	794	192	65	1561
Boardman, Frank, Bennett, Pa. Match-safe.	493,227	Mar. 7	707	181	62	1497
Boardman, Thomas, Warehouse Point, Conn. Automatic circulator for bleaching-keirs.	489,361	Jan. 3	579	157	62	124
Boardman, William Y. A., Hyde Park, Mass. Flesh-brush.	506,869	Oct. 17	1817	455	65	369
Boardman, Wyman, Toledo, Ohio. Rowing-gear.	494,948	Apr. 4	656	169	63	126
Boardman, Wyman, assignor of one-half to D. W. Camp, Jr., Toledo, Ohio. Coin-controlled game apparatus.	493,395	Mar. 14	981	253	62	1567
Boas, Felix, Potsdam, and S. Weinmann, Charlottenberg, Germany. Scale-measure.	492,569	Feb. 28	2409	600	62	1278
Boas, Richard, New York, N. Y. Cover for pots, urns, jugs, &c.	505,647	Sept. 26	2256	571	64	1735
Boatright, Henry C. (See Fitzpatrick and Boatright.)						
Bobb, George, Yokena, Miss. Lap-ring.	493,543	Mar. 14	1225	314	62	1612
Bobier, Wellington W. (See Walker, Melbourne, assignor.)						
Bobo, Martin J., Rockmart, Ga. Vehicle-brake.	493,676	Mar. 21	1455	371	62	1673
Bobrick, Gabriel A., New York, N. Y. School-desk.	498,703	May 30	3766	929	63	1353
Bobrick, Gabriel A., New York, N. Y. School-desk.	511,262	Dec. 19	2445	596	65	1892
Böcher, Adam, New York, N. Y. Darning implement.	501,817	July 18	2051	505	64	403
Bock, Martin, Hazelton, assignor to E. F. Bowman, Lancaster, Pa. Device for holding graves' or other tools for sharpening them.	494,504	Mar. 28	2821	708	62	1945
Böcker, Ernst, Cologne, Germany. String instrument.	511,009	Dec. 19	2038	503	65	1814
Bockius, Charles J., assignor to Canton Glass Company, Marion, Ind. Making lens-globes.	503,825	Aug. 22	2615	653	64	1089
Bodani, Joseph, Rochester, N. Y. Rocking-chair.	510,400	Dec. 12	926	222	65	1600
Boddam, Edmund M. T., Sydney, New South Wales. Device for opening or closing elevator-doors.	491,832	Feb. 14	1241	310	62	1012
Boddy, Samuel L., et al. (See Lyle, Jefferson Y., assignor.)						
Bode, Albert. (See Sner and Bode.)						
Bode, Charles. (See Xiezopolski and Bode.)						
Bodell, Benjamin, Auburn, N. Y. Stop-motion for spinning-jennies.	499,280	June 13	882	213	63	1558
Bodell, John R., assignor of one-half to J. Bopes, New Salem, Ohio. Sliding door.	494,840	Apr. 4	510	127	63	98
Boden, Annie, J. Peers, and S. Saxon, San Francisco, Cal. Invalid-bed.	504,515	Sept. 5	341	87	64	1333
Bodenbrown, William, Jr., Boston, Mass. Type-writing machine.	491,072	Feb. 7	17	5	62	752
Bodenhamer, James M. (See Bodenhamer, Levi I. and J. M.)						
Bodenhamer, Levi I. and J. M., Kernersville, N. C. Fertilizer-distributor and grain-drill.	500,557	July 4	33	11	64	8
Bodenstein, Henry, Staatsburg, N. Y. Ice-cutter.	505,971	Oct. 3	264	70	65	52
Bodenstein, John G., Staatsburg, N. Y. Tooth-fastening for ice-plows.	491,332	Feb. 7	450	116	62	134
Bodine, Enoch K., Bristol, Va. Grain-scourer.	510,769	Dec. 12	1580	393	65	1720
Bodine, John, Pittsfield, Ill. Wire-coupling.	499,090	June 6	594	143	63	1494
Bodkin, Charles W., assignor of one-half to G. H. Houser, Celina, Ohio. Street-lamp.	492,320	Feb. 21	1997	497	62	1181
Boeck, Charles H., assignor to H. S. Smith, Jackson, Mich. Oil-stove.	500,367	June 27	2704	664	63	1903
Boeck, Charles H., assignor to H. L. Smith, Jackson, Mich. Oil-stove.	510,236	Dec. 5	667	158	65	1536
Boeckmann, Eduard, St. Paul, Minn. Sterilizer for surgical dressings.	510,321	Dec. 5	795	192	65	1561
Boedeker, Hermann, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst, Germany. Pink dye.	493,241	Mar. 14	735	193	62	1521
Boehne, Edward H., Chicago, Ill. Pencil-sharpener.	505,695	Sept. 26	2310	593	64	1749
Boehmer, Peter. (See Noecke, Louis, assignor.)						
Boehringer & Soehne, C. F. (See Geromont, Friedrich, assignor.)						
Boehringer & Soehne, C. F. (See Lederer, Leonhard, assignor.)						
Boehringer & Soehne, C. F. (See Marfori and Schniedeberg, assignors.)						
Boeklen, Reinhold, Brooklyn, N. Y. Magnetic nail-driver.	510,467	Dec. 12	1039	249	65	1621
Boeklen, Reinhold, assignor to J. W. Bedford, Omaha, Nebr. Electrically-operated machine for molding clay or cement pipes.	507,671	Oct. 31	3216	787	65	655
Boerner, George, Brooklyn, N. Y. Cash register, indicator, recorder, and check-printer.	498,615	May 30	3599	891	63	1325
Boeing, Ernst, and J. Sjöström, assignors to J. Scott, Yonkers, N. Y. Rotary pump.	501,864	July 18	2113	522	64	413
Boës, Frederick O., New York, N. Y. Brake for children's carriages.	509,288	Nov. 21	2166	519	65	1195
Boesch, Emile, San Francisco, Cal. Car-lamp.	492,953	Mar. 7	285	73	62	1415
Boesch, Emile, San Francisco, Cal. Car-lamp.	492,954	Mar. 7	287	73	62	1416
Boesch, Emile, San Francisco, Cal. Chandelier car-lamp.	511,398	Dec. 26	2698	654	65	1951
Boessenberg, Gustav W. (See Müller, Hermann, assignor.)						
Boettler, George, St. Charles, Mo. Attachment for straw-stackers.	496,771	May 2	599	160	63	726
Boettner, Charles W. (See Dye and Boettner.)						
Bogan, James F., Westport, Conn. Chin-rest.	508,081	Nov. 7	166	46	65	789
Bogart, Arthur S., and J. J. Nesmith, Warren, Pa. Back gage of paper-cutting machines.	507,963	Oct. 31	3685	916	65	743
Bogart, Samuel S., New York, N. Y., assignor, by mesne assignments, to Electric Selector and Signal Company, of West Virginia. Electric selecting device.	507,205	Oct. 24	2407	593	65	480

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Bogart, Samuel S., New York, N. Y., assignor, by mesne assignments, to Electric Selector and Signal Company, of West Virginia. Electric selecting device	507,206	Oct. 24	2411	{ 594 595 }	65	490
Boggs, Alden B., assignor to Chain-Stay Fence Company, Limited, Covington, Ohio. Wire fence	508,082	Nov. 7	166	47	65	789
Boggs, Joseph O., Fayetteville, Pa., assignor of one-half to G. W. Bothwell, Jersey City, N. J. Broiler	505,433	Sept. 26	1850	476	64	1658
Boggs, William H., Covington, Ohio. Wire-cutting machine	507,101	Oct. 24	2207	545	65	454
Bogler, Philip, Chicago, Ill. Car-coupling	496,849	May 9	732	194	63	769
Bogy, Ben, <i>et al.</i> (See Hacker, Charles F., assignor.)						
Bohde, George W., New York, N. Y. Cinder and dust blind	510,237	Dec. 5	668	159	65	1537
Bohlin, John A. S., Stockholm, Sweden. Protector for pocket-books	492,911	Mar. 7	226	56	62	1403
Bohlinger, Alfred P., St. Louis, Mo. Easel attachment for lace-curtain stretcher-frames	505,306	Sept. 19	1638	424	64	1605
Bohls Cigarette Machine Company. (See Bohls, Henry, assignor.)						
Bohls Cigarette Machine Company. (See Payne, William J., assignor.)						
Bohls, Henry, San Francisco, Cal. assignor to Bohls Cigarette Machine Company, Richmond, Va. Machine for dressing and feeding tobacco	493,148	Mar. 7	585	{ 146 147 148 }	62	1474
Bohm, William D., London, England. Apparatus for leaching ores	507,350	Oct. 24	2654	{ 652 653 }	65	536
Bohm, William D., London, England. Apparatus for the separation of gold from ores containing it	509,289	Nov. 21	2160	519	65	1195
Bohn, Milton W., and J. H. Machen, Norfolk, Va. Baby-carriage brake	506,970	Oct. 17	1980	491	65	400
Bohn, René, Mannheim, assignor to Badische Anilin and Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Green-blue alizarin dye	509,603	Aug. 1	598		64	675
Bohner, Joseph E., assignor to Wallace & Sons, Ansonia, Conn. Hanging lamp	492,321	Feb. 21	1999	498	62	1181
Bohner, Joseph E., assignor to Wallace & Sons, Ansonia, Conn. Table-leg fastening	496,181	Apr. 25	2625	661	63	535
Bohren, Ulrich. (See Steets and Bohren.)						
Böhringer, Carl, Offenburg, Germany. Stamped or folded metal sheet spool for winding thread	492,657	Feb. 28	2555	632	62	1306
Bohrmann, Julius, New York, N. Y. Hat-sweat	506,839	Oct. 17	1769	445	65	361
Boifeuillet, Adrian S., Brunswick, Ga. Can-labeling machine	506,095	Oct. 3	456	{ 119 120 }	65	89
Boise, Eugene, <i>et al.</i> (See Moulton, Luther V., assignor.)						
Boisvert, Napoleon. (See Hamilton, Boisvert, and Champonoux.)						
Boland, Daniel L., New York, N. Y. Device for manipulating switches	501,317	July 11	1240	312	64	240
Boland, Frank P., Providence, R. I. Coffee-pot	501,672	July 18	1818	453	64	362
Boland, James. (See Hopkins and Boland.)						
Boland, Joseph, and G. W. Fritz, Pittsburg, Pa. Mining-machine	501,402	July 11	1399	{ 350 351 }	64	268
Boldt, Heinrich, Berlin, Germany. Machine for dividing dough	511,499	Dec. 26	2861	692	65	1980
Bole, Samuel C., Leechburg, Pa. Wrench	507,407	Oct. 24	2746	674	65	554
Bole, Samuel C., Leechburg, Pa. Key	507,408	Oct. 24	2747	675	65	554
Bole, William A. (See Westinghouse and Bole.)						
Boles, Jacob E., and A. Wilson, Alta, Iowa; said Wilson assignor to said Boles. Band-cutter and feeder	495,010	Apr. 11	754	192	63	160
Bolgiano, John, Baltimore, Md. Face-protector	494,775	Apr. 4	397	98	63	78
Bolgiano, John, Baltimore, Md. Water-motor	496,182	Apr. 25	2627	661	63	535
Bolin, John P. (See Erb, Harry P., assignor.)						
Bolinger, Andrew and J., Speedwell, Tenn. Age-gage	493,963	Mar. 21	1937	494	62	1765
Bolinger, John. (See Bolinger, Andrew and J.)						
Bolleremann, Arthur, New York, N. Y. Piano-stringing device	493,748	Mar. 21	1582	402	62	1698
Bolles, William P. (See Fitz Henry, Bolles, and McKee.)						
Bolling, S. C., <i>et al.</i> (See Weare, Enoch W., assignor.)						
Bollinger, Cornelius, Harrisburg, Pa. Broadcast seed-sower	502,604	Aug. 1	599	142	64	675
Bollman, Herman H., <i>et al.</i> (See MacRae, Charles J., assignor.)						
Bollmann, John F., Cincinnati, Ohio. Apparatus for cleaning liquor-faucets and their keg connections	501,645	July 18	1767	440	64	354
Bolster, Alexander J., York, Nebr. Cultivator	489,844	Jan. 10	1315	343	62	288
Bolster, Alexander J., York, Nebr. Disk cultivator	489,845	Jan. 10	1317	343	62	288
Bolte, Frank H., Milwaukee, Wis. Automatic fire alarm	506,096	Oct. 3	459	120	65	90
Bolte, Frank H., assignor of two-thirds to P. H. Sercombe and T. A. Donlevy, Milwaukee, Wis. Workman's time-recorder	491,978	Feb. 21	1470	366	62	1072
Bolte, Frank H., assignor to Sercombe-Bolte Manufacturing Company, Milwaukee, Wis. Bicycle-frame, &c	499,707	June 20	1597	386	63	1697
Bolte, Frank H., assignor to Sercombe-Bolte Manufacturing Company, Milwaukee, Wis. Vehicle-wheel						
Bolthoff, Henry, Denver, Colo. Brake mechanism	500,368	June 27	2705	664	63	1903
Bolthoff, Henry, Denver, Colo. Alarm-indicator	494,518	Mar. 28	245	712	62	1949
Bolthoff, William H., Denver, Colo. Permutation-padlock	494,519	Mar. 28	2846	713	62	1949
Bolton, George W., Detroit, Mich. Car-coupling	511,673	Dec. 26	3133	766	65	2031
Bolton, Gilman B., Waverly, assignor of one-half to F. H. Henry, Wakefield, Mass. Street-car	494,776	Apr. 4	397	98	63	78
Bolton, James M., Sioux City, Iowa. Gate for wire fences	493,242	Mar. 14	736	{ 188 189 }	62	1521
Bolton, William T., <i>et al.</i> (See Dunning, Harry, assignor.)	507,779	Oct. 31	3387	829	65	687
Boluss, Alfred R., Norwood, Ohio, assignor of one-half to W. T. Bothwell, Jersey City, N. J. Steam-actuated valve	491,506	Feb. 7	726	{ 183 184 }	62	888
Boman, Claes W., New York, N. Y. Device for forming cigar-heads	498,738	May 30	3243	948	63	1367
Boman, Claes W., Brooklyn, assignor to Eagle Pencil Company, New York, N. Y. Penholder	505,384	Sept. 19	1767	457	64	1628
Boman, Claes W., assignor to Eagle Pencil Company, New York, N. Y. Penholder	510,322	Dec. 5	797	192	65	1561
Boman, James F., and J. Cornelius, Flat Rock, Ind. Hog-trap	497,163	May 9	1240	315	63	859
Bongardner, Joseph, Wilmet, Ohio. Ice-pillow	505,873	Oct. 3	112	28	65	22
Bonbrake, Lewis S., Decatur, Ill. Stovepipe-joint	489,521	Jan. 10	850	221	62	193
Bonbrake, Lewis S., Decatur, Ill. Eaves-trough	503,940	Aug. 29	2786	698	64	1140
Bonbrake, Lewis S., Decatur, Ill. Oil-can	505,347	Sept. 19	1695	436	64	1615
Bonbrake, Lewis S., Dwight, Ill. Oil or gasoline can	489,786	Jan. 10	1233	323	62	270
Bonbrake, Lewis S., Waynesburg, Ohio. Eaves-trough hanger	489,600	Jan. 10	962	250	62	215
Bonbrake, Lewis S., Waynesburg, Ohio. Metal roofing	495,875	Apr. 18	2176	546	63	434
Bond, Arthur T., Wilmington, Mass. Means for advertising	502,947	Aug. 8	1200	296	64	801
Bond, Charles J., Springfield, Mass. Type-writing machine	509,067	Nov. 21	1772	437	65	1121
Bond, Eaton D., Mercer, Tenn. Car-coupling	507,102	Oct. 24	2209	545	65	454
Bond, Eaton D., Mercer, Tenn. Car-coupling	511,399	Dec. 26	2702	654	65	1951
Bond, Henry J., and L. Hilling, Shawnee, Ohio. Pug-mill for brick-mills	495,389	Apr. 11	1393	348	63	275
Bond, Nathan O., Fairfax Court-House, Va., assignor of three-eighths to S. J. Meeks and A. S. Johnson, Washington, D. C. Match-safe	498,377	May 30	3221	801	63	1257

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Bonebrake, Lark P. (See Glover and Jean, assignors.)						
Bonebrake, Lark P., Maryville, Mo. Multiple terminal cut-out	493,328	Mar. 14	886	226	62	1546
Bonenberger, George. (See Herth and Bonenberger.)						
Bonicard, Jean, Paris, France. Steam generator and superheater	507,644	Oct. 31	3179	778	65	646
Bonnamy, Louis A., London, England. Means for hermetically closing receptacles	495,775	Apr. 18	2020	511	63	496
Bonnar, William, Mono Mills, Canada. Spring-gear for vehicles	493,677	Mar. 21	1456	371	62	1674
Bonnar, William, Bolton, Canada. Running-gear for vehicles	503,032	Aug. 8	1333	328	64	826
Bonné, Sigmund, Nuremberg, Germany. Boot cleaning and polishing machine	497,624	May 16	2000	500	63	1009
Bonnell, Lansing, New York, N. Y. Refrigerator	506,097	Oct. 3	461	120	65	90
Bonner, Julius, Newark, N. J. Manufacture of rings	499,091	June 6	596	143	63	1494
Bonney, George E., Middleborough, Mass. Shade or curtain hanger	506,301	Oct. 10	870	215	65	177
Bonnhorst, George M. von. (See Long, Jacob, assignor.)						
Bonwick, William P., London, England. Stopper for bottles	494,361	Mar. 28	2600	653	62	1904
Bookser, Rudolph C., Buffalo, N. Y. Curling-iron	501,646	July 18	1769	440	64	354
Bookwalter, Charles A., et al. (See Darnell, Calvin F., assignor.)						
Bookwalter, Francis M., Springfield, Ohio. Water-wheel	509,863	Dec. 5	20	4	65	1414
Bookwalter, Francis M., and W. W. Tyler, assignors to James Leffel & Company, Springfield, Ohio. Water-wheel	493,964	Mar. 21	1988	494	62	1765
Boon, Willard S., Kansas City, Mo. House mail-box	496,772	May 2	606	{ 160 161 }	{ 63 63 }	727
Boone, Robert B., et al. (See King, James O., assignor.)						
Boone, Samuel H., assignor to himself and W. A. West, Douglas, Canada. Thread-case	492,658	Feb. 28	2556	632	62	1306
Boorman, David, Altoona, Pa. Shaft-coupling	503,033	Aug. 8	1334	328	64	826
Boostrum, Lewis O., Galesburg, Ill. Propeller-wheel	502,545	Aug. 1	505	121	64	659
Booth, Ebenezer H., Kirkwood, N. Y. Vehicle-spring	502,605	Aug. 1	602	143	64	676
Booth, Irving E., et al. (See Beckett, John R., Jr., assignor.)						
Booth, Irving E., et al. (See Hatfield, Charles B., assignor.)						
Booth, John C., and W. C. Redfield, assignors to J. H. Williams & Co., Brooklyn, N. Y. Pipe-wrench	499,508	June 13	1299	305	63	1631
Booth, John L., et al. (See Smith, George, assignor.)						
Booth, Joseph B. S., and E. J. Falconer, Manchester, England. Telephone	505,087	Sept. 19	1296	334	64	1542
Booth, Moses, Blackstone, Mass. Lubricator	509,264	Dec. 5	22	5	65	1414
Booth, Quentin W., et al. (See Beckett, John R., Jr., assignor.)						
Booth, Quentin W., et al. (See Hatfield, Charles B., assignor.)						
Booth, Quentin W., Rochester, N. Y. Leather-turning machine	495,776	Apr. 18	2021	511	63	406
Booth, Quentin W., Rochester, N. Y. Turning-machine	506,684	Oct. 17	1474	{ 370 371 }	{ 65 65 }	306
Booth, Ralph W., New Brunswick, N. J. Lawn-tennis fork	494,913	Apr. 4	612	156	63	118
Booth, Ralph W., New Brunswick, N. J. Call-bell	494,914	Apr. 4	613	156	63	119
Boothby, James F. (See Darling, Charles E., assignor.)						
Bootman, William H., Waterford, assignor to J. Knickerbacker, Troy, N. Y. Hydrant	504,662	Sept. 5	555	142	64	1375
Booze, John W. (See Sweeney, Robert E., assignor.)						
Bopp, John. (See Bodell, John R., assignor.)						
Bopp, Oscar, New York, N. Y. Bed-couch	490,423	Jan. 24	2297	596	62	500
Borchardt, Hugo, Berlin, Germany. Automatic recoil-rest for breech-loading guns	499,315	June 13	937	227	63	1568
Borchers, Warnerus, Munich, Germany. Aspirator and air-injector	493,012	Mar. 7	378	94	62	1433
Borden, James Y., Philadelphia, Pa. Hair-structure	489,283	Jan. 3	465	129	62	102
Borden, William A., New Haven, Conn. Paper-file drawer	511,582	Dec. 26	2989	728	65	2005
Borden, William H., assignor of two-thirds to H. F. Murray and J. A. Brogan, Lawrence, Mass. Knot-tying machine	493,205	Mar. 7	666	{ 170 171 }	{ 62 62 }	1489
Borem, Levi N., Englewood, Ill. Combination-vise	494,802	Apr. 4	444	110	63	86
Borgarelli, Paolo, Turin, Italy. Drier for cereals, &c	504,320	Sept. 5	11	4	64	1273
Borgfeldt & Co., George. (See Le Brun, Victor, assignor.)						
Borgfeldt, Nicholas H. (See Schutz, Adolph C., assignor.)						
Borgfeldt, Nicholas H., assignor to himself and A. C. Schutz, Brooklyn, N. Y. Apparatus for making cigar-fillers	494,362	Mar. 28	2601	653	62	1904
Borgfeldt, Nicholas H., assignor to himself and A. C. Schutz, Brooklyn, N. Y. Apparatus for making cigar-fillers	494,363	Mar. 28	2602	653	62	1904
Borghese, Carlo, Turin, Italy. Automatic railway-signal	497,530	May 16	1857	468	63	984
Borgmeyer, Charles L., Rahway, N. J. Manufacture of pyroxyline compounds	502,546	Aug. 1	507	64	659	
Borgmeyer, Charles L., Rahway, N. J. Pyroxyline compound	502,547	Aug. 1	508	64	660	
Borgmeyer, Charles L., Rahway, N. J. Manufacture of pyroxyline compounds	502,921	Aug. 8	1157	64	794	
Borgmeyer, Charles L., Rahway, N. J. Pyroxyline solvent and its compounds	503,401	Aug. 15	1938	64	949	
Borgmeyer, Charles L., Rahway, N. J. Pyroxyline solution or compound	503,402	Aug. 15	1938	64	949	
Borgmeyer, Charles L., Rahway, N. J. Pyroxyline solvent and its compound	504,905	Sept. 12	986	64	1471	
Borgmeyer, Charles L., Rahway, N. J., and L. Paget, New York, N. Y. Pyroxyline solvent and its compounds	507,964	Oct. 31	3686	65	743	
Borgmeyer, Joseph. (See Hugelmeyer, Louis W., assignor.)						
Borgström, Gustaf J., Chicago, Ill. Ticket-holder	493,473	Mar. 14	1105	284	62	1589
Boris, Pierre J., Boston, Mass. Street-railway switch	505,077	Sept. 12	1276	{ 328 329 }	{ 64 64 }	1524
Borlinghausen, B. G. (See Borlinghausen, Michael and P., assignors.)						
Borlinghausen, Michael and P., assignors of one-third to B. G. Borlinghausen, Cleveland, Ohio. Safety-lamp for beer-vats	504,702	Sept. 12	644	164	64	1404
Borlinghausen, Peter. (See Borlinghausen, Michael and P.)						
Born, Henry. (See Parkin and Born.)						
Born, Henry, and J. Parkin, Cleveland, Ohio. Smoke arrester and separator	493,749	Mar. 21	1583	403	62	1698
Bornhoeft, Edward, assignor to Strauch Bros., New York, N. Y. Damper-regulator for piano-actions	504,906	Sept. 12	986	253	64	1471
Bornholdt, Adolph, assignor to National Vacuum Drying and Air Distilling Company, Brooklyn, N. Y. Extracting or separating liquids from vegetable substances	489,362	Jan. 3	580	157	62	125
Bornholdt, Adolph, assignor to National Vacuum Drying and Air Distilling Company, Brooklyn, N. Y. Separating the constituents of liquid bodies	489,363	Jan. 3	582	157	62	125
Bornholdt, Adolph, assignor to National Vacuum Drying and Air Distilling Company, Brooklyn, N. Y. Pneumatic press	489,409	Jan. 3	645	175	62	139
Bornholdt, Adolph, assignor to National Vacuum Drying and Air Distilling Company, Brooklyn, N. Y. Drier	506,901	Oct. 17	1873	466	65	320
Borries, August von, Hanover, Germany, assignor to himself, T. W. Worsdell, Stonycroft, England, and R. H. Lapage. Compound engine	511,581	Dec. 26	2987	728	65	2005
Bosart, Timothy L., assignor to Yaryan Fifth Wheel Company, Indianapolis, Ind. Fifth-wheel	503,643	Aug. 22	2342	585	64	1036
Börsum, Ivar J., Lillehammer, Norway. Horse-rake	511,037	Dec. 19	2071	513	65	1821
Borton, Stockton, Providence, R. I., and C. H. Willcox, assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Machine for trimming and sewing fabrics	498,616	May 30	3608	{ 893 894 895 }	{ 53 53 53 }	1326

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Borton, Stockton, Rutherford, N. J., assignor to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Uniting fabrics and mechanism therefor.....	498,617	May 30	3614	895	63	1327
Borwick, Alfred. (See Osborne, Charles F., assignor.)						
Borzell, Harry E. F., and E. E. Bardsley, Philadelphia, Pa. Starting attachment for gaso- line-burners.....	489,284	Jan. 3	466	129	62	102
Bosch, William U., assignor of one-half to B. W. Schuelkens, Jr., Cincinnati, Ohio. Dump- ing-wagon.....	509,350	Nov. 21	2261	547	65	1214
Bosdyk, James C. M. (See Spencer, Charles F., assignor.)						
Bosley, Elijah M., St. Louis, Mo. Furnace for steam-boilers.....	498,778	May 30	3222	801	63	1257
Bosley, Lee W., Gainesville, Tex. Mandrel attachment.....	492,775	Mar. 7	5	2	62	1359
Bosmann, Nicolas, Chicago, Ill. Securing tips to billiard-cues.....	504,663	Sept. 5	557	142	64	1375
Bosmann, Nicolas, Jr., Chicago, Ill. Nut-lock.....	497,531	May 16	1859	469	63	985
Boss-Grip Lock-Nut Company. (See Rouse, Albion M., assignor.)						
Boss, Martin P., San Francisco, Cal. Amalgamating-pan.....	504,859	Sept. 12	909	{ 234 235 }	64	1456
Bosse, Henning von, Lower Penasco, N. Mex. Ter. Plow.....	509,509	Nov. 28	2582	624	65	1287
Bossert, William F., assignor to Utica Electrical Manufacturing and Supply Company, Utica, N. Y. Combination fuse-box.....	489,364	Jan. 3	583	{ 157 158 }	62	125
Bossert, William F., assignor to Utica Electrical Manufacturing and Supply Company, Utica, N. Y. Electric switch.....	493,243	Mar. 14	737	189	62	1521
Bossomaier, Alfred, Launceston, Tasmania. Coin-operated exhibiting apparatus.....	489,285	Jan. 3	467	{ 129 130 }	62	102
Boston Cash Register Company. (See Bailey, Fortune L., assignor.)						
Boston Cash Register Company. (See Foote, Edward N., assignor.)						
Boston Cash Register Company. (See Range and Foote, assignors.)						
Boston Cash Register Company. (See Webster, Jerome J., assignor.)						
Boston Filter Company. (See Way, Frank K., assignor.)						
Boston Footwear Machine Company. (See Day, George W., assignor.)						
Boston, John A. (See Boston, Orren W. and J. A.)						
Boston Lasting Machine Company. (See Crisp, Copeland, and Barrett, assignors.)						
Boston Manufacturing Company. (See Edmunds, John, assignor.)						
Boston, Orren W., David City, Nebr. Chimney-protector.....	490,536	Jan. 24	2181	639	62	545
Boston, Orren W. and J. A., David City, Nebr. Tea-kettle.....	509,865	Dec. 5	23	5	65	1415
Boston Tool Company. (See Smith, Edward A., assignor.)						
Boston Woven Cordage Company. (See McGee, Bernard J., assignor.)						
Bostrom, Earnest A. (See Wotton and Bostrom.)						
Bostwick, Abner R., and J. Duffy, Detroit, Mich. Fog signaling apparatus.....	511,400	Dec. 26	2703	655	65	1951
Bostwick, Joseph M., Janesville, Wis. Cloth or dress-goods sampler.....	504,550	Sept. 5	401	102	64	1344
Boswell, George F. (See Deplanty, Charles, assignor.)						
Boswell, George G. F., Indianapolis, Ind. Thill-support.....	503,644	Aug. 22	2343	585	64	1036
Bosworth, Charles R. (See Smith, Charles T., assignor.)						
Bosworth, George P., assignor to Easton & Burnham, Pawtucket, R. I. Stop-motion for spoolers.....	493,206	Mar. 7	671	171	62	1490
Bothwell, George W. (See Boggs, Joseph O., assignor.)						
Bothwell, Henry R., Cincinnati, Ohio, assignor, by mesne assignments, to Queen Liquid and Filtering Slot Machine Company, Newport, Ky. Coin-controlled liquid-vending ap- paratus.....	497,011	May 9	1004	258	63	817
Bothwell, Jacob I. (See Rowland, Horace B., assignor.)						
Bothwell, William T. (See Boluss, Alfred R., assignor.)						
Bothwell, William T., Jersey City, N. J. Fluid-pressure railway-brake.....	508,364	Nov. 7	627	154	65	874
Bothwell, William T., Jersey City, N. J. Engineer's brake-valve.....	508,365	Nov. 7	630	155	65	875
Botsford, Frederick G. (See Botsford, George N. and F. G.)						
Botsford, George, and W. Holtz, Nineveh, Ind. Roller-bearing.....	494,055	Mar. 21	2081	532	62	1793
Botsford, George N. and F. G., Cleveland, Ohio. Disinfecting device.....	490,957	June 20	2013	488	63	1770
Bottoms, Thomas J., Fayette county, Ga. Combination-cultivator.....	508,912	Nov. 21	1534	374	65	1075
Botts, Winfield J., Webster, Md. Vehicle-brake.....	503,897	Aug. 22	2177	6-2	64	1110
Bouchard, Eli, assignor to Excelsior Horse Shoe Company, Worcester, Mass. Horseshoe.....	490,063	Jan. 17	1702	444	62	379
Bouchard, Joseph, St. Anne, Ill. Washing-machine.....	491,520	Feb. 14	755	192	62	913
Boucher, John, assignor of one-half to D. Bechar, Belle River, Canada. Combined switch and signal device for railway-crossings.....	490,736	Jan. 31	2516	723	62	626
Boucher, Louis, assignor of one-half to A. Patrie, West Superior, Wis. Drag for steering vessels.....	508,371	Nov. 7	484	117	65	847
Boudrie, Jake M., and T. McManus, Rulo, Nebr. Steam-shovel.....	511,110	Dec. 19	2196	539	65	1-46
Bouéry, Pierre, Clermont-Ferrand, France. Pneumatic tire.....	495,777	Apr. 18	2023	511	63	407
Boughton, Claudius V., assignor to Boughton Telephotos Company, Buffalo, N. Y. Signal- telegraph.....	509,290	Nov. 21	2162	{ 519 520 }	65	1196
Boughton Telephotos Company. (See Boughton, Claudius V., assignor.)						
Bougie, Stephen, Marinette, Wis. Spring-support for buggy-tops.....	502,606	Aug. 1	602	143	64	676
Bougie, Stephen, Marinette, Wis. Buggy-top support.....	502,607	Aug. 1	604	143	64	676
Bouker, Franklin, Far Rockaway, N. Y. Dumping-wagon.....	502,698	Aug. 8	768	186	64	722
Boulanger, Emile, St. Louis, Mo. Drum-case.....	501,318	July 11	1242	313	64	240
Boulet, Gaston, Fils, and E. Donard, Rouen, France. Drier.....	496,217	Apr. 25	2687	674	63	546
Boulle, Adolph, Abilene, Tex. Machine-brake.....	494,268	Mar. 28	2446	617	62	1275
Boulter, William A., Brooklyn, assignor to himself, and A. R. Kolb, New York, N. Y. Re- ceptacle for cans of condensed milk.....	489,923	Jan. 17	1452	380	62	370
Bourassa, Pierre E., Montreal, Canada. Clamp.....	491,633	Feb. 14	939	236	62	952
Bourdette, Willis C., Ridgway, Colo. Wrecking-frog.....	491,005	Jan. 31	3254	{ 531 532 }	62	711
Bourdil, François F., Paris, France. Apparatus for atomizing or pulverizing liquids.....	501,178	July 11	1035	262	64	203
Bourke, Isidore M., London, England. Driving mechanism for wheels.....	510,882	Dec. 19	1817	{ 449 450 }	65	1774
Boulter, Alphonse, et al. (See Coon, Frank S., assignor.)						
Bourlier, Emile, et al. (See Coon, Frank S., assignor.)						
Boursier, Ernest, assignor of one-half to A. E. L. Deste, Los Angeles, Cal. Mordant.....	497,229	May 9	1333	.....	63	877
Bouse, William G., Lorain, Ohio. Ice-velocipede.....	504,265	Aug. 29	3328	832	64	1241
Boutelle, George S. (See Long, Horace B., assignor.)						
Boutwell, Theodore, and A. P. Magee, Franklinton, La. Combination harrow and culti- vator.....	511,038	Dec. 19	2073	{ 513 514 }	65	1221
Bouvé, Crawford & Company. (See Packard, James W., assignor.)						
Bouvé, Crawford & Company. (See Packard, James W., assignor.) (Reissue.)						
Bouvé, Crawford & Company Corporation. (See Packard, James W., assignor.)						
Bouvier, Nazaire, Montreal, Canada. Fire-escape.....	495,955	Apr. 25	2290	577	63	471
Bovee, David W., Tama, Iowa. Washing-machine.....	502,608	Aug. 1	605	{ 143 144 }	64	677
Bovet, Armand de, Paris, France. Electric brake for railways.....	508,805	Nov. 14	1316	327	65	1022

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Bowden, Fountain P. (See Kirksey and Bowden.)						
Bowden, Jonathan. (See Walker, John, assignor.)						
Bowden, Louise M., Newark, N. J. Doll-pattern	511,111	Dec. 19	2198	540	65	1847
Bowen, Annette S. and G. S., New York, N. Y. Musical block	491,833	Feb. 14	1243	310	62	1013
Bowen, Azro B., Bethel, Vt. Tire-tightener	495,541	Apr. 18	1641	412	63	341
Bowen, Charles A., assignor to Akron Tool Company, Akron, Ohio. Pivotal axle, &c.	508,499	Nov. 14	853	210	65	932
Bowen, Daniel C., Grand Rapids, Mich. Rail-puller	490,383	Jan. 21	2242	583	62	499
Bowen, David, Butler, Pa. Device for drawing casings from deep wells	505,262	Sept. 19	1557	406	64	1590
Bowen, David F., Denver, Colo. Paper-roll holder and fare-register	510,392	Dec. 5	911	218	65	1524
Bowen, Eugene K., et al. (See Holman, Calvin J., assignor.)						
Bowen, Frank H., Springfield, Mass. Music-writing machine	500,793	July 4	415	109 110	64	77
Bowen, George A., Fond du Lac, Wis. Refrigerator	496,378	Apr. 25	2968	740	63	600
Bowen, George A., assignor of one-half to C. L. Muentner, Fond du Lac, Wis. Ironing-table	496,183	Apr. 25	2627	662	63	535
Bowen, George A., assignor of one-half to C. L. Muentner, Fond du Lac, Wis. Folding table	506,622	Oct. 10	1403	352	65	281
Bowen, George M., Talbott, Tenn. Harrow-tooth socket	511,039	Dec. 19	2075	514	65	1832
Bowen, George W., Fort Wayne, Ind. Combined gage and cane	505,385	Sept. 19	1768	458	64	1628
Bowen, Jesse, Glencoe, Nebr. Journal-box	500,794	July 4	421	111	64	78
Bowen, Goodridge S. (See Bowen, Annette S. and G. S.)						
Bowen, Helum H. (See Keith, Maddison Q., assignor.)						
Bowen, Henry C., New York, N. Y. Apparatus for determining viscosity	494,974	Apr. 4	698	179	63	134
Bowen, Hugh J. (See Conley, Joseph, assignor.)						
Bowen, Jesse, assignor of one-half to F. E. Shue, Lancaster, Ohio. Cider-mill	494,544	Apr. 4	8	2, 3	63	4
Bowen, John J., et al. (See McClure, James P., assignor.)						
Bowen, John W., Jacksonville, Ill. Machine for making chain-links	496,773	May 2	603	162	63	727
Bowen, Philip A., assignor to L. Ahrens, C. E. and L. M. Morehouse, Milwaukee, Wis. Toilet-paper holder	489,787	Jan. 10	1234	323	62	271
Bower, James G., Jr., Norwich, England. Wire-netting machine	500,052	June 20	2165	525 526	63	1796
Bowers, Franklin M., and J. L. Dickelman, Forest, Ohio. Eaves-trough	508,366	Nov. 7	632	155	65	875
Bowers, George W., Pittsburg, Pa. Ear and bail for cooking-vessels	506,302	Oct. 10	871	215	65	178
Bowers, La Mont M., and L. A. Galpin, Binghamton, N. Y. Eaves-trough	506,766	Oct. 17	1651	414	65	339
Bowers, William F., San Francisco, Cal. Guide-support for hose-reels	501,489	July 18	1521	382	64	308
Bowers, William L. (See Michel, McDonough, and Bowers.)						
Bowie, Alexander, Gallup, N. Mex. Ter. Car-transportation carriage	498,739	May 30	3845	948	63	1367
Bowie, Washington, et al. (See Shaffer, Richard M., assignor.)						
Bowie, William S., Boston, Mass. Lounge or couch bed	497,748	May 16	2189	548	63	1045
Bowie, William S., Boston, Mass. Lounge	497,749	May 16	2192	548	63	1045
Bowker, Daniel R., Brooklyn, N. Y. Extracting weevils from grain	505,648	Sept. 26	2257	571	64	1735
Bowker, Daniel R., Brooklyn, N. Y. Grain-storage warehouse	508,561	Nov. 14	955	234 235	65	951
Bowler, James, London, England. Boot-tree	497,164	May 9	1241	315	63	860
Bowler, John A., New York, N. Y. Twisted metallic band	494,975	Apr. 4	700	179	63	134
Bowles, John, Washington, D. C. Combined saw and planer	505,154	Sept. 19	1396	358	64	1559
Bowles, John, Washington, D. C., assignor of one-half to C. S. Mitchell, New York, N. Y. Combined saw and planer	503,522	Aug. 15	2120	532	64	981
Bowles, John L., assignor of one-half to C. E. Baird, Philadelphia, Pa. Pug-mill	499,413	June 13	1136	272	63	1603
Bowles, Stewart B., Pittsburg, Pa. Washing-machine	497,701	May 16	2124	530	63	1032
Bowles, Thomas, Janesville, Wis. Stock-car	507,524	Oct. 31	2951	723 724	65	606
Bowles, William R., et al. (See Sanguinetti, Percy A., assignor.)						
Bowley, James D., Woodlawn, Ala. Lock	491,868	Feb. 14	1303	322	62	1024
Bowley, Joseph H., assignor of one-half to J. M. Stockwell, Marengo, Ill. Rotatable egg-case	496,184	Apr. 25	2628	662	63	535
Bowley, Joseph H., assignor of one-half to J. W. Stockwell, Marengo, Ill. Egg-shipping case	499,708	June 20	1599	386	63	1698
Bowley, Joseph H., assignor of one-half to J. W. Stockwell, Marengo, Ill. Apparatus for rotating egg-containing cases	508,806	Nov. 14	1318	328	65	1022
Bowley, Joseph H., assignor of one-half to J. W. Stockwell, Marengo, Ill. Egg-case	509,838	Nov. 28	3103	750	65	1386
Bowley, Joseph H., assignor of one-half to J. W. Stockwell, Marengo, Ill. Shipping-case	509,839	Nov. 28	3104	750	65	1386
Bowley, Joseph W., London, England. Ice-cream freezer	493,966	July 21	1042	495	62	1766
Bowley, William H. K., London, England. Flexible metallic tubing	500,847	July 4	498	129	64	91
Bowley, William H. K., London, England. Flexible metallic tubing	507,877	Oct. 31	3547	873	65	717
Bowling, Mary A., Scandia, Kans. Clothes-drier	496,185	Apr. 25	2629	662	63	535
Bowman, Abraham F., C. H. Ohmart, and A. A. Allen, Dayton, Ohio. Tobacco-hiller	494,621	Apr. 4	154	36	63	32
Bowman, Charles, Fort Wayne, Ind. Sawmill feed mechanism	502,245	July 25	2748	694	64	547
Bowman, Charles, Fort Wayne, Ind. Shaper-head	510,887	Dec. 19	1824	451	65	1776
Bowman, Charles, Hanover, Pa. Machine for stripping and booking leaf-tobacco	504,799	Sept. 12	806	205	64	1434
Bowman, Charles M., Lebanon, Pa. Match	491,204	Feb. 7	234	59	62	792
Bowman, Charles M., Lebanon, Pa. Method of and device for making matches	491,205	Feb. 7	234	59	62	792
Bowman, Charles M., Lebanon, Pa. Making matches	499,776	June 20	1724	415 416	63	1719
Bowman, Charles M., Lebanon, Pa. Machine for making matches	499,777	June 20	1726	416 417	63	1719
Bowman, Charles R., San Angelo, Tex. Windmill	493,060	Mar. 7	447	113	62	1447
Bowman, Charles R., and W. Rice, Tylersburg; said Rice assignor to A. S. Karns, Franklin, Pa. Mail-marking machine	504,664	Sept. 5	558	112 113	64	1375
Bowman, Ezra F. (See Bock, Martin, assignor.)						
Bowman, Frederick E., South Bend, Ind. Strainer-cover for sprinkling-tanks	493,965	Mar. 21	1941	494	62	1766
Bowman, Oliver S., Salt Lake City, Utah Ter. Bed-and-platen printing-machine	501,319	July 11	1243	313	64	240
Bowman, Oliver S., Salt Lake City, Utah Ter. Type-distributing machine	501,597	July 18	1688	421 422	64	340
Bowman, Robert D., London, England. Apparatus for making oxygen	505,809	Oct. 3	8	2, 3	65	4
Bowman, Renben, Middletown, Pa. Screw-cutting implement	499,092	June 6	596	143	63	1494
Bowman, Stase, Bloomington, Pa. Boring-tool	505,746	Sept. 26	2415	610	64	1762
Bowman, W. M., et al. (See Graves, Cashious M., assignor.)						
Bown, William, and J. H. Hughes, Birmingham, England. Bicycle-lamp	495,661	Apr. 18	1837	459 460	63	374
Bowry, Walter C., Charters Towers, Queensland. Paper-clamp	507,478	Oct. 24	2853	700	65	575
Bowser, David J., Cadillac, Mich. Planter	492,383	Feb. 28	2103	524	62	1214
Bowser, David J., Lucas, Mich. Corn-planter	504,321	Sept. 5	13	4, 5	64	1273
Bowser, Lycurgus. (See Blakeley and Bowser.)						
Bowser, Michael W. (See Smawley, Sassaman, and Bowser.)						
Bowser, Michael W., W. H. Smawley, and P. Mullin, South English, Iowa. Horse-power	494,545	Apr. 4	13	3	63	5

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Bowser, William B. (See Neal, Lewis F., assignor.)						
Bowsman, Noah, Portland, Ind. Fence.....	505,434	Sept. 26	1853	477	64	1658
Boyce, Arthur, St. Louis, Mo. Steam-boiler or hot-water heater.....	497,625	May 16	2002	500	63	1010
Boyce, Darwin C., Quinnimont, W. Va. Mining coal.....	494,187	Mar. 23	2315	586	62	1252
Boyce, Darwin C., Quinnimont, W. Va. Car-loading apparatus.....	503,364	Aug. 15	1889	468 469	64	939
Boyce, Lawrence D., Bush River, and J. C. Thompson, Baltimore, Md. Ribbon attachment for type-writing machines.....	506,581	Oct. 10	1345	338	65	270
Boyd, Alexander, Whitewright, Tex. Gate.....	490,737	Jan. 31	2819	724	62	636
Boyd, Arthur, Middlesbrough, England. Rotary engine.....	493,618	May 30	3617	896	63	1323
Boyd, Benjamin Y., Wichita, Kans. Electrical instrument for medical purposes.....	494,520	Mar. 28	2849	713	62	1949
Boyd, Edward. (See Munro, Colin, assignor.)						
Boyd, George W., assignor of one-half to F. and P. H. Buchanan, San Francisco, Cal. Lubricator.....	507,409	Oct. 24	2749	675	65	555
Boyd, Horace B., Cambridge City, assignor of one-half to L. A. Boyd, Indianapolis, Ind. Pneumatic tire.....	500,468	June 27	2847	701	63	1929
Boyd, James M., Jr., et al. (See Brewer, Andrew T., assignor.)						
Boyd, John, Elmhurst, Ill. Cheese-making.....	494,777	Apr. 4	398		63	78
Boyd, John and T. A., Glasgow, Scotland. Stop-motion for twisting, doubling, winding, or analogous machines.....	492,603	Feb. 28	2466	613	62	1239
Boyd, Lawson A. (See Boyd, Horace B., assignor.)						
Boyd, Lindley, Longwood, Mo. Trace attachment.....	507,645	Oct. 31	3180	778	65	648
Boyd, Nathaniel W., Carlisle, Pa. Railway-frog.....	505,022	Sept. 12	1172	301	64	1506
Boyd, Nathaniel W., Carlisle, Pa. Railway-frog.....	505,023	Sept. 12	1175	301	64	1506
Boyd, Randolph, Galva, Ill. Corn-planter.....	499,958	June 20	2014	489	63	1770
Boyd, Samuel M. (See Wray, David A., assignor.)						
Boyd, Sarah A., executrix. (See Kneidler, Solomon A. and O., assignors.)						
Boyd, Thomas A. (See Boyd, John and T. A.)						
Boyer, Charles E., St. Louis, Mo. Hat-holder.....	505,696	Sept. 26	2342	593	64	1750
Boyer, Charles H. (See Sweeney, Peter, assignor.)						
Boyer, Israel D., assignor to himself and W. E. Haas, Dayton, Ohio. Revolving fan.....	491,006	Jan. 31	3256	832	62	711
Boyer, James F., Blair, Nebr. Violin-support.....	492,284	Mar. 7	179	43	62	1394
Boyer, John M., assignor to T. J. Holton, Philadelphia, and J. Shoemaker, Norristown, Pa. Take-up for knitting machines.....	506,000	Oct. 3	310	80, 81	65	60
Boyer, Josiah E., and H. Dixon, assignors to National Candy Mold Company, Dayton, Ohio. Autographic register.....	493,207	Mar. 7	672	172	62	1490
Boylan, Frederick E., Cyclone, Pa. Elevator for sucker-rods.....	502,169	July 25	2615	659	64	522
Boyle, David A., Hutchinson, Kans. Device for securing pickets to wire.....	496,508	May 2	184	51	63	652
Boyle, Frank, P., J. H. Dundon, and J. E. Boyle, Youngstown, Ohio. Fare-register.....	491,007	Jan. 31	3258	832	62	711
Boyle, James E., deceased, James E. Boyle, Jr., administrator, Brooklyn, assignor to Henry Huber Company, New York, N. Y. Flushing apparatus for water-closets. (Reissue).....	11,351	July 18	2194	546	64	427
Boyle, John E. (See Boyle, Dundon, and Boyle.)						
Boyle, John J. (See Ruck and Barnes, assignors.)						
Boyle, Thaddeus W., Harriman, Tenn. Plow.....	500,750	July 4	347	92	64	91
Boyer, George S., and F. Rothwell, Havelock, Canada. Air-pump attachment for stoves or furnaces.....	493,967	Mar. 21	1944	495	62	1766
Boyne, John J., and W. Caldwell, Buffalo, N. Y. Valve.....	510,883	Dec. 19	1819	450	65	1775
Boynton, Eben M., West Newbury, Mass. Electric locomotive.....	496,550	May 2	250	66, 67	63	664
Boynton, Edward S., assignor to E. T. Wilkinson, Brooklyn, N. Y. Toy kite.....	498,379	May 30	3223	801	63	1257
Boynton, Edward S., Brooklyn, N. Y., assignor, by mesne assignments, to American Butter Machine Company. Butter worker and mold.....	502,428	Aug. 1	300	72	64	621
Boynton, Frank E. (See Matteson, Job, assignor.)						
Boynton Furnace Company. (See Boynton, Nathaniel A., assignor.)						
Boynton, John W., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Tail-stock for milling machines.....	491,521	Feb. 14	756	192	62	914
Boynton, John W., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Speed-regulating device for lathes.....	495,296	Apr. 11	1252	312	63	250
Boynton, Nathaniel A., assignor to Boynton Furnace Company, New York, N. Y. Sectional steam-boiler.....	491,979	Feb. 21	1473	367	62	1073
Boysen, Hans, Elsalund, and O. N. Sørensen, Kolding, Denmark. Car-starter.....	497,488	May 16	1789	450	63	971
Bozell, John E., Elwood, Ind. Latch.....	505,386	Sept. 19	1769	458	64	1629
Braastad, John G., New York, N. Y. Pantograph.....	503,934	Aug. 22	2771	695	64	1121
Brabaw, Micheal, Detroit, Mich. Wrecking apparatus.....	501,912	July 25	2212	551 552	64	446
Brabston, John R., New Bell, Miss. Wire stretcher and holder.....	511,112	Dec. 19	2199	540	65	1847
Brace, Harvey J., Rogers, Ark. Running-gear for wagons.....	502,609	Aug. 1	605	141	64	677
Bracewell, John, North Adams, Mass. Printing aniline-black.....	500,558	July 4	34		64	8
Bracewell, John, North Adams, Mass. Fixing colors upon cottons, &c.....	505,088	Sept. 19	1297		64	1542
Brachhausen, Gustav A., Jersey City, N. J. Damping device for music-boxes.....	500,369	June 27	2707	664	63	1903
Brachhausen, Gustav A., Jersey City, N. J. Damping device for music-boxes.....	500,370	June 27	2708	665	63	1903
Brachhausen, Gustav A., Hoboken, N. J., and P. Riessner, Eutritzsch, near Leipsic, Germany. Music-box.....	500,371	June 27	2709	665	63	1904
Brachhausen, Gustav A., Hoboken, N. J., and P. Riessner, Eutritzsch, near Leipsic, Germany. Governor.....	500,372	June 27	2710	665	63	1904
Brachhausen, Gustav A., Hoboken, N. J., and P. Riessner, Eutritzsch, near Leipsic, Germany. Machine for making note-plates for music-boxes.....	500,373	June 27	2711	665 666	63	1904
Brachhausen, Gustav A., Hoboken, N. J., and P. Riessner, Eutritzsch, near Leipsic, Germany. Note-plate for music-boxes.....	500,374	June 27	2714	667	63	1905
Brachhausen, Gustav A., Hoboken, N. J., and P. Riessner, Eutritzsch, near Leipsic, Germany. Coin-controlled mechanism for music-boxes.....	509,358	Nov. 28	2285	554 555	65	1230
Brack, Jacob, assignor to Société L. Durand, Huguenin & Co., Basle, Switzerland. Blue-dye.....	497,114	May 9	1160		63	846
Bradberry, Thomas J., Sharpsburg, Pa. Retaining-bar for molding-flasks.....	505,155	Sept. 19	1399	359	64	1500
Bradbury, Samuel H., Waukegan, Ill. Cabinet for printers' rollers.....	497,855	May 23	2364	592	63	1091
Bradbury, William F., Kansas City, Kans. Tube-cleaner.....	507,965	Oct. 31	3667	916	65	743
Braddock, Warren L., Boston, Mass. Buckle.....	508,675	Nov. 14	1130	279	65	986
Braddock, Warren L., Boston, Mass. Furnace.....	511,194	Dec. 19	2335	571	65	1871
Bradlen, John S., Chariton, Iowa. Washing-machine.....	511,040	Dec. 19	2076	514	65	1822
Bradfield, Joseph P. (See Stewart, Joseph B., assignor.)						
Bradford, Albert, Morden, Canada. Windmill.....	509,866	Dec. 5	24	5	65	1415
Bradford, Alden, Fall River, Mass. Rod-packing.....	501,913	July 25	2214	552	64	447
Bradford, Charles K., Lynnfield, Mass. Sharpener for knives, &c.....	501,267	July 11	1167	296	64	227
Bradford, Eli B., Munster, Ill. Horse-shoeing-stock.....	503,565	S-pt. 26	2108	535	61	1707
Bradford, Ernest W. (See Harris, William T., assignor.)						
Bradford, Ernest W. (See Kimber, Abraham, assignor.)						
Bradford, Ernest W., Indianapolis, Ind. Mail-pouch deliverer.....	496,551	May 2	252	67	63	665

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Bradford, Eugene S., St. Louis, Mo. Attachment-holder device for fence-posts, poles, &c.	507,966	Oct. 31	3688	916	65	743
Bradford, Hezekiah, deceased, Philadelphia, Pa.; S. I. Willingale and R. W. Finletter, administrators. Separator for coal, &c.	501,673	July 18	1818	453	64	362
Bradford, Hezekiah, assignor to S. E. Griscom, Philadelphia, Pa. Ore-separating machine.	504,665	Sept. 5	561	{ 143 144 }	{ 64	1376
Bradford, Hezekiah, assignor to S. E. Griscom, Philadelphia, Pa. Separating or concentrating ores.	504,666	Sept. 5	567	144	64	1376
Bradford, Jefferson, and J. P. Williams, Boston Station, Ky. Electric railway-signal.	493,678	Mar. 21	1457	372	62	1674
Bradford, McDuffee, Decatur, Tex. Weather-strip.	500,559	July 4	36	11	64	8
Bradford, Nelson E., Pittsburg, Pa. Vehicle-brake.	498,841	June 6	161	39	63	1420
Bradford, Nelson E., Allegheny, Pa. Nut-lock for vehicle-axes.	500,095	June 20	2225	542	63	1807
Bradford, Winslow P., Haverhill, Mass. Sole-slotting machine.	492,185	Feb. 21	1791	447	62	1133
Bradford, Winslow P., Haverhill, Mass. Shoe.	492,186	Feb. 21	1793	447	62	1138
Bradley, Andrew J., St. Louis, Mo. Stencil-machine.	494,546	Apr. 4	15	3.4	63	5
Bradley, Charles S., Avon, N. Y. Electrical transmission of power.	491,465	Feb. 7	667	{ 167 168 }	{ 62	876
Bradley, Charles S., Avon, N. Y. Transformer and means for developing rotary magnetic fields.	492,420	Feb. 28	2256	563	62	1245
Bradley, Charles S., Avon, N. Y. Dynamo-electric machine or motor.	503,574	Aug. 22	2218	555	64	1015
Bradley, Charles S., Yonkers, N. Y. Converter system for electric railways.	508,807	Nov. 14	1319	328	65	1022
Bradley, Christopher C. (See Brown, Charles M., assignor.)						
Bradley, Christopher C., et al. (See Bunnell, Francis A., assignor.)						
Bradley, Christopher C., Syracuse, N. Y. Power-hammer.	497,012	May 9	1008	258	63	818
Bradley, Christopher C., Syracuse, N. Y. Reach-coupling for vehicles.	498,421	May 30	3279	{ 817 818 }	{ 63	1269
Bradley, Christopher C., Syracuse, N. Y. Reach-coupling for vehicles.	499,959	June 20	2015	489	63	1770
Bradley, Christopher C., Syracuse, N. Y. Spring-vehicle.	502,027	July 25	2386	{ 599 600 }	{ 64	478
Bradley, Christopher C., Syracuse, N. Y. Road-cart.	502,028	July 25	2387	600	64	478
Bradley, Christopher C., Syracuse, N. Y. Two-seated vehicle.	503,308	Aug. 15	1787	441	64	921
Bradley, Ebenezer. (See McRanolds, John A., assignor.)						
Bradley, Ebenezer. (See Monahan, John J., assignor.)						
Bradley, Edson, and E. N. Dickerson, Jr., New York, N. Y. Making alcoholic distilled liquor.	504,074	Aug. 29	3007		64	1180
Bradley, Edward E., assignor to J. E. and E. Atwood, Stonington, Conn. Self-balancing spindle for spinning.	504,860	Sept. 12	912	235	64	1456
Bradley, Edward E., assignor to J. E. and E. Atwood, Stonington, Conn. Spinning and twisting machine.	504,861	Sept. 12	913	{ 235 236 }	{ 64	1456
Bradley, Frank S., and J. P. Lavigne, New Haven, Conn. Staple-stitching machine.	496,634	May 2	382	{ 103 104 }	{ 63	689
Bradley, George T. and M. H., New Haven, Conn. Puzzle.	492,605	Feb. 28	2469	614	62	1290
Bradley, George T. and M. H., New Haven, Conn. Puzzle.	500,795	July 4	422	111	64	78
Bradley, Harry, Jr., Buffalo, N. Y. Cap for sewer and other pipes.	510,884	Dec. 19	1821	450	65	1775
Bradley, Harry, Jr., and J. V. Adams, Buffalo, N. Y. Ventilating-cap for sewer-pipes.	499,904	June 20	1942	471	63	1757
Bradley, Henry C. (See Hill, Lyman L., assignor.)						
Bradley, Henry L., New Haven, Conn. Brace.	494,622	Apr. 4	155	37	63	32
Bradley, Howard C. (See Brintnall and Bradley.)						
Bradley, Howard C., et al. (See Brintnall, Thomas M., assignor.)						
Bradley & Hubbard Manufacturing Company. (See Jauch, Joseph, assignor.)						
Bradley & Hubbard Manufacturing Company. (See Penfield, William A., assignor.)						
Bradley, Jay L., St. Louis, Mo. Thermal circuit-closer and indicator.	498,153	May 23	2824	707	63	1173
Bradley, Jay L., St. Louis, Mo. Electric indicator.	504,196	Aug. 29	3221	802	64	1221
Bradley, Jay L., assignor of two-thirds to F. Meyrose and C. Cherbonnier, St. Louis, Mo. Whip-socket.	490,861	Jan. 31	3005	771	62	664
Bradley, Milton, Springfield, Mass. Color-disk rotating mechanism.	492,604	Feb. 28	2468	613	62	1290
Bradley, Milton H. (See Bradley, George T. and M. H.)						
Bradley, Stephen R., Nyack, assignor to Fiber Conduit Company, New York, N. Y. Indurating and waterproofing articles.	506,623	Oct. 10	1404		65	282
Bradley, Thomas. (See Aitchison and Bradley.)						
Bradley, William E., Middletown, N. Y. Fire-escape.	494,407	Mar. 28	2673	{ 670 671 }	{ 62	1917
Bradley, William E., Frankfort, Ky. Making whisky.	495,956	Apr. 25	2291		63	472
Bradley, William E., Frankfort, Ky. Whisky-making.	499,316	June 13	939		63	1568
Bradley, William F., Owosso, Mich. Car-truck.	492,776	Mar. 7	7	2	62	1360
Bradley, William W., assignor to Keystone Watch Case Company, Philadelphia, Pa. Article of jewelry or plate.	502,026	July 25	2385	599	64	478
Bradnack, John H., New Haven, Conn. Combined measure and funnel.	507,479	Oct. 24	2854	700	65	575
Bradrick, Charles H. (See Karr and Bradrick.)						
Bradsby, William B. (See Pyle, Charles and J., assignors.)						
Bradt, Charles E., et al. (See Reynolds, Samuel D., assignor.)						
Bradt, S. E., et al. (See Reynolds, Samuel D., assignor.)						
Bradt, William H. (See Clemishaw and Bradt.)						
Brady, Charles G., assignor to Western Electric Company, Chicago, Ill. Spring-jack cleaner.	509,867	Dec. 5	25	5	65	1415
Brady, James. (See Russel and Brady.)						
Brady, James, Brooklyn, N. Y. Numbering and perforating machine.	499,281	June 13	884	{ 214 215 }	{ 63	1558
Brady, James H., W. A. Whitehead, and S. J. Shea, Frankfort, Ky. Music-chart.	506,971	Oct. 17	1982	491	65	401
Brady, Joseph H., Kansas City, Mo. Heating, cooling, and ventilating system.	504,961	Sept. 12	1070	{ 273 274 }	{ 64	1486
Brady, Thomas H., New Britain, Conn. Insulator.	497,515	May 16	1835	463	63	960
Braendly, Jean J. (See Jonas and Braendly.)						
Bragg, Edward F. (See Cowen and Bragg.)						
Bragg, Edward F., Cambridge, assignor to Automatic Rubber Mixer Company, Boston, Mass. Roll for india-rubber mixing and calendaring machines.	508,272	Nov. 7	485	117	65	847
Bragg, Everett B., assignor to Grasselli Chemical Company, Cleveland, Ohio. Tank for conveying acids.	511,674	Dec. 26	3135	766	65	2031
Bragg, Henry, Cleveland, Ohio. Petroleum-fluid burner.	505,417	Sept. 19	1821	469	64	1639
Braham, Harry C. (See Steel, Walter J., assignor.)						
Brain, Carl T. B., Liverpool, England. Electric-railway system.	508,083	Nov. 7	167	47.48	65	789
Brainard, Adelbert M., assignor to T. Kane, trustee, Chicago, Ill. Folding bed.	507,103	Oct. 24	2210	546	65	455
Brainard, Adelbert M., assignor to T. Kane, trustee, Chicago, Ill. Folding bed.	507,104	Oct. 24	2211	546	65	455
Brainerd, Austin, et al. (See Stevens, John C., assignor.)						
Brainerd, Sidney W., Cedar Rapids, L. C. and T. E. Mann, Gladbrook, Iowa; said Brainerd assignor to said L. C. and T. E. Mann. Bed and cylinder printing-machine.	498,530	May 30	3465	{ 858 859 }	{ 63	1301

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Braithwaite, Charles H., Ardmore, Pa. Lawn-mower.....	504,411	Sept. 5	162	43	64	1300
Brake, Archibald, Toronto, Canada. Brake-shoe.....	499,509	June 13	1301	305	63	1632
Braley, Charles L., and J. C. Stewart, Buffalo, N. Y. Ironing-machine.....	491,634	Feb. 14	940	236	62	952
Braley, Samuel T., assignor to Howe Scale Company of 1886, Rutland, Vt. Scale-beam.....	509,591	Nov. 28	2705	654	65	1311
Braley, Samuel T., assignor to Howe Scale Company of 1886, Rutland, Vt. Platform-scale.....	509,592	Nov. 28	2706	{ 654 655 }	{ 65 65 }	1311
Braley, Thurman, Langsville, Ohio. Railway-switch.....	495,911	Apr. 11	756	192	63	160
Bramble, Martin S., Binghamton, N. Y. Flushing device for water-closets.....	496,394	May 2	11	3	63	621
Brame, Robert, Allegheny, assignor to E. A. Weart, Pittsburg, Pa. Gas-pressure regulator.....	494,699	Apr. 4	269	68	63	54
Brameld, William, Paterson, N. J. Pneumatic boiler compound-feeder.....	497,298	May 16	1485	374	63	918
Bramlette, William A., and W. H. Evans, Bonham, Tex. Copy-holder.....	508,863	Nov. 14	1417	{ 351 352 }	{ 65 65 }	1040
Bramlitt, Thomas W. (See Tornwall, Perry A., assignor.)						
Brammer, James K., Crosstown, Ohio. Book-rest.....	510,323	Dec. 5	797	192	65	1561
Branwell, Joseph W., Camden, N. J. T-square.....	502,112	July 25	2521	632	64	504
Brand, Sebastian. (See Van Evera and Brand.)						
Brand Stove Company. (See Van Evera and Brand, assignors.)						
Brandau, George F., assignor of one-fourth to J. Wallace, Cohoes, N. Y. Brake for rail-way-cars.....	505,435	Sept. 26	1853	477	64	1658
Branden, Jeffries R., Chicago, Ill. Valve.....	508,464	Nov. 14	792	196	65	919
Brandenburg, Albert F., Dayton, Ohio. Door-indicator.....	500,316	June 27	2625	642	63	1889
Brandenburg, Albert F., assignor to G. C. Kennedy, Dayton, Ohio. Storm-apron for carriages.....	506,152	Oct. 3	558	145	65	108
Brandenburg, Clyde K., Bly, Oreg. Vehicle-brake.....	507,480	Oct. 24	2855	701	65	575
Brandon, James A., Akron, Ohio. Mitering-machine.....	505,024	Sept. 12	1177	{ 301 302 }	{ 64 64 }	1506
Brandstaedter, William, Hanover, Pa. Box-covering machine.....	504,551	Sept. 5	401	102	64	1344
Brandt, Adolph. (See Powell, Winslow W., assignor.)						
Brandt, August C., Fort Wayne, Ind. Washing-machine.....	491,073	Feb. 7	18	5	62	752
Brandt, Carl, Cedar Falls, Iowa. Oil heating-stove.....	500,751	July 4	348	92	64	65
Brandt, Christopher C. F., Muscatine, Iowa. Clothes-drier.....	490,943	Jan. 31	3154	808	62	692
Brangit, Julius M., New York, N. Y. Shoe-fastening.....	499,201	June 13	769	183	63	1538
Braun, Fred W., Oakland, Cal. Conduit electric railway.....	492,265	Feb. 21	1917	479	62	1164
Brannagan, John J., Martin's Ferry, Ohio. Forming articles of glassware.....	502,344	Aug. 1	160	37	64	595
Brannagan, John J., Martin's Ferry, Ohio. Manufacture of glassware.....	504,552	Sept. 5	404	103	64	1345
Brannan, Patrick F. (See Powell, Charles L., assignor.)						
Branson, David R., D. Thornburgh, and J. E. Starr, St. Louis, Mo. Underground distribution and recovery of anhydrous ammonia.....	489,729	Jan. 10	1139	{ 294 295 }	{ 62 62 }	251
Branson, Edwin R., Philadelphia, Pa. Circular-knitting machine.....	493,575	Mar. 14	1229	329	62	1625
Branson, Edwin R., Philadelphia, Pa. Stocking and knitting same.....	495,660	Apr. 18	1236	459	63	374
Branson, Joseph H., Belmont, N. Y., assignor to Sandwich Enterprise Company, Sandwich, Ill. Pump.....	503,523	Aug. 15	2122	532	64	982
Branson Machine Company. (See Cook, Stephen S., assignor.)						
Brant, Clark T., Chariton, Iowa. Screw-cap.....	495,195	Apr. 11	1090	271	63	220
Brant, Clark T., Chariton, Iowa. Removable thumb-piece for jars or cans.....	495,196	Apr. 11	1091	271	63	221
Branth, Johan F. S., assignor of two-thirds to E. H. Johnson, New York, N. Y. Electric locomotive.....	506,358	Oct. 10	970	241	65	196
Brantingham, Allen C., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Feeder for mills.....	491,198	Mar. 28	2316	587	62	1852
Branton, Samuel L., Omaha, Nebr. Link-movement for locomotives.....	510,885	Dec. 19	1832	450	65	1775
Brash, John C., Loami, Ill. Band-cutter and feeder.....	491,522	Feb. 11	757	193	62	914
Brashear, Fred L., assignor of two-thirds to H. H. Martin and R. McCalmont, Franklin, Pa. Druggist's and chemist's mortar.....	507,410	Oct. 24	2750	675	65	555
Brashears, Shipley. (See Wilkerson, Basil M., assignor.)						
Brass, Robert, Brooklyn, assignor to L. W. Levy and E. Dreyfus, New York, N. Y. Opera-glass holder.....	490,264	Jan. 24	2046	536	62	459
Bratt, Charles E., Stockholm, Sweden. Cylindrical cask.....	503,575	Aug. 22	2219	555	64	1015
Bratton, Cap. (See Kemp, Amos J., assignor.)						
Brauch, Frederick J., St. Louis, Mo. Putty-knife.....	508,273	Nov. 7	486	117	65	848
Brauer, John, assignor to Francis Fritsch Manufacturing Company, Cincinnati, Ohio. Mash-machine.....	495,297	Apr. 11	1254	{ 312 313 }	{ 63 63 }	250
Braun, Charles A., assignor to Envelope and Stamp Machine Company, Chicago, Ill. Automatic vending-machine.....	495,241	Apr. 11	1162	{ 291 292 }	{ 63 63 }	233
Braun, John. (See Higbee, Braun, and Deck.)						
Braun, John, et al. (See Deck, Henry, assignor.)						
Braun, John F., et al. (See Deck, Henry, assignor.)						
Braun, John F., assignor to J. Braun & Sons, Philadelphia, Pa. Grass-box for lawn-mowers.....	493,612	Mar. 14	1355	344	62	1638
Braun & Sons, John. (See Braun, John F., assignor.)						
Braun & Sons, John. (See Higbee, Braun, and Deck, assignors.)						
Braun, William P. M., et al. (See Deck, Henry, assignor.)						
Braunwarth, Charles C., Muscatine, Iowa. Rubber boot.....	495,450	Apr. 11	1490	375	63	293
Brausil, Franz A., assignor of one-half to M. Theumann, Vienna, Austria-Hungary. Machine for decorating wooden lists and pressed veneers.....	510,377	Dec. 5	878	211	65	1577
Brawley, Dan B. (See Holliday and Brawley, assignors.)						
Brawley, David A. (See Holliday and Brawley.)						
Bray, Eliza J., Fair Forest, S. C. Incubator.....	508,808	Nov. 14	1322	328	65	1022
Bray, Isabella, New York, N. Y., assignor to American Dress Stay Company. Dress-stay.....	494,242	Mar. 28	2406	607	62	1868
Bray, Mellen. (See Bertrand, Joseph E., assignor.)						
Bray, Sanford, Somerville, Mass. Glass-cutter.....	506,466	Oct. 10	1109	290	65	236
Brayton, Richard, assignor to Michigan Fire Ladder and Engine Company, Grand Rapids, Mich. Adjustable fireman's ladder.....	501,403	July 11	1401	351	64	268
Brazee, Melchior, Chicago, Ill. Vending-wagon.....	498,231	May 30	2967	740	63	1211
Brazee, Joseph E., Denver, Colo. Wire stringer and stretcher.....	511,232	Dec. 19	2394	583	65	1883
Brazello, Benjamin, St. Louis, Mo., assignor to F. Flanner, Indianapolis, Ind. Apparatus for burning fluid fuel.....	510,153	Dec. 5	526	121	65	1509
Brazier, Daniel, Detroit, Mich., assignor of one-half to W. H. Carson. Stove fire-pot and stoker.....	491,333	Feb. 7	451	116	62	834
Brazier, James D., assignor of one-half to J. C. Hanley, Vicksburg, Miss. Dam or levee.....	496,292	Apr. 25	2800	701	63	568
Brazilian Manufacturing Company. (See Davis, John T., assignor.)						
Brede, Alexander. (See Friedrichs and Brede.)						
Bredenberg, Alfred. (See Lovell and Bredenberg.)						
Bredenberg, Alfred, assignor of two-thirds to C. W. Lovell, Brooklyn, and J. W. Lovell, New York, N. Y. Book-cover machine.....	490,895	Jan. 31	3067	{ 787 788 789 }	{ 62 62 62 }	676
Breed, Burritt B., Cincinnati, Ohio. Carriage-top crate.....	491,869	Feb. 14	1304	322	62	1024

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Breed, Edwin S., Waterbury, Conn. Emergency-wagon for electric-line work.....	510,113	Dec. 5	460	103	65	1496
Breene, William V. (See Stevens and Breene.)						
Breinig, Granville M., New Milford, Conn. Production of artificial stone.....	505,747	Sept. 26	2416		64	1762
Breinl, Anton R., Graslitz, Austria-Hungary. Musical instrument.....	511,500	Dec. 26	2-62	692	65	1981
Breitenbach, John, St. Louis, Mo. Bread-knife.....	499,650	June 13	1511	362	63	1668
Breitenstein, Henry, Laramie, Wyo. Steam-actuated valve for engines.....	509,291	Nov. 21	2165	521	65	1196
Bremer, Isidor, Brooklyn, N. Y. Padlock.....	490,537	Jan. 24	2482	610	62	546
Brenack, Richard G., Brooklyn, N. Y. Wrapper for bottles or other articles.....	494,364	Mar. 28	2603	654	62	1905
Brenk, Joseph J., assignor of one-half to H. G. Underwood, Milwaukee, Wis. Match-safe.....	506,303	Oct. 10	872	215	65	178
Brennan & Co. Southwestern Agricultural Works. (See Christman and Munn, assignors.)						
Brennan, Helen E. (See Brennan, Mary F. and H. E.)						
Brennan, John P., Akron, Ohio. Bookbinding.....	493,396	Mar. 14	982	253	62	1567
Brennan, Mary F. and H. E., Brooklyn, N. Y. Article made from shells.....	509,359	Nov. 28	2257	555	65	1231
Brenneisen, John E., Unionville, Md. Butter-mold.....	496,635	May 2	388	105	63	690
Brenner, David H., Grand Rapids, Mich. Folding bed.....	492,707	Feb. 28	2625	650	62	1321
Brenner, David H., Grand Rapids, Mich. Miter-cutting machine.....	499,202	June 13	770	183	63	1539
Brenner, David H., Grand Rapids, Mich. Machine for cutting concavo-convex wooden dishes.....	501,404	July 11	1402	351	64	269
Brenner, David H., assignor of one-half to D. W. Kendall, Grand Rapids, Mich. Folding bed.....	492,706	Feb. 28	2623	{ 649 650 }	{ 62 62 }	{ 1320 1320 }
Brenner, Peter. (See Tilger and Brenner.)						
Brenner, Reinhold, Waterbury, Conn. Wick-raising device for central-draft lamps.....	510,378	Dec. 5	879	211	65	1577
Brenner, Reinhold, Waterbury, Conn. Wick-raising device for central-draft lamps.....	510,379	Dec. 5	881	212	65	1577
Brenner, William H. Sr., Port Carbon, Pa. Suction-valve.....	493,968	Mar. 21	1946	496	62	1767
Breslin, Micheal J., Albany, N. Y. Metallic shelving.....	510,562	Dec. 12	1219	296	65	1653
Breslin, William W. (See Smith, Thomas S., assignor.)						
Bresnahan, Maurice V. (See Heys, John J., assignor.)						
Bresnahan, Maurice V., and J. J. Heys, Lynn, Mass. Sole-leveling machine.....	498,619	May 30	3621	{ 896 897 }	{ 63 63 }	{ 1328 1328 }
Bressler, John T., Shepherdsdown, Pa. Attachment for wheel-hubs.....	493,474	Mar. 14	1107	285	62	1590
Bretherton, Sidney E. (See Engelbach and Bretherton.)						
Bretz, Solomon H., Battle Creek, Mich. Square.....	509,292	Nov. 21	2167	521	65	1197
Breuer, August, Iserlohn, Germany. Electrolytic diaphragm.....	504,703	Sept. 12	645		64	1404
Breuer, August, Iserlohn, Germany. Diaphragm used in electrolytical processes.....	508,084	Nov. 7	179		65	701
Breuer, Hynek, New Prague, Minn. Printing-press.....	511,113	Dec. 19	2201	540	65	1847
Breul, Charles A., assignor to R. A. Breul, Bridgeport, Conn. Suspension attachment for soap.....	508,809	Nov. 14	1323	329	65	1023
Breul, Richard A. (See Breul, Charles A., assignor.)						
Breul, Richard A., Bridgeport, Conn. Toy bank.....	500,848	July 4	499	129	64	91
Breul, Richard A., Bridgeport, Conn. Chain-link.....	510,238	Dec. 5	669	159	65	1537
Brewer, Albert G. (See Stewart and Brewer.)						
Brewer, Albert G., Hopkinton, Mass. Mechanical movement.....	508,676	Nov. 14	1131	279	65	986
Brewer, Andrew T., assignor of two-thirds to E. C. Holmes and J. M. Boyd, Jr., Minneapolis, Minn. Spark-catcher.....	490,242	Jan. 17	2001	523	62	438
Brewer, Benjamin B. (See Smith and Brewer.)						
Brewer, Frank P., Angola, Ind. Pruning-saw.....	491,980	Feb. 21	1475	367	62	1073
Brewer, Gilbert T., Hoboken, N. J. Hot-water heater for cars, &c.....	489,141	Jan. 3	240	66	62	55
Brewer, Gipp, Sylvia, Kans. Switching device.....	508,274	Nov. 7	488	118	65	848
Brewer, James. (See McCoy, William H., assignor.)						
Brewer, John M., and B. N. Smith, Detroit, Mich. Skirt supporter.....	497,516	Mar. 16	1-36	463	63	980
Brewer, Russell, Chicago, Ill. Car-axle box.....	502,652	Aug. 1	677	163	64	691
Brewer, Wells L. (See Tiffany and Brewer.)						
Brewer, William M., New Brighton, assignor of one-half to F. P. Musser, Beaver Falls, Pa. Treating clay for pottery-ware.....	491,074	Feb. 7	19		62	752
Brewers' Metallic Bung Company. (See Stone, Harry W., assignor.)						
Brewster, Elias M., Norwich, assignor to R. M. Brewster, Hartford, Conn. Mower.....	501,865	July 18	2114	523	64	414
Brewster, Elisha, Bessemer, Ala. Planter and fertilizer-distributor.....	510,498	Dec. 12	1086	262	65	1630
Brewster, Kate L., Kearney, Nebr. Collapsible cover-supporting frame for dough-receptacles.....	499,510	June 13	1301	305	63	1632
Brewster, Robert, New Barnet, England. Artificial-tooth mold.....	503,826	Aug. 22	2615	653	64	1090
Brewster, Robert M. (See Brewster, Elias M., assignor.)						
Brewster, William D., and E. A. Abell, Binghamton, N. Y.; said Abell assignor to said Brewster. Preparing pie fillings.....	508,598	Nov. 14	1019		65	965
Brewster, William H., Boston, Mass. Hypodermic syringe.....	490,842	Jan. 31	2979	764	62	658
Brice, Norman R. (See Trumbull, George A., assignor.)						
Bricker, David E., Boiling Springs, Pa. Poultry-brooder.....	494,056	Mar. 21	2082	532	62	1793
Bricker, David W., Polkton, N. C. Cultivator and fertilizer-distributor.....	494,457	Mar. 28	2743	688	62	1930
Bricker, Leonard, St. Louis, Mo. Plant-protector.....	499,203	June 13	772	183	63	1539
Brickey, William N., Morrilton, Ark. Machine for punching and forming calks on horse-shoes.....	494,623	Apr. 4	156	37	63	32
Brickley, Joseph B., Port Angeles, Wash. Platform for wood-choppers.....	500,527	June 27	2944	723	63	1947
Brickley, Willard P. (See Hendrix, Zadox B., assignor.)						
Bridgeport Brass Company. (See Rhind, Frank, assignor.)						
Bridges, Alfred. (See Dorgan and Bridges.)						
Bridges, Christopher M., Seattle, Wash. Hot-air furnace.....	505,697	Sept. 26	2343	593	64	1750
Bridges, James T. (See Faith, Lewis, assignor.)						
Bridgewater, Christopher A., assignor of one-half to A. B. Lawler, Rushville, Ill. Earth-mover.....	490,243	Jan. 17	2002	524	62	439
Brieger, A., et al. (See Swigart, Frank W., assignor.)						
Brien, Theodore R., Hoosick Falls, assignor of one-half to F. L. Stevens, North Hoosick, N. Y. Pipe-cutter.....	511,501	Dec. 26	2863	693	65	1981
Brier, Henry, Crosshill, Scotland. Fluid-pressure regulator.....	489,646	Jan. 10	1016	264	62	227
Briere, Louis A., Paris, France. Coupling-bar for locomotives.....	502,653	Aug. 1	679	163	64	691
Brierley, William, Rochdale, England. Lozenge-machine.....	496,590	May 2	309	83	63	676
Brierly, Conant B., Boise City, assignor of one-half to A. Friedline, Moscow, Idaho. Ore-amalgamator.....	503,034	Aug. 8	1335	328	64	826
Brigg, Henry C., Howell, Mich. Spectacle-case.....	494,624	Apr. 4	158	37	63	32
Briggr, Gottfried, assignor of one-half to C. L. Kempel, Akron, Ohio. Wrench.....	489,429	Jan. 3	682	184	62	147
Briggs, Charles H., Jersey City, N. J. Leak-alarm.....	511,041	Dec. 19	2077	514	65	1822
Briggs, Frank, Philadelphia, Pa. Spring-motor.....	504,907	Sept. 12	987	{ 253 254 }	{ 64 64 }	{ 1471 1471 }
Briggs, Frank H., Cleveland, Ohio. Transportation, storage, and discharging vessel.....	506,840	Oct. 17	1770	{ 445 446 }	{ 65 65 }	{ 361 361 }
Briggs, Henry, and C. Dancel, New York, N. Y., assignors to Goodyear Shoe Machinery Company, Portland, Me. Rough-rounding and channeling machine.....	511,263	Dec. 19	2446	{ 596 597 }	{ 65 65 }	{ 1892 1892 }

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Briggs, Horace A., and C. W. Hopkins, Norwich, Conn. Firearm	489,366	Jan. 3	588	158	62	126
Briggs, Isaac, Middleborough, Mass. Railway-crossing gate and signal	489,365	Jan. 3	586	158	62	126
Briggs, John, Clitheroe, England. Kiln for burning limestone	507,411	Oct. 24	2751	675	65	555
Briggs, John S., San Buenaventura, Cal. Fruit-stoning machine	490,265	Jan. 24	2048	536	62	459
Briggs, John S., Poland, Me. Nut and bolt lock	496,379	Apr. 25	2769	741	63	600
Briggs, Lucius, Glasgo, Conn. Stamp-safe	501,762	July 18	1974	488	64	389
Briggs, Morris E., St. Louis, Mo. Machine for cutting packing-rings	503,341	Aug. 15	1848	458	64	932
Briggs, Nathaniel B. (See Albertson and Briggs.)						
Briggs, Orlando P., Chicago, Ill. Automatic screw-machine	508,864	Nov. 14	1418	352 353	65	1040
Briggs, Thomas A., Arlington, Mass. Paper-feeding machine	499,818	June 20	1793	435 436	63	1731
Briggs, Thomas A., Arlington, Mass. Device for piling paper	503,576	Aug. 22	2220	555 556	64	1015
Briggs, Thomas A., Arlington, Mass. Paper-feeding machine	507,308	Oct. 24	2535	636	65	523
Briggs, Thomas A., Arlington, Mass. Paper-gaging device for platens	507,906	Nov. 7	15	5	65	761
Briggs, William J., Denison, Tex. Combined cigar-tip cutter and match-safe	494,700	Apr. 4	270	69	63	54
Brigham, Arthur A., Weston, Mass. Winding-machine	503,277	Aug. 15	1735	428	61	912
Brigham, Dan, Schuyler, Neb. Watering trough for hogs	494,732	Apr. 4	326	83	63	64
Brigham, Henry M., Brooklyn, N. Y. Pocket-knife	492,084	Feb. 21	1629	404	62	1104
Brigham, Martin E., Philadelphia, Pa. Machine for forming wooden tubes	497,299	May 16	1486	374 375	63	918
Brigham, Robert O., assignor to Novel Envelope Opener Company, Denver, Colo. Attachment for envelope-machines	511,675	Dec. 26	3136	767	65	2031
Brigham, Robert O., assignor to Novel Envelope Opener Company, Denver, Colo. Envelope-machine	511,676	Dec. 26	3138	767 768	65	2032
Bright, George M., Abingdon, Va. Postage-stamp	492,912	Mar. 7	926	57	62	1403
Bright, Joseph E., St. Louis, Mo. Filter	506,304	Oct. 10	873	215	65	178
Bright, Pittman, Philadelphia, Pa. Crank-power	430,134	Jan. 17	1822	476	62	405
Bright, William, Sheffield, England. Grinding-machine for metals	499,706	June 20	1596	386	63	1697
Bright, William R., Bowers Hill, Va. Ventilated barrel	510,499	Dec. 12	1087	262	65	1631
Brightman, Francis M., Hillsdale, assignor to A. D. Kirby, Detroit, Mich. Extension-table	506,902	Oct. 17	1875	467	65	389
Brighton Sign Company. (See Kennedy, Franklin K., assignor.)						
Brill, George M. (See Brill, John A. and G. M.)						
Brill, George M. and J. A., Philadelphia, Pa. Car-truck	494,117	Mar. 28	2200	561	62	1829
Brill, John A. (See Adams, Walter S., assignor.)						
Brill, John A. (See Brill, George M. and J. A.)						
Brill, John A. (See Gosney, John, assignor.)						
Brill, John A., Philadelphia, Pa. Axle-box frame for car-trucks	492,525	Feb. 28	2339	581	62	1262
Brill, John A., Philadelphia, Pa. Brake-support	499,709	June 20	1600	366 367	63	1698
Brill, John A., Philadelphia, Pa. Car-brake	503,121	Aug. 15	1484	365	64	866
Brill, John A., Philadelphia, Pa. Motor-truck	504,800	Sept. 12	807	206	64	1434
Brill, John A., Philadelphia, Pa. Motor-truck	507,207	Oct. 24	2415	596 597	65	490
Brill, John A., Philadelphia, Pa. Motor-truck	507,208	Oct. 24	2422	597	65	492
Brill, John A. and G. M., Philadelphia, Pa. Combination open and closed car	493,013	Mar. 7	379	95, 96	62	1433
Brill, John A., and W. S. Adams, Philadelphia, Pa.; said Adams assignor to said Brill. Motor-truck	493,234	Mar. 7	716	183 184 185	62	1499
Brill, John A., and W. S. Adams, Philadelphia, Pa.; said Adams assignor to said Brill. Motor-truck	504,149	Aug. 29	3133	783 784	64	1204
Brill, William H., Willow Springs, assignor of one-half to G. Flint, De Soto, Mo. Car-coupling	490,799	Jan. 31	2919	750	62	645
Brillié, Lucien, Paris, France. Electric meter	511,401	Dec. 26	2705	655	65	1952
Brindle, Mark W., et al. (See Brunney, Daniel F., assignor.)						
Bringham, Friend J., Orville, Cal. Billet-loop	500,111	June 27	2257	549	63	1823
Brinker, Oliver P., Ashville, Ohio. Attachment for corn-planters	490,266	Jan. 24	2051	536	62	460
Brinkerhoff, Jacob, Auburn, N. Y. Lock-nut	497,702	May 16	2125	530	63	1032
Brinkerhoff, Milford H. (See Juvinall, Incard, and Brinkerhoff.)						
Brinkman, Oscar F., assignor of one-half to K. Johnson, Lancaster, Pa. Apparatus for a parlor game	503,403	Aug. 15	1938	421	64	949
Brinkman, Sebastian G., New York, N. Y. Electrically-controlled ventilator	489,025	Jan. 10	989	258	62	221
Brinkop, John H. (See Reno, Robert S., assignor.)						
Brinly, John L., Louisville, Ky. Cultivator	501,818	July 18	2053	505	64	402
Brinly, Thomas E. C., Louisville, Ky. Plow	494,458	Mar. 28	2744	688	62	1930
Brintnall, Thomas M., assignor of three-fourths to B. Hendrickson, Medina, R. S. Giffin, Cleveland, and H. C. Bradley, Warren, Ohio. Metallic tie and fastener	511,317	Dec. 19	2541	618	65	1909
Brintnall, Thomas M., Medina, and H. C. Bradley, Warren, assignors of one-half to R. S. Giffin, Cleveland, and B. Hendrickson, Medina, Ohio. Railway-tie and means for securing track-rails thereto	511,316	Dec. 19	2538	618	65	1909
Brinton, Burtwin L., Bradford, Pa. Lamp-filling can	506,153	Oct. 3	559	145	65	108
Brinton, George, Harrisburg, Pa. Can	495,012	Apr. 11	757	193	63	160
Brinton, Henry A., Harrisburg, Pa. Compound locking device	490,098	Jan. 17	1758	458	62	391
Brisben, William W., assignor to J. E. Rundle, Cleveland, Ohio. Emery-wheel dresser	491,466	Feb. 7	670	168	62	876
Bristol, Homer C., Paterson, N. J. Educational appliance	496,993	May 9	978	253	63	813
Bristol, Lars, London, England. Secondary battery	493,817	Mar. 21	1694	431	62	1719
Bristol Novelty Company. (See Field, Charles C., assignor.)						
Bristol, William H. (See Faber du Faur and Bristol.)						
Bristol, William H., Hoboken, N. J. Recording-voltmeter	505,243	Sept. 19	1531	399	64	1584
Bristol, William S. (See Moore, James S., assignor.)						
Britain, William, Jr., London, England. Loom	506,467	Oct. 10	1170	290 291	65	236
Britton, Horace E., Stoughton, Mass. Tool-holder	599,851	Nov. 28	3129	756	65	1392
Brizzi, Carlo. (See Narberti, Giorgio, assignor.)						
Broad, Thomas, et al. (See Anderson, Lee, assignor.)						
Broadbent, Robert, Stalybridge, England. Machine for winding yarn or thread	493,970	Mar. 21	1951	496 497	62	1768
Broadbent, Thomas, Worcester, Mass. Velocipede	507,412	Oct. 24	2752	676	65	555
Broadbent, Thomas, Worcester, Mass. Saddle for velocipedes	507,413	Oct. 24	2757	676	65	556
Broadbent, Thomas, Worcester, Mass. Pedal for velocipedes	508,562	Nov. 14	958	235	65	952
Broadwell, Edward C., assignor of one-third to M. J. Grier, Philadelphia, Pa. Coating with aluminum or alloys thereof	503,070	Aug. 8	1325		64	836
Broadwell, Norman, Jacksonville, Ill. Wagon end-gate	499,511	June 13	1302	306	63	1632

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Brocke, Gerhard, Allegheny, assignor of one-half to D. C. Riter, Pittsburg, Pa. Lock for automatic railway-switches.	500,796	July 4	423	111	64	78
Brockington, George, assignor, by mesne assignments, to D. H. Barnet, Newark, N. J. Die or mold for covering bridle-bits.	509,293	Nov. 21	2170	521	65	1197
Brockley, Jacob. (See Hymas, Alfred, assignor.)						
Brockley, Jacob. (See Hymas and Brockley.)						
Brockman, Robert, St. Louis, Mo., assignor of one-half to J. H. Stotsenburg, New Albany, Ind. Bed for polishing plate glass.	497,115	May 9	1161	298	63	846
Broderick, Clement M., and J. Vankeirsbilck, assignors to Gatling Gun Company, Hartford, Conn. Feed for machine-guns.	504,516	Sept. 5	343	87	64	1334
Broderick, Clement M., and J. Vankeirsbilck, assignors to Gatling Gun Company, Hartford, Conn. Machine-gun.	504,517	Sept. 5	345	88	64	1334
Brodie, William H., Brooklyn, N. Y. Automatic switch for trolley-tracks.	489,179	Jan. 3	300	83	62	69
Brodie, William H., Brooklyn, N. Y. Trolley.	500,375	June 27	2714	667	63	1965
Brodie, William H., Brooklyn, N. Y. Trolley-track.	509,650	Nov. 28	2796	673	65	1328
Brodie, William H., New York, N. Y. Multiple switch for overhead trolley-lines.	492,526	Feb. 28	2342	581	62	1262
Brodrick Copyraph Company. (See Brodrick, John, assignor.)						
Brodrick, John, assignor to Brodrick Copygraph Company, New York, N. Y. Making stencil-plates.	505,698	Sept. 26	2344		64	1750
Brodtt, Lincoln, West Oakland, Cal. Safety stop-cock for gas-fixtures.	508,275	Nov. 7	490	118	65	848
Broeker, Henry. (See Vetter and Broeker.)						
Broesel, Herman, trustee. (See Denison, Sylvester P., assignor.)						
Brogan, James A., et al. (See Borden, William H., assignor.)						
Brogan, Thomas J., assignor of one-half to H. Fozard, Paterson, N. J. Automatic trap for water-pipes.	496,994	May 9	979	254	63	813
Brolowska, Charles, Port Huron, Mich. Clothes-drier.	490,843	Jan. 31	2981	764	62	658
Brombacher, Max H. C. (See Oberle and Faller, assignors.)						
Bromley, Daniel W. (See Carver, James W., assignor.)						
Bronk, Casper, Hillsdale, N. J. Combination hammer and hatchet.	504,908	Sept. 12	989	254	64	1471
Bronk, Charles L., New York, N. Y. Bench-dog.	504,962	Sept. 12	1074	274	64	1487
Bronner, Bernhard, Syracuse, assignor to J. L. Bronner, New York, N. Y. Umbrella-stand.	499,449	June 13	1193	284	63	1613
Bronner, Jesse L. (See Bronner, Bernhard, assignor.)						
Bronner, Paul, Stuttgart, Germany. Manufacturing white lead.	491,635	Feb. 14	941		62	952
Bronson, Albert E., and D. Chubb, Lilley, Mich. Saw-swage.	502,065	July 25	2446	614	64	489
Bronson, Douglas B., assignor of one-half to T. B. Wrigley, Chicago, Ill. Cleat.	503,193	Aug. 15	1602	394	64	889
Bronson, Enos A., Lincoln, Nebr. Compound for retarding the setting of cement.	493,613	Mar. 14	1356		62	1638
Bronson, Enos A., Wymore, Nebr. Finish for plastering.	499,710	June 20	1602		63	1699
Bronson, William C., et al. (See Bunn, John, assignor.)						
Bronson, Thomas J., and A. Armstrong, Jacksonville, Ill.; said Armstrong assignor to said Bronson. Metallic railway-tie.	491,032	Feb. 14	1324	346	62	1041
Brook, John W. (See Cooke and Brook.)						
Brook, John W., Twin Bridges, Mont. Car-coupling.	495,578	Apr. 18	1703	429	63	352
Brooke, Simpson & Spiller. (See Green and Lawson, assignors.)						
Brooke, William E., assignor to American Saw Company, Trenton, N. J. Wrench.	491,870	Feb. 14	1305	322	62	1025
Brooke, William E., assignor to American Saw Company, Trenton, N. J. Making wrench-handles.	504,518	Sept. 5	346	88	64	1334
Brooke, William E., Trenton assignor of one-fourth to T. H. Clark, Scudder's Falls, N. J. Saw-tooth.	504,412	Sept. 5	162	43	64	1301
Brooks, Augustus, Sayre, Pa. Combined flour and meal sifter.	494,753	Apr. 4	360	91	63	71
Brooks, Augustus J., Wichita Falls, Tex. Adding-machine.	493,971	Mar. 21	1952	497	62	1768
Brooks, Austin A., Eau Claire, assignor to Brooks Safety Truck Company, Chippewa Falls, Wis. Car-truck.	508,276	Nov. 7	491	118	65	849
Brooks, Charles B., Newark, N. J. Punch.	507,672	Oct. 31	3217	787	65	655
Brooks, Charles N. (See Matthews, Edward, assignor.)						
Brooks, Charles W., Stevens Point, Wis. Carriage-axle.	505,387	Sept. 19	1770	458	64	1629
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Hand-punch.	489,430	Jan. 3	623	184	62	147
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal.	501,042	July 4	799	209	64	146
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal.	503,645	Aug. 22	2344	585	64	1036
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal and seal-tag.	505,388	Sept. 19	1771	458	64	1629
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal and tag therefor.	509,610	Nov. 28	2738	661	65	1318
Brooks, Frank W. (See Ament, James E., assignor.)						
Brooks, Franklin W. (See Doremus and Brooks.)						
Brooks, Franklin W., New York, N. Y. Seal.	498,103	May 23	2756	689	63	1160
Brooks, Franklin W., New York, N. Y. Seal.	511,723	Dec. 26	3217	789	65	2046
Brooks, Franklin W., New York, N. Y. Seal.	511,724	Dec. 26	3218	789	65	2046
Brooks, Fred S. (See Pinkston, Lucien A., assignor.)						
Brooks, Jacob A. (See Bennett, John A., assignor.)						
Brooks, James W., trustee. (See Elliott, Alvin D., assignor.)						
Brooks, James W., trustee. (See Fairfield, Hadley P., assignor.)						
Brooks, James W., trustee. (See Glidden, Charles W., assignor.)						
Brooks, James W., trustee. (See Glidden and Winter, assignors.)						
Brooks, James W., trustee. (See Winter, Henry W., assignor.)						
Brooks, James W., et al., trustees. (See Goddu, Louis, assignor.)						
Brooks, James W., et al., trustees. (See Tobey, Franklin O., assignor.)						
Brooks, John, Plainfield, N. J. Bottle-stopper.	511,114	Dec. 19	2203	541	65	1847
Brooks, John, assignor to C. Potter, Jr., H. W. Fish, J. M. and D. E. Tittsworth, Plainfield, N. J. Cylinder printing-machine.	489,431	Jan. 3	684	184	62	147
Brooks, John, Plainfield, N. J., assignor to C. Potter, Jr., H. W. Fish, J. M. and D. E. Tittsworth, New York, N. Y. Bed and cylinder printing-machine.	491,334	Feb. 7	453	116 117 118	62	834
Brooks, John C., Paterson, N. J., assignor to G. Draper & Sons, Hopedale, Mass. Warp stop-motion for looms.	501,041	July 4	796	208	64	145
Brooks, John S., Brooklyn, N. Y. Metallic roofing.	503,941	Aug. 29	2727	698	64	1140
Brooks Locomotive Works. (See Player, John, assignor.)						
Brooks, M. H. (See Palm, George, assignor.)						
Brooks, Mott B., Oak Point, N. Y. Portable force-pump.	489,367	Jan. 3	589	159	62	126
Brooks, Neil D., Columbus, Ohio. Umbrella-support.	507,481	Oct. 24	2856	701	65	575
Brooks, Richard N., San Francisco, Cal. Rotating index.	499,960	June 20	2016	429	63	1770

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Brooks, Robert A., Denver, Colo. Hydrant	494,318	Mar. 28	2519	635	62	1889
Brooks Safety Truck Company. (See Brooks, Austin A., assignor.)						
Brooks, Samuel H. (See Edge, James, assignor.)						
Brooks, Samuel H., et al. (See Cook and Harrison, assignors.)						
Brooks, Sidney R., Allegany, assignor of one-third to H. W. Haskins, Frewsburg, N. Y. Horseshoe-calk sharpener	504,553	Sept. 5	405	103	64	1345
Brooks, Silas M., Burlington, assignor of two thirds to C. A. Hart and P. F. Smith, Canton, Conn. Compound for protecting trees, &c.	495,957	Apr. 25	2292		63	472
Brooks, Stephen H., Brooklyn, N. Y., assignor to Wilmington Dental Manufacturing Company, Wilmington, Del., New York, N. Y., and Philadelphia, Pa. Dental-engine hand-piece.	504,704	Sept. 12	646	164	64	1104
Brooks, Thomas, Peterborough, Canada. Hot-water furnace	498,531	May 30	3470	859 860	63	1302
Brooks, Willard P., Topeka, Kans. Releasing device.	496,380	Apr. 25	2970	711	63	600
Brooks, William H., West Point, N. Y. Lock for metallic plates	491,206	Feb. 7	236	59	62	792
Broome, Henry, assignor to A. Whiteley, Springfield, Ohio. Lawn-mower clutch.	497,944	May 23	2514	627	63	1117
Broome, Henry, assignor to A. Whiteley, Springfield, Ohio. Clutch	510,886	Dec. 19	1823	451	65	1775
Broome, Henry, assignor of two-thirds to E. E. Albin and J. W. Hughes, Springfield, Ohio. Coin-delivering device.	489,863	Jan. 10	1335	342	62	292
Broome, Isaac, New Brighton, Pa. Apparatus for ornamenting architectural tiles	493,244	Mar. 11	739	189 190	62	1521
Broome, Isaac, Beaver Falls, Pa. Tile-dressing machine.	509,268	Dec. 5	26	6	65	1415
Broomell, Albert P., York, Pa. Combined cooking and water-heating range	498,894	June 6	256	60	63	1438
Brophy, Michael M., London, England. Knob attachment	503,228	Aug. 15	1659	407	64	899
Brosius, Samuel G., Savannah, Ga. Rotating-cylinder engine.	492,850	Mar. 7	130	33	62	1383
Brosius, Samuel G., Savannah, Ga. Rotating-cylinder engine.	492,860	Mar. 7	134	33, 34	62	1384
Brosius, Samuel G., Savannah, Ga. Rotating-cylinder engine.	492,861	Mar. 7	137	34	62	1385
Brosius, Samuel G., Savannah, Ga. Mechanical movement.	503,122	Aug. 15	1487	366	64	867
Brosius, Samuel G., Savannah, Ga. Boiler	511,115	Dec. 19	2205	541	65	1848
Brosius, Samuel G., Savannah, Ga. Boiler	511,116	Dec. 19	2206	541	65	1848
Brosnan, Cornelius J., Springfield, Mass. Hook	501,320	July 11	1248	314	64	241
Brost, Charles A., Lakeville, Minn. Automatic wagon-brake.	492,490	Feb. 28	2286	563	62	1250
Brothington, Edmund E., Newark, N. J. Support or holder for decorated plates	502,548	Aug. 1	508	121	64	660
Brothwell, John G., Torrington, Conn., and F. K. Phillips, St. Louis, Mo., assignors to Turner & Seymour Manufacturing Company and H. L. Judd & Company, New York, N. Y. Extension curtain-rod and bracket	502,654	Aug. 1	683	164	64	691
Brott Electric Rapid Transit Bicycle Railway Company. (See Brott, George F., assignor.)						
Brott, George F., Washington, D. C., assignor to Brott Electric Rapid Transit Bicycle Railway Company, of Virginia. Elevated bicycle-railway	195,927	Apr. 18	2247	566	63	448
Brouillard, Joseph A. (See Larsson and Brouillard.)						
Brouillet, Georges A., Boston, Mass. Rubber-dam clamp	506,098	Oct. 3	463	121	65	90
Brown, Matilda C. S., Berkeley, Cal. Detachable umbrella-cover	501,819	July 18	2054	506	64	402
Brousse, Firmin, Paris, France. Package or wrapper for cigarette-papers	509,790	Nov. 28	3023	730	65	1371
Brouwer, Theophilus A., Jr., East Hampton, N. Y. Pocket stamp-holder	490,783	Jan. 31	2898	744	62	641
Brower, Asher A., assignor of two-thirds to W. M. McFarland and W. W. Orris, Des Moines, Iowa. Car-coupling.	503,646	Aug. 22	2345	585 586	64	1037
Brower, Bloomfield, New York, N. Y. Letter-file cabinet.	490,099	Jan. 17	1759	459	62	391
Brower, George L., Des Moines, Iowa. Toy building	499,512	June 13	1304	306	63	1632
Brower, James F., assignor of one-half to F. Barry, Rodney, Mich. Saw-tooth gage	492,187	Feb. 21	1794	448	62	1138
Brower, John H., assignor of two-thirds to R. S. Sargent and F. W. Moul, Waupun, Wis. Wire-fence stay	505,210	Oct. 3	11	3	65	5
Brown, Adna, Springfield, Vt. Machine for dressing or finishing cloth	496,720	Mar. 2	520	138	63	713
Brown, Adna, Springfield, Vt. Cloth-finishing machine	509,296	Nov. 21	2173	522	65	1198
Brown, Albert. (See Courtney, William P., assignor.)						
Brown, Alexander F. G., Dalry, Scotland. Rotary engine, pump, and blower.	507,780	Oct. 31	3388	829	65	687
Brown, Alexander T. (See Lippe and Brown.)						
Brown, Alexander T., Syracuse, N. Y. Type-writing machine	503,735	Aug. 22	2467	619	64	1064
Brown, Alexander T., Syracuse, N. Y. Ribbon mechanism for type-writing machines	503,736	Aug. 22	2490	619 620	64	1065
Brown, Alfred. (See Dobyns and Brown.)						
Brown, Alfred, et al. (See Hieatzman, Arthur H., assignor.)						
Brown, Alfred C., London, England. Wheel for cycles	504,413	Sept. 5	163	43	64	1301
Brown, Alfred T., assignor to Warner Elevator Manufacturing Company, Cincinnati, Ohio. Elevator safety-gate	510,770	Dec. 12	1582	394	65	1720
Brown, Almon C., Minneapolis, Minn., assignor to E. A. Sumner, New York, N. Y. Car-coupling	495,721	Apr. 18	1935	487	63	390
Brown, Arthur F., and W. R. Knaub, assignors to Stoddard Manufacturing Company, Dayton, Ohio. Disk cultivator	499,711	June 26	1603	387 388	63	1099
Brown, Arthur L., Lyndonville, Vt. Car-coupling	504,862	Sept. 12	914	236	64	1457
Brown, Augustus H. (See Robson, May, assignor.)						
Brown & Bailey. (See Craw, Joseph T., assignor.)						
Brown, Benjamin F., Salt Lake City, Utah Ter. Safety-car	499,819	June 20	1795	436 437	63	1732
Brown, Benoni S., Hyde Park, Mass., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine	504,487	Sept. 5	287	73, 74	64	1323
Brown, Burke D. (See Bullard, Kennedy C., assignor.)						
Brown, Callum H., St. Louis, Mo. Manifold device for baggage-checks	509,869	Dec. 5	28	7	65	1416
Brown, Charles, assignor to Maschinenbau Gesellschaft, Basle, Switzerland. Electric car	493,969	Mar. 21	1947	496	62	1767
Brown, Charles, assignor to Maschinenbau Gesellschaft, Basle, Switzerland. Railway-car	494,319	Mar. 28	2520	636	62	1890
Brown, Charles A. (See Larabee, Henry L., assignor.)						
Brown, Charles E., Rome, N. Y. Machine for making boiler brace-jaws	507,876	Oct. 31	3548	873	65	717
Brown, Charles F., trustee. (See Benjamin and Simmons, assignors.)						
Brown, Charles F., et al. (See Farnham, Charles H., assignor.)						
Brown, Charles F., Yonkers, N. Y. Register for pool-triangles	509,424	Nov. 28	2413	584	65	1253
Brown, Charles G. (See Cleghorn, Frederick W., assignor.)						
Brown, Charles G., Salt Lake City, Utah Ter. Ore-tank	497,856	May 23	2365	593	63	1091
Brown, Charles H., Portland, Oreg. Galvanic battery	503,567	Aug. 15	2199	549	64	996
Brown, Charles H., Dayton, Ohio. Adjustable bearing for spindles	511,318	Dec. 19	2543	619	65	1910
Brown, Charles H., H. W. Meyer, and H. Schiewetz, assignors to S. N. Brown & Company, Dayton, Ohio. Box for vehicle-wheels	492,384	Feb. 28	2106	525	62	1215
Brown, Charles M., Chicago, Ill., assignor to C. C. Bradley, Syracuse, N. Y. Power-hammer	497,013	May 9	1009	259	63	818
Brown, Charles O. (See Powers, Jay W., assignor.)						
Brown, Charles S., New York, N. Y. Basket for gathering fruit	494,666	Apr. 4	218	55	63	45

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Brown, Clark, Freeport, Ill. Car-coupling.....	495,958	Apr. 25	2292	578	63	472
Brown, Conrad J. (See Baker, William C., assignor.)						
Brown, Daniel R. (See Gustafson, John, assignor.)						
Brown, Daniel T. (See Jackson, Thomas B., assignor.)						
Brown, David R. (See Cook, John, assignor.)						
Brown, David R., Cottageville, S. C. Horse-detacher.....	500,186	June 27	2415	588	63	1852
Brown, Davis, assignor of one-half to Decatur Leader Manufacturing Company, Decatur, Ill. Automatic cutter for brick and tile machines.....	503,524	Aug. 15	2124	532 533	64	982
Brown Developing Company. (See Brown, Samuel H., assignor.)						
Brown Developing Company. (See Jones, Gomer, assignor.)						
Brown, Edward, Philadelphia, Pa. Pyrometer.....	494,244	Mar. 28	2407	607	62	1868
Brown, Edward, Philadelphia, Pa. Pyrometer.....	494,245	Mar. 28	2409	608	62	1868
Brown, Edward G., Brooklyn, O. N. Cammann, New Brighton, and O. Willcox, Brooklyn, N. Y. Obtaining sweet residual petroleum products.....	510,672	Dec. 12	1417	350	65	1690
Brown, Edward S., Sioux City, Iowa. Tension and take-up device for harvesters.....	496,680	May 2	460	124	63	703
Brown, Edwin H., Brooklyn, N. Y. Securing pictures to watches or other articles.....	511,678	Dec. 26	3145	769	65	2033
Brown, Elizabeth. (See Reynolds, Christopher C., assignor.)						
Brown Folding Machine Company. (See Van Etten, Charles D., assignor.)						
Brown, Francis C., New York, N. Y. Fountain-pen.....	490,862	Jan. 31	3006	771	62	664
Brown, Francis R., assignor to Globe Manufacturing Company, Denver, Colo. Baling-press.....	490,633	Jan. 24	2651	683	62	580
Brown, Frank D. (See Sneckner and Roth, assignors.)						
Brown, Frank E., Webster City, Iowa. Speeding-cart.....	498,154	May 23	2825	707	63	1173
Brown, Frank O., Dallas, Tex. Apparatus for boring Artesian wells.....	492,536	Feb. 28	2358	546	62	1266
Brown, Fred H., Detroit, Mich. Shoe-rest.....	499,093	June 6	597	143	63	1495
Brown, Fred H., assignor, by mesne assignments, of one-fifth to Brown Telephone and Telegraph Company, Chicago, Ill. Telegraphy and telephony.....	490,064	Jan. 17	1703	444	62	379
Brown, Frederick W., Cambridge, Mass. Car-fender.....	509,996	Dec. 5	258	60	65	1458
Brown, Garrett S., assignor to Detroit Stay Company, Detroit, Mich. Dress-stay.....	499,513	June 13	1305	307	63	1632
Brown, George A., Minneapolis, Minn. Thill coupling.....	501,052	July 11	819	213	64	161
Brown, George A., Muskegon, Mich. Magnetic clutch or coupling.....	505,025	Sept. 12	1179	302	64	1507
Brown, George F., Philadelphia, Pa. Water-closet.....	508,203	Nov. 7	369	91	65	827
Brown, George F., Philadelphia, and H. Van Duzee, Jenkintown, Pa. Valve-escapement for reservoirs, tanks, &c.....	508,162	Nov. 7	301	75	65	814
Brown, George H., Portsmouth, Va. Crate or case.....	497,300	May 16	1491	376	63	919
Brown, George M., Nashville, Tenn., assignor of one-half to E. J. Cahill, La Salle, Ill. Ear attachment for telephones.....	493,245	Mar. 14	742	190	62	1522
Brown, Gilbert H., Dayton, Ohio. Windmill-derrick.....	495,662	Apr. 18	1838	460	63	374
Brown & Gilman. (See Wright, William A., assignor.)						
Brown, Gilman W., West Newbury, Mass. Valve for fire-alarm whistles.....	489,215	Jan. 3	359	100 101	62	81
Brown, Gilman W., West Newbury, Mass. Memorandum book or pad.....	500,736	July 4	328	87	64	61
Brown, Gilman W., assignor of one-half to H. Brown, West Newbury, Mass. Automatic fire-alarm system.....	506,582	Oct. 10	1349	338 339	65	271
Brown, Harold P. (See Taylor and Brown.)						
Brown, Harold P., New York, N. Y. Dynamo-electric machine and motor.....	493,679	Mar. 21	1458	372	62	1674
Brown, Harold P., New York, N. Y. Nut-lock.....	508,402	Nov. 14	703	173	65	902
Brown, Harrison B., Washington, D. C. Washstand.....	509,295	Nov. 21	2172	522	65	1197
Brown, Harry E., et al. (See Obrist, Andrew J., assignor.)						
Brown, Harvey, Brandt, Ohio. Fence-post.....	505,811	Oct. 3	12	3	65	5
Brown, Harvey, Brandt, Ohio. Wire fence machine.....	505,812	Oct. 3	13	4	65	5
Brown, Harvey, Brandt, assignor to W. K. Clyne, Troy, Ohio. Fence-post.....	495,471	Apr. 18	1534	384	63	322
Brown, Harvey S., et al. (See Cabell, Samuel G., assignor.)						
Brown, Hayden. (See Brown, Gilman W., assignor.)						
Brown, Herman H., Montreal, Canada. Insulated wire.....	507,257	Oct. 24	2493	614	65	505
Brown, Horace F., Butte, Mont., assignor to M. C. Brown, Chicago, Ill. Ore-roasting furnace.....	489,142	Jan. 3	242	67	62	56
Brown, Horace F., Butte, Mont., assignor to M. C. Brown, Chicago, Ill. Ore-roasting furnace.....	489,143	Jan. 3	245	68, 69	62	57
Brown, Horace F., Chicago, Ill., and L. De Camp, Denver, Colo. Condensing-chamber for lead fumes.....	489,144	Jan. 3	248	69	62	57
Brown, Horace T., and G. H. Morris, Burton-on-Trent, England. Preparing raw grain.....	490,538	Jan. 24	2482	62	62	546
Brown, Irvin L., Waveland, Ind. Car-coupling.....	511,042	Dec. 19	2078	515	65	1822
Brown, Isaac G. (See Friede, Samuel M., assignor.)						
Brown, James A., Duquoin, Ill. Sprocket-wheel.....	499,627	June 13	1477	355	63	1663
Brown, James A., Moline, Ill. Transmitter for telephones.....	501,610	July 18	1713	427	64	344
Brown, James A., Moline, Ill. Telephone-transmitter.....	504,801	Sept. 12	811	206	64	1435
Brown, James A., Moline, Ill. Magneto-telephone.....	506,305	Oct. 10	874	216	65	178
Brown, James A., Moline, Ill. Magneto-telephone.....	511,118	Dec. 19	2209	542	65	1849
Brown, James B., Washington, D. C. Device for lifting traction-cables.....	506,972	Oct. 17	1982	491	65	401
Brown, James D., Philadelphia, Pa. Automatic fire-extinguisher.....	490,821	Jan. 31	2948	757	62	652
Brown, James D., assignor to himself and H. Ayres, Philadelphia, Pa. Composition of matter as a substitute for hard rubber.....	499,354	June 13	1025	.....	63	1584
Brown, James E., Ferndale, Cal. Animal-poke.....	494,754	Apr. 4	361	91	63	71
Brown, James H., Denver, Colo. Car-coupling.....	491,467	Feb. 7	670	168	62	876
Brown, James H., Eau Claire, Wis. Valve connection for steam sawmill-feeds.....	494,118	Mar. 28	2203	562	62	1830
Brown, James H., Chicago, Ill. Car-coupling.....	511,233	Dec. 19	2396	524	65	1883
Brown, James L., Glasgow, Scotland. Spinning-top.....	501,321	July 11	1249	314 315	64	241
Brown, James O., Boston, Mass., assignor to National Chain Gear Company, Portland, Me. Drive-chain.....	499,961	June 20	2017	490	63	1770
Brown, James R., Meigs, Ga. Tobacco-curing rack.....	505,874	Oct. 3	112	28	65	83
Brown, John A., assignor of one-fourth to F. L. Dille, Tyler, Tex. Buckle.....	504,076	Aug. 29	3009	751	64	1181
Brown, John H., New York, N. Y. Manufacture of guns.....	496,395	May 2	12	3	63	621
Brown, John H., New York, N. Y. Anchoring the ends of wire.....	496,636	May 2	389	105	63	690
Brown, John H., New York, N. Y. Gun.....	496,637	May 2	390	105	63	690
Brown, John S., Galveston, Tex. Railway-joint.....	503,071	Aug. 8	1386	342	64	836
Brown, John W., assignor to Collins Plow Company, Quincy, Ill. Cultivator.....	496,850	May 9	734	195	63	769
Brown, John W., and A. A. Gehrt, assignors to Collins Plow Company, Quincy, Ill. Baling-press.....	494,915	Apr. 4	614	157	63	119
Brown, John W., and A. A. Gehrt, assignors to Collins Plow Company, Quincy, Ill. Baling-press.....	505,389	Sept. 19	1772	459	64	1629
Brown, John W. L., Marietta, assignor of one-half to F. S. Roach, Athens, Ohio. Fire-escape.....	492,955	Mar. 7	291	74	62	1416
Brown, Joseph, Mount Clemens, Mich. Insecticide.....	496,110	Apr. 25	2528	63	516

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Brown, Joseph H., Madison, Ga. Millstone-dress.	509,294	Nov. 21	2170	521	65	1197
Brown, Joseph S., Academia, Pa. Dough-raiser.	489,153	Jan. 3	260	72	62	61
Brown, Julius C., Santa Barbara, Cal. Nut-lock.	509,870	Dec. 5	29	7	65	1416
Brown, Julius C., assignor of one-half to A. W. Palmer, Kansas City, Mo. Animal-trap.	497,089	May 9	1126	288	63	839
Brown, Leander C., Boston, Mass. Drawer-lock.	505,799	Sept. 26	2502	{ 631 632 }	64	1780
Brown, Mary C. (See Brown, Horace F., assignor.)						
Brown, Millard F., Louisville, Ky. Combined flour bin and sifter.	498,232	May 30	2967	740	63	1212
Brown, N. B. (See Redwine, William J., assignor.)						
Brown, Nathaniel H., Norristown, Pa. Flash-lamp.	501,556	July 18	1629	408	64	329
Brown, Otis E., Brockton, Mass. Wax-thread sewing-machine.	498,505	May 30	3426	850	63	1295
Brown, Otis E., Brockton, assignor to H. A. Peach, Randolph, Mass. Wax-thread sewing-machine.	499,414	June 13	1138	272	63	1603
Brown, Perry, Sharonville, Ohio. Drawbar attachment.	490,635	Jan. 31	2655	685	62	595
Brown, Philip C., Washington, D. C. Car-coupling.	494,246	Mar. 28	2411	608	62	1869
Brown, Philip C., assignor of one-half to V. Stanley, Washington, D. C. Permutation-lock.	497,761	May 23	2228	558	63	1068
Brown, Reinhart L., Chicago, Ill. Manual recorder and cash-drawer.	489,067	Jan. 3	122	35	62	32
Brown, Reuben H. (See Lavigne, Joseph P., assignor.)						
Brown, Reuben L., Chicago, Ill. File-case.	498,926	June 6	317	74, 75	63	1448
Brown, Richmond R. (See Foltrow, Henry P., assignor.)						
Brown, Robert K., Whitinsville, Mass. Sash-balance.	491,762	Feb. 14	1136	286	62	901
Brown, Robert K., Whitinsville, Mass. Sash-holder.	491,763	Feb. 14	1137	286	62	992
Brown, Robert K., Whitinsville, Mass. Sash-balance.	510,154	Dec. 5	527	121	65	1509
Brown, Robert P., Philadelphia, Pa. Paper box.	504,075	Aug. 29	3008	751	64	1180
Brown, Robert S., St. Albans, W. Va. Spirit-level.	505,937	Oct. 3	206	52	65	41
Brown, Samuel, Easthampton, Mass. Weaving elastic fabrics.	502,699	Aug. 8	770	187	61	722
Brown, Samuel, Seaford, Del. assignor to J. L. Ketterlinus, Philadelphia, Pa. Toy machine-gun.	511,069	Dec. 19	2119	523	65	1831
Brown, Samuel C., Niagara, Oreg. Car-coupling.	511,117	Dec. 19	2208	541	65	1848
Brown, Samuel G., Lynn, Mass. Stall-floor.	502,221	July 25	2698	681	64	539
Brown, Samuel H., Newark, N. J., assignor to Brown Developing Company, of New Jersey. Hydrocarbon or gas furnace.	497,750	May 16	2193	549	63	1046
Brown, Samuel H., Frederick, Md., and J. E. Solt, Northbrook, Pa.; said Solt, assignor to said Brown. Corn-harvester.	498,409	May 30	3263	813	63	1265
Brown, Samuel H., Belleville, N. J., assignor to Brown Developing Company, of New Jersey. Furnace for burning garbage.	501,181	July 11	1037	263	64	204
Brown, Samuel S. (See Bain, Foré, assignor.)						
Brown, Samuel S. (See Keil and Westerdahl, assignors.)						
Brown, Samuel S. (See Legg and Keil, assignors.)						
Brown, Seabury F., Cuyler, N. Y. Bag-holder.	501,820	July 18	2055	506	64	403
Brown & Sharpe Manufacturing Company. (See Beale, Oscar J., assignor.)						
Brown & Sharpe Manufacturing Company. (See Boynton, John W., assignor.)						
Brown & Sharpe Manufacturing Company. (See Parks, Edward H., assignor.)						
Brown & Sharpe Manufacturing Company. (See Spalding, Frank, assignor.)						
Brown & Sharpe Manufacturing Company. (See Worsley, Samuel L., assignor.)						
Brown, Stephen J., assignor of one-half to G. E. Waldron, Troy, N. Y. Ventilator.	509,593	Nov. 28	2708	655	65	1312
Brown Telephone and Telegraph Company. (See Brown, Fred. H., assignor.)						
Brown, Theodore H., Viroqua, Wis. Endless sickle for reapers.	492,322	Feb. 21	2000	498	62	1182
Brown, Theodore H., assignor of one-half to H. Casson, Viroqua, Wis. Car-coupling.	492,370	Feb. 21	2075	518	62	1196
Brown, Theodore H., assignor to United States Sheathing Lath Company, Viroqua, Wis. Sheathing-lath attachment for planing-machines.	492,369	Feb. 21	2074	518	62	1196
Brown, Theodore M., Troy, Minn. Blank form for keeping accounts.	490,135	Jan. 17	1824	{ 476 477 }	62	405
Brown, Thomas. (See Moomy, Joseph G., assignor.)						
Brown, Thomas F., et al. (See Ripson, John D., assignor.)						
Brown, Tristram D. (See Lisk and Brown.)						
Brown, Tristram D., assignor to T. Perkins, Canandaigua, N. Y. Automatic baster.	510,380	Dec. 5	882	212	65	1577
Brown, Vincent B., J. Imel, and D. J. Whitaker, Emerson, Iowa. Cattle-dehorner.	507,967	Oct. 31	3690	917	65	743
Brown, Walter F. (See Paull and Brown.)						
Brown, Walter F., Providence, R. I. Safety attachment for governors.	498,002	May 23	2605	651	63	1133
Brown, Walter M., Albany, N. Y. Cotton-gin saw.	500,560	July 4	37	12	64	9
Brown, Warren, Eaton, Me. Horse-hoof guard.	492,621	Feb. 28	2497	619	62	1295
Brown, Webster E. (See Dimick, Richard E., assignor.)						
Brown, William B. (See Parmley, Lemuel, assignor.)						
Brown, William C., Davilla, Tex. Cotton-scoop.	495,579	Apr. 18	1703	429	63	352
Brown, William C., U. S. Army. Stovepipe-shield for tents.	511,502	Dec. 26	2864	{ 693 694 }	65	1981
Brown, William G., Danville, Pa. Wire or bicycle spoke straightener.	497,116	May 9	1163	298	63	846
Brown, William H., Angel's Camp, Cal. Guide for stamp-mills.	495,876	Apr. 18	2177	547	63	434
Brown, William J., et al. (See Hanson, Joseph H., assignor.)						
Brown, William J., Philadelphia, Pa. Device for holding metallic staples.	491,235	Feb. 7	284	71	62	802
Brown, William J., and J. K. Walker, Coal City, Ill. Bridge-gate.	506,099	Oct. 3	461	121	65	91
Brown, William K., et al., executors. (See Meyers, William H., assignor.)						
Brown, William M. (See Soper and Brown.)						
Brown, William M., Johnstown, Pa., assignor to Johnson Steel Street Rail Company, of Kentucky. Interlocking rail-chair.	492,458	Feb. 28	2223	555	62	1239
Brown, William M., assignor to Johnson Company, Johnstown, Pa. Brace-chair for railway-rails.	494,243	Mar. 28	2407	607	62	1868
Brown, William S., et al. (See Hogg, William T., assignor.)						
Brown, Willis L., Lake Geneva, Wis. Lifting device.	493,061	Mar. 7	448	113	62	1448
Browne, Arthur B., Cambridge, Mass., assignor, by mesne assignments, to American Lead Company, Kittery, Me. Manufacturing white lead.	496,109	Apr. 25	2526	638	63	516
Browne, Arthur W. (See Johnston and Browne.)						
Browne, Arthur W. (See Johnston, Browne, and Davidson.)						
Browne, Arthur W., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Flexible shaft for dental engines.	492,266	Feb. 21	1920	479	62	1165
Browne, Arthur W., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine.	503,737	Aug. 22	2493	{ 620 621 }	64	1066
Browne & Dowd Manufacturing Company. (See Browne, William G., assignor.)						
Browne & Dowd Manufacturing Company. (See Browne and Palmer, assignors.)						
Browne, Frank E., Los Angeles, Cal. Coffee-urn or like vessel.	491,834	Feb. 14	1244	311	62	1013
Browne, Frank E., Los Angeles, Cal. Appliance for heating, illuminating, or culinary purposes.	498,380	May 30	3224	802	63	1258

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Browne, George W. (See Hill, John C., assignor.)						
Browne, James E., Elizabeth, N. J. Lightning-arrester	501,241	July 11	1125	285	64	219
Browne, Julian A., Kosciusko, Miss. Saddle-bags	501,821	July 18	2055	506	61	403
Browne, William G., assignor to Browne & Dowd Manufacturing Company, Meriden, Conn. Can-opener	501,322	July 11	1258	315	64	241
Browne, William G., and W. D. Palmer, assignors to Browne & Dowd Manufacturing Company, Meriden, Conn. Padlock	506,665	Oct. 17	1475	371	65	307
Browne, William J., Gladstone, Minn. Sulky gang-plow	501,179	July 11	1035	262	64	203
Browne, William J., Gladstone, Minn. Gang or sulky plow	501,180	July 11	1036	262	64	203
Brownell, Frank A., assignor, by mesne assignments, to Eastman Kodak Company, Rochester, N. Y. Photographic shutter	501,866	July 18	2116	523	61	414
Brownell, George L., Worcester, Mass. Twisting-machine	499,204	June 13	773	184	63	1539
Brownell, James S., San Francisco, Cal. Belt for ore-concentrators	501,557	July 18	1631	408	64	329
Brownell, John R., Dayton, Ohio. Boiler	489,453	Jan. 10	732	195 196	62	169
Brownfield, William H., Dayton, assignor of one-half to L. K. Marty, Highlands, Ky. Blind-stile mortiser and borer	500,278	June 27	2552	623 624	63	1876
Browning, Clinton, deceased; F. Browning, Coraopolis, Pa., administrator. Cigar-bunching machine	494,521	Mar. 28	2849	713 714	62	1949
Browning, Frank, administrator. (See Browning, Clinton.)						
Browning, John M., Ogden, Utah Ter. Gas-operated breech-loading gun	502,549	Aug. 1	509	121 122	64	660
Browning, John M., Ogden, Utah Ter., assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine-firearm	499,005	June 6	462	106	63	1472
Browning, John M., Ogden, Utah Ter., assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine-firearm	499,007	June 6	468	109 110	63	1473
Browning, John M., Ogden, Utah Ter., assignor to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading firearm	511,677	Dec. 26	3143	769	65	2033
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Magazine-firearm	492,459	Feb. 28	2224	556 557	62	1239
Browning, John M. and M. S., Ogden, Utah Ter., assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine catch for magazine-firearms	499,006	June 6	465	109	63	1472
Browning, Matthew S. (See Browning, John M. and M. S.)						
Browning, William, Accrington, England, assignor to Arnold Print Works, North Adams, Mass. Printing colors with aniline-black	491,673	Feb. 14	997		62	964
Brownson, Ralph, St. Paul, Minn. Horse-collar	507,209	Oct. 24	2425	598	65	492
Brownson, William A., Viola, Ill. Foot-guard for railway-frogs, &c	506,413	Oct. 10	1077	267	65	217
Brubaker, Andrew, Ashland, Ohio. Bung	504,060	Aug. 29	2988	747	64	1177
Brace, Avery C., and J. W. Warnock, South Pittsburg, Tenn. Apparatus for casting sash-weights	490,184	Jan. 17	1894	494	62	419
Bruce, Clark, Chicago, Ill. Vapor-burner	502,029	July 25	2388	600	64	541
Bruce, Fred W., Mayport, Fla. Rotary valve	492,267	Feb. 21	1921	479	62	1165
Bruce, John M., Pittsburg, Pa. Means for filtering and cooling water	500,528	June 27	2944	723	63	1947
Bruce, Robert N., Sperryville, Va. Fire-escape	489,368	Jan. 3	590	159	62	127
Bruch, Frederick W., Cleveland, Ohio. Machine for upsetting metal	504,909	Sept. 12	989	254	64	1471
Bruckner, Charles C., assignor to National Engraving Machine Company, Chicago, Ill. Engraving-machine	507,610	Oct. 31	3111	760 761	65	636
Brudon, Joseph, Camden, assignor of one-half to R. S. Doughty, Glassborough, New Jersey. Window	499,008	June 6	472	110	63	1473
Brueck, Otto, Jersey City, N. J. Washtub	495,390	Apr. 11	1395	349	63	276
Brueger, Abraham, assignor to Muskegon Chemical Fire Engine Company, Muskegon, Mich. Alarm-bell	500,187	June 27	2417	588	63	1852
Brueger, Abraham, assignor to Muskegon Chemical Fire Engine Company, Muskegon, Mich. Vehicle-brake	500,188	June 27	2418	589	63	1852
Brueger, Abraham, assignor to Muskegon Chemical Fire Engine Company, Muskegon, Mich. Chemical fire-engine	500,189	June 27	2419	589	63	1852
Brueger, Abraham, assignor to Muskegon Chemical Fire Engine Company, Muskegon, Mich. Chemical fire-engine	500,190	June 27	2421	590 591	63	1853
Bruening, William, East Orange, N. J. Phonograph	499,370	June 13	1046	254	63	1588
Bruening, William, East Orange, N. J. Phonograph	511,402	Dec. 26	2706	656	65	1952
Bruff, Charles M., Cummings, Ill. Recording weighing-scale	492,708	Feb. 28	2626	650 651	62	1321
Bruger, Theodor, assignor to Hartmann & Braun, Bockenheim, near Frankfort-on-the-Main, Germany. Electric measuring apparatus	511,503	Dec. 26	2865	694	65	1981
Brüggemann, August, Breslau, Germany. Sanding device for railway-locomotives	496,119	Apr. 25	2581	649	63	526
Brugman, Otto J., Manistee, Mich. Lock and latch	509,016	Nov. 21	1690	417	65	1106
Brugman, P. E., et al. (See Graves, John W., assignor.)						
Bruhns, Henry A., Milwaukee, Wis. Rail-sweeper	509,871	Dec. 5	30	7	65	1416
Bruley, Calixte, assignor of two-thirds to A. P. Yale and J. Bruley, Milwaukee, Wis. Washing-machine	501,268	July 11	1168	296	64	227
Bruley, Joseph, et al. (See Bruley, Calixte, assignor.)						
Brunbauer, Ferdinand, Vienna, Austria-Hungary. Lubricator	493,475	Mar. 14	1108	285	62	1590
Brunbauer, Ferdinand, Vienna, Austria-Hungary. Injector	495,778	Apr. 18	2023	512	63	407
Brunbauer, Ferdinand, Vienna, Austria-Hungary. Injector	500,752	July 4	349	92, 93	64	65
Brundage, Samuel M., Indianapolis, Ind. Deflector for ironing-machines	509,510	Nov. 28	2583	625	65	1267
Brundin, Per Walfrid, assignor of one-half to E. Tornblom, New York, N. Y. Cheese case and cutter	502,170	July 25	2616	659	64	523
Brunelle, François X., Worcester, Mass. Steam generator or heater	491,523	Feb. 14	761	193	62	915
Brunner, Martin, Buckland, Ohio. Pulverizer or harrow	509,068	Nov. 21	1774	437	65	1122
Brunner, Preston M., St. Louis, Mo. Building engine-foundations	501,914	July 25	2215	552 553	64	447
Brunk, Christian H., Harrisonburg, Va. Wire fence and tightener	508,465	Nov. 14	793	196	65	919
Brünler, Oscar, Eutritsch-Leipsc, Germany. Petroleum-engine	507,987	Nov. 7	18	5, 6	65	762
Brünler, Oscar, Eutritsch-Leipsc, Germany. Petroleum-motor	507,988	Nov. 7	19	6	65	762
Brünler, Oscar, Eutritsch-Leipsc, Germany. Petroleum-motor	507,989	Nov. 7	19	6	65	762
Brünler, Oscar, Eutritsch-Leipsc, Germany. Petroleum-motor	507,990	Nov. 7	20	7	65	762
Brunner, Charles, and J. H. Goodwin, Peru, Ill. Combined match-safe and cigar-cutter	502,807	Aug. 8	958	233	64	757
Brunner, Edward C., and W. J. Renkel, Cleveland, Ohio. Laundry-tub	501,763	July 18	1975	488	64	389
Brunney, Daniel F., Lancaster, Ohio, assignor of one-half to M. W. Brindle and C. E. Reese. Cider mill and press	490,335	Jan. 24	2165	565	62	484
Bruno, Désiré, Avondale, Ill. Trammel-point	493,062	Mar. 7	449	113	62	1448
Bruno Nordberg Company. (See Nordberg, Bruno V., assignor.)						
Brunson, Horace, Chicago, Ill., assignor of one-half to C. C. Coulter, Mansfield, Ohio. Pav-ing-block	508,537	Nov. 14	922	226	65	944

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Brunswick-Balke-Collender Company. (See Cunningham, Patrick M., assignor.)						
Brunton, David W., Aspen, Colo., assignor of one-half to Sheffield Car Company, Three Rivers, Mich. Velocipede-car	508,500	Nov. 14	854	211	65	932
Brush Electric Company. (See Adams, Thomas E., assignor.)						
Brush Electric Company. (See Pfannkuche, Gustav and A., assignors.)						
Brush, George E., Danbury, Conn. Machine for attaching sweats and bands to hats	494,365	Mar. 28	2604	654	62	1905
Brush, George S., et al. (See Robertson, Archibald J., assignor.)						
Brush, William J., and H. C. Fayette, Oakville, Canada. Car-coupling	495,779	Apr. 18	2026	512	63	407
Brust, Peter, St. Francis, Wis. Padlock	495,217	Apr. 11	1117	279	63	225
Brustlein, Henri A., Unieux, France. Casting ingots	504,322	Sept. 5	17	5	64	1274
Bryan, Clarence H., Chicago, Ill. Electric battery	489,668	Jan. 10	1045	272	62	233
Bryan, Darius, Washington Court-House, Ohio. Fence and stay	502,345	Aug. 1	161	37	64	596
Bryan, George W., Rowayton, Conn. Tire for carriage-wheels	502,808	Aug. 8	959	233	64	757
Bryan, Guy M., Jr., et al. (See Wright, George H., assignor.)						
Bryan, John, assignor of two-thirds to H. Wimberg and J. Egli, Evansville, Ind. Hoop and handle fastener	506,190	Oct. 3	642	163	65	124
Bryan, John C., assignor of one-half to F. W. Miller, Atlanta, Ga. Interchangeable tire and sleeve-journal for car-wheels	496,968	May 9	939	246	63	807
Bryant, Alden B., assignor of one-half to H. Wolf, Boston, Mass. Potato-digger	491,981	Feb. 21	1476	367	62	1073
Bryant, Charles K. (See Doebler, Charles F., assignor.)						
Bryant, Charles K. (See Doebler and Bryant.)						
Bryant, Elbert W., and S. Kinkert, Ithaca, Mich. Rail-brace	500,376	June 27	2716	667	63	1905
Bryant Electric Company. (See Bryant, Waldo C., assignor.)						
Bryant, Everett B., Providence, and R. J. Victor, East Providence, assignors to American Ship Windlass Company, Providence, R. I. Windlass-gear	498,740	May 30	3847	948	63	1367
Bryant, John. (See Bryant, Wiley E., M. Z., and J.)						
Bryant, Moses Z. (See Bryant, Wiley E., M. Z., and J.)						
Bryant, Noah, assignor of one-half to J. Hoek, Otsego, and G. E. Bardeen, Kalamazoo, Mich. Feed-regulator for paper-machines	495,013	Apr. 11	758	193	63	160
Bryant, Reuben, Adrian, Mo. Adjustable desk	498,842	June 6	162	39	63	1420
Bryant, Waldo C., assignor to Bryant Electric Company, Bridgeport, Conn. Socket for incandescent electric lamps	502,655	Aug. 1	684	164	64	691
Bryant, Waldo C., assignor to Bryant Electric Company, Bridgeport, Conn. Socket for electric lamps	509,297	Nov. 21	2173	522	65	1199
Bryant, Wiley E., M. Z., and J., Milan, Tenn. Insecticide	501,323	July 11	1259		64	242
Bryant, William H., assignor of one-half to N. D. Trilling, J. B. Rainey, A. L. Gaines, R. M. Weaver, and J. W. O'Neill, Clarksville, Tex. Steam-compress	494,701	Apr. 4	272	69	63	55
Bryce, Albert O., Caryville, and E. R. Stanton, Durand, Wis. Reel-carrying frame	501,822	July 18	2056	507	64	403
Bryce, Andrew, Allegheny, assignor of nine-twentieths to C. A. O'Brien, Pittsburg, Pa. Apparatus for combustion	510,673	Dec. 12	1418	{ 350 } { 351 }	{ 65 }	1690
Bryden, Edward O., assignor of one-half to W. F. Combs, Reno City, Okla. Ter. Axle-lubricator and dust-guard	506,203	Oct. 10	692	174	65	142
Bryden, Williamson, Boston, Mass. Veterinary appliance	492,268	Feb. 21	1923	479	62	1165
Brydson, John J., and J. A. Greathouse, Temple, Tex. Swing	502,610	Aug. 1	606	144	64	677
Bryon, William J. O., Jr., New York, N. Y. Exercising-machine	499,205	June 13	775	184	63	1540
Bryson, Charles W., et al. (See Kitton, John C., assignor.)						
Bubar, John H. (See Dodge, Willis, assignor.)						
Buch, John H. (See Buch, Royer S., assignor.)						
Buch, Royer S., assignor to J. H. Buch, Elizabethtown, Pa. Cultivator	502,171	July 25	2617	{ 659 } { 660 }	{ 64 }	523
Buchanan, Archibald, Jr., Ayr, Scotland. Floor for stables, &c	492,777	Mar. 7	8	2, 3	62	1360
Buchanan, Charles G., New York, N. Y. Magnetic ore-separator	497,117	May 9	1164	298	63	846
Buchanan, David R., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Apparatus for enameling dials	503,525	Aug. 15	2126	{ 533 } { 534 }	{ 64 }	982
Buchanan, Findley, et al. (See Boyd, George W., assignor.)						
Buchanan, George W. (See Meily and Buchanan.)						
Buchanan, James, Indianapolis, Ind. Ground-pulverizer	495,105	Apr. 11	922	233	63	192
Buchanan, James, Indianapolis, Ind. Vehicle-wheel	499,514	June 13	1305	307	63	1632
Buchanan, James, Jr. (See Easton, Watt, and Buchanan.)						
Buchanan, James, Jr., Liverpool, England. Apparatus for charging furnaces with metal	505,348	Sept. 19	1697	{ 437 } { 438 }	{ 64 }	1616
Buchanan, John P., Boston, Mass., assignor to Hall Signal Company, of Maine. Circuit-controlling device	497,489	May 16	1791	450	63	972
Buchanan, Luther H., Pasadena, Cal. Electric-arc lamp	502,948	Aug. 8	1202	296	64	802
Buchanan, Luther H., Pasadena, Cal. Game appliance	503,942	Aug. 29	2787	699	64	1140
Buchanan, Nancy J., Ickesburg, Pa. Skirt-protector	510,324	Dec. 5	799	193	65	1562
Buchanan, Patrick H., et al. (See Boyd, George W., assignor.)						
Buchel, Jules, New Orleans, La. Pressure-regulator for cane-mills	497,301	May 16	1493	376	63	919
Bucher & Gibbs Plow Company. (See Ream, George W., assignor.)						
Bucher & Gibbs Plow Company. (See Stone and Ream, assignors.)						
Buchholz, August, Boent Creek, Mo. Machine for cutting washers	507,210	Oct. 24	2426	598	65	492
Buchmiller, Dulon F. (See Amwake, Jacob B., assignor.)						
Buck, Chester J. (See Buck, Robert J. and C. J.)						
Buck, Edwin C., and W. M. Barnes, assignors to J. J. Boyle, Philadelphia, Pa. Tag	492,085	Feb. 21	1630	404	62	1104
Buck, Frances C. (See Buck, James A., assignor.)						
Buck, Fred., Saginaw, Mich. Tape-measure	498,104	May 23	2757	689	63	1160
Buck, George N., assignor to George N. Buck Manufacturing Company, Mattoon, Ill. Clasp for garment-supporters	507,646	Oct. 31	3181	778	65	648
Buck, James A., assignor to F. C. Buck, Crescent, N. Y. Brick-mold sander	499,206	June 13	778	{ 184 } { 185 }	{ 63 }	1540
Buck, Lewis P., and F. D. Sweeten, Wilmington, Del. Printing-telegraph	506,973	Oct. 17	1983	492	65	401
Buck, Raphael, New York, N. Y. Hat	506,100	Oct. 3	466	121	65	91
Buck, Robert J., and C. J., Bridgeton, N. J. Furnace for welding, &c	503,926	Aug. 22	2760	692	64	1118
Buck, Taylor S., and B. G. Volger, New York, N. Y. Rubber tire	508,466	Nov. 14	794	196	65	920
Buck, Vertrude P., Auburn, Me. Thread-cutting attachment for shoe-sewing machines	495,542	Apr. 18	1642	412	63	341
Buckeye Automatic Car Coupler Company. (See Timms, James, assignor.)						
Buckeye Iron and Brass Works. (See Krutzsch, William, assignor.)						
Buckhalter, Frederick, et al. (See Diebel, William, assignor.)						
Buckhalter, Frederick, Ashbourne, Pa. Circular-knitting machine	510,401	Dec. 12	927	223	65	1600
Buckingham, George. (See Lovell and Buckingham.)						
Buckingham, Herman C., New Milford, Conn. Standard for wagon-bolsters	502,346	Aug. 1	162	38	64	596
Buckingham, John L., et al. (See Hall, Henry, assignor.)						
Buckingham, John L., and C. S. McCrory, Hermosa, S. D. Hasp-lock	498,457	May 39	3346	833	63	1281
Buckingham, Roswell H., Chicago, Ill. Harrow	491,036	Jan. 31	3315	845	62	724

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Buckler, Michael, administrator. (See Haefner, Hugo.)						
Buckley, John F., <i>et al.</i> (See Gledhill, Walter, assignor.)						
Buckley, John P., assignor of one-third to J. G. Kostmayer, C. Schoeneck, and O. Helmann, New Orleans, La. Elevator	511,679	Dec. 26	3146	{ 769 770 }	65	2033
Buckley, John W. (See Sutton and Buckley.)						
Buckley, Peter J., Rochester, N. Y., assignor to Rochester Lasting Machine Company, Minneapolis, Minn. Lasting-pinchers	497,440	May 16	1711	432	63	959
Buckley, Thomas H., Worcester, assignor of one-half to E. Hamel, Lynn, Mass. Lunch-wagon	489,893	Jan. 10	1379	359	62	300
Buckmann, William F., Detroit, Mich. Current-wheel	495,780	Apr. 18	2027	513	63	407
Bucksey, Harry. (See Zahringer and Bucksey.)						
Bucyrus Steam Shovel and Dredge Company. (See Douglas, William M., assignor.)						
Bud, Siegmund, <i>et al.</i> (See Kuestermann and Gottschalk, assignors.)						
Budd, Harry H., Rochester, N. Y. Turned shoe	509,149	Nov. 21	1917	469	65	1150
Budd, John C., Defiance, Ohio. Churn	505,026	Sept. 12	1180	{ 302 303 }	64	1507
Budd, Robert, Bowmanville, Canada. Post-hole digger	499,962	June 20	2021	490	63	1771
Budue, Alexander, Berlin, Germany. Water-trap for sewers	493,750	Mar. 21	1584	403	62	1699
Budke, John F., Cannonsburg, Pa. Grinding and polishing tool	504,519	Sept. 5	347	88	64	1334
Budlong, Edward L., Chicago, Ill., assignor to W. O. Talcott, Providence, R. I. Method of and machine for making sheet-metal belt-fasteners	503,035	Aug. 8	1336	329	64	826
Budro, Judson S., assignor to Ingersoll-Sergeant Drill Company, New York, N. Y. Bit for channeling-machines	505,972	Oct. 3	265	70	65	52
Buechner, John, Battle Creek, Mich. Toe-weight	503,404	Aug. 15	1940	482	64	949
Buehl, Arthur B., Chicago, Ill. Adjustable coat-bust	497,423	May 16	1677	{ 423 424 }	63	953
Buehl, Edward W., Chicago, Ill. Display-hanger	510,468	Dec. 12	1041	249	65	1621
Buel, Jesse A., Akron, Ohio. Table-leg fastening	494,547	Apr. 4	18	4	63	5
Buell, Benjamin F., Duff, Nebr. Rein attachment	492,978	Mar. 7	327	82	62	1424
Buerger, Otto W., Quincy, Ill. Watchcase-pendant	503,714	Aug. 22	2455	611	64	1058
Buerkle, Bernard A., Jr. (See Buerkle, Charles W. and B. A., Jr.)						
Buerkle, Charles W. and B. A., Jr., Pittsburg, Pa. Apparatus for pumping gas	505,973	Oct. 3	267	71	65	52
Buerling, Charles. (See Grosch, Allenberg, and Buerling.)						
Buff, Frank J., Milwaukee, Wis. Thill-coupling	509,017	Nov. 21	1691	417	65	1106
Buffalo Dental Manufacturing Company. (See Lewis, Theodore G., assignor.)						
Buffalo Electrotube and Engraving Company. (See Gleason, Alexander, assignor.)						
Buffington, Calvin A., Berkshire, N. Y. Thill-coupling	496,774	May 2	610	163	63	728
Buffinton, Elisha W., assignor of one-half to A. F. Dow, Fall River, Mass. Cleat for holding a plurality of insulated electric wires	505,215	Sept. 19	1490	389	64	1577
Buffinton, Elisha W., assignor of one-half to A. F. Dow, Fall River, Mass. Cleat for holding insulated electric wires	505,912	Oct. 3	176	45	65	34
Bufford, George W., Ithaca, N. Y. Wrench	489,454	Jan. 10	737	196	62	171
Bufford, George W. and J. E. Kitson, Ithaca, N. Y. Pipe-wrench	469,455	Jan. 10	737	196	62	171
Bufinger, W. H., <i>et al.</i> (See Wilson, Robert R., assignor.)						
Bufkin, Samuel, and C. Snyder, Battle Creek, Mich. Straw-stacker	501,242	July 11	1126	{ 286 287 }	64	220
Bühler, Emil W. R. von, Berlin, Germany. Pneumatic tool	510,155	Dec. 5	528	122	65	1510
Buhoup, Harry C., Chicago, Ill. Car-coupling	491,207	Feb. 7	237	60	62	793
Buhoup, Harry C., Chicago, Ill. Car-coupling	498,381	May 30	3226	802	63	1258
Buhoup, Harry C., Chicago, Ill. Buffer and vestibule connection for passenger-cars	503,647	Aug. 22	2347	586	64	1037
Buhrman, Edward R., Cincinnati, Ohio. Hinge	506,154	Oct. 3	561	146	65	109
Buick, David D., Detroit, Mich. Discharge-valve for water-closet tanks	502,611	Aug. 1	607	145	64	677
Bule, Edward R., Ogden, Utah Ter. Trunk-strap	494,459	Mar. 28	2745	689	62	1930
Bulen, George F., Bayonne, N. J. Electric alarm system	506,841	Oct. 17	1772	{ 446 447 }	65	361
Bulkeley, William F. (See Hill, Norfleet, assignor.)						
Bull, Annabell C., Peoria, Ill. Cake or pudding stirrer	502,066	July 25	2447	615	64	490
Bull, Charles H., New York, N. Y. Asphalt pavement	505,699	Sept. 26	2345	593	64	1750
Bull, Edward E., assignor of one-half to A. H. Wood, Whitwell, Tenn. Hame-fastener	506,306	Oct. 10	876	216	65	178
Bull, Julia L. (See Bull, Willie S., assignor.)						
Bull, Willie S., assignor to J. I. Bull, Buffalo, N. Y. Two-wheeled vehicle	495,014	Apr. 11	760	193	63	161
Bull, Willie S., assignor to J. I. Bull, Buffalo, N. Y. SULKY	495,015	Apr. 11	761	194	63	161
Bullard, Charles A., Sharon, Mich. Corn-harvester	511,403	Dec. 26	2709	{ 656 657 }	65	1952
Bullard, Edgar R., Wheeling, W. Va. Camera	505,813	Oct. 3	15	4, 5	65	6
Bullard, Edgar R., Wheeling, W. Va. Photographic-plate holder	508,204	Nov. 7	371	91	65	827
Bullard, Edward P. (See Libby, Charles L., assignor.)						
Bullard, John F., Swanton Junction, Vt. Overshoe	502,275	Aug. 1	16	4	64	569
Bullard, Kennedy C., Milledgeville, Ga. Trace-carrier	492,508	Feb. 28	2318	575	62	1257
Bullard, Kennedy C., assignor of one-half to B. D. Brown, Milledgeville, Ga. Harrow	490,326	Jan. 24	2166	565	62	485
Bullock, Alanson B., Canton, Mass. Twisting-machine	497,762	May 23	2230	558	63	1068
Bullock, Barnet E. (See Nogar, Russell H., assignor.)						
Bullock, Charles, North Cambridge, Mass. Method of and apparatus for treating alcoholic liquors	497,857	May 23	2366	593	63	1091
Bullock, Edmund L., Hartford, Conn. Sash-balance	491,507	Feb. 7	728	184	62	888
Bullock, Edwin R., Pawtucket, R. I., assignor to J. & P. Coats, Limited, Paisley, Scotland. Doubling drum spooler	490,822	Jan. 31	2950	757	62	652
Bullock, Harvey E., Oakland, Cal. Vegetable or fruit crate	507,991	Nov. 7	21	7	65	762
Bullock, Milan C. (See Douglas, Samuel W., assignor.)						
Bullock, Milan C. (See Sypher, Abraham J., assignor.)						
Bullock, Milan C., Chicago, Ill. Governing device for compound engines	504,691	Sept. 5	620	{ 158 159 }	64	1387
Bullock, Milan C., and S. W. Douglass, Chicago, Ill.; said Douglass assignor to said Bullock. Mold	501,915	July 25	2216	553	64	447
Bullock, Milan C., and S. W. Douglass, Chicago, Ill.; said Douglass assignor to said Bullock. Rock-drill	511,119	Dec. 19	2211	542	65	1849
Bullough, John. (See Vaughan, John, assignor.)						
Bultman, Frederick H., assignor to Cleveland Type Foundry, Cleveland, Ohio. Type-mold	507,258	Oct. 24	2494	614	65	505
Bump, Charles M., Bay City, Mich. Bank-check book	492,956	Mar. 7	292	74	62	1417
Bumpus, George D., assignor of one-fourth to C. J. D. Stroecker, Zelienople, Pa. Oil-well pump	491,674	Feb. 14	998	252	62	964
Bunch, George D. (See Hudson, La Strong, and Bunch.)						
Bunch, James M., assignor of one-half to G. W. Aery, Willow Springs, Mo. Car-coupling	489,924	Jan. 17	1454	380	62	331
Bunker, Augustus S., Lawrence, Mass. Sanding device for street-cars	490,896	Jan. 31	3080	790	62	678

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Bunker, Harman, Barrie, Canada. Cart-top	499,963	June 20	2022	490	63	1771
Bunker, Harman, assignor of one-half to J. H. McKeggie, Barrie, Canada. Sled-brake	493,680	Mar. 21	1464	373	62	1675
Bunker, Harman, assignor of one-half to J. H. McKeggie, Barrie, Canada. Antirattler for thill-couplings	497,858	May 23	2369	593	63	1092
Bunker, Ira S., Nevada, Mo. Treadle	494,460	Mar. 28	2746	689	62	1930
Bunker, Ira S. and W. O., Nevada, Mo. Churn	500,990	July 4	717	188	64	130
Bunker, William, New York, and L. W. Butler, Brooklyn, N. Y. Tripod	496,851	May 9	735	195	63	770
Bunker, William I., La Grange, Ill. Gearing	492,778	Mar. 7	8	3	62	1361
Bunker, William I., La Grange, Ill. Bicycle	499,009	June 6	473	110	63	1474
Bunker, William O. (See Bunker, Ira S. and W. O.)						
Bunn, Harry C. (See Maloney, John P., assignor.)						
Bunn, John, assignor of two-thirds to W. C. Bronson and D. B. Cooke, Binghamton, N. Y. Cigar-machine	494,548	Apr. 4	18	4, 5	63	6
Bunnell, Francis A., assignor to C. C. Bradley and M. E. Bunnell, Syracuse, N. Y. Filter	492,134	Feb. 21	1707	425	62	1120
Bunnell, Mary E., et al. (See Bunnell, Francis A., assignor.)						
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Machine for making and repairing roads	510,955	Dec. 19	1947	475	65	1799
Bunnell, Morton G., Chicago, Ill., assignor, by mesne assignments, to A. B. Austin. Machine for making and repairing roads	511,287	Dec. 19	2493	608	65	1900
Buntain, Levi K., Dayton, Ohio. Oar-lock	506,974	Oct. 17	1987	492	65	402
Buntain, Levi K., Dayton, Ohio. Bird-trap	507,086	Oct. 17	2168	537	65	434
Bunting, William, Jr., Flushing, assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Bath-tub leg	507,259	Oct. 24	2495	614	65	505
Burbank, Arthur, et al. (See Wilson, Robert R., assignor.)						
Burbank, Clarence A., Portland, Ore. Bonquet-holder	500,469	June 27	2848	701	63	1929
Burbank, George A., St. Johnsbury, Vt. Fabric or paper cutter	493,351	Mar. 14	914	234	62	1553
Burbee, Aaron, Grand Rapids, Mich. Lock and latch	502,276	Aug. 1	17	4	64	570
Burbee, Aaron, Grand Rapids, Mich. Lock	503,648	Aug. 22	2349	587	64	1037
Burbee, Aaron, Grand Rapids, Mich. Lock and latch	503,649	Aug. 22	2351	587	64	1038
Burbridge, James, London, England. Producing variegated rubber	510,888	Dec. 19	1825		65	1776
Burch, Carrol P., Henderson, Ky. Display-cabinet for ribbons, laces, &c.	511,264	Dec. 19	2449	597 598	65	1893
Burch, Catherine H., St. Louis, Mo. Game apparatus	499,317	June 13	940	228	63	1568
Burch, Eli F., Baltimore, Md. Filter	506,666	Oct. 17	1477	371	65	307
Burch, George C., Westerly, R. I. Vehicle-spring	509,069	Nov. 21	1776	437	65	1122
Burchell, Norval L., and B. L. Nevius, Jr., Washington, D. C. Support for telephonic receivers	501,405	July 11	1405	352	64	269
Burden, Howard H. (See Renshaw and Burden.)						
Burdette, William W. (See Coddington, William C., assignor.)						
Burdick, Christopher G., Antigo, Wis. Thill-coupling	509,840	Nov. 28	3104	750	65	1387
Burdick, Mark S., Alameda, Cal. Feed apparatus	497,703	May 16	2126	530	63	1033
Burdin, William, Little Britain, assignor of one-half to H. A. McLaren, Wolfe Island, Canada. Attachment for mowers	498,205	May 23	2922	728	63	1189
Burford, Oskar F. (See Mueller and Burford.)						
Burgard, Henry P. (See Selby, Allen, assignor.)						
Burgess, James C. (See Williams and Burgess.)						
Burgess, Charles H., Eureka, Me. Hand-stamp	508,865	Nov. 14	1423	353	65	1041
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Door-bell	502,612	Aug. 1	608	145	64	678
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Knob attachment	503,450	Aug. 15	2005	497	64	960
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Door-bell	507,992	Nov. 7	22	7	65	763
Burgess, Ernest, Paterson, N. J. Take-up mechanism for narrow-ware looms	494,755	Apr. 4	362	91	63	71
Burgess, John G. (See Warenskjold and Burgess.)						
Burgess, John W., Hockessin, Del. Rotating screen for screening kaolin or analogous substances	493,751	Mar. 21	1585	403 404	62	1699
Burgess, Josiah. (See Thomas, Thomas, assignor.)						
Burgess, Melancthon, assignor of one-half to J. L. Smith, St. George, Utah Ter. Vehicle-wheel	500,703	July 4	272	73	64	51
Burgess, Neilson. (See Patten, Jefferson, assignor.)						
Burgess, Neilson. (See Towers, David I., assignor.)						
Burgess, Perry A., Steamboat Springs, Colo. Flue-cleaner	491,404	Feb. 7	571	143	62	857
Burgess, Perry A., Steamboat Springs, Colo. Fire-escape	491,405	Feb. 7	572	144	62	857
Burgess, William D., et al. (See Edison, Thomas A., assignor.)						
Burgess, William H. (See Wixson, George S., assignor.)						
Burgin, Bernhard, San Antonio, Tex. Car-coupling	509,872	Dec. 5	32	8	65	1416
Burgoin, Edward L., Los Angeles, Cal. Overflow, waste, and trap for basins, baths, &c.	497,465	May 16	1749	441	63	965
Burgon, Charles and H. Sheffield, England. Animal-shears	501,324	July 11	1260	316	64	242
Burgon, Harry. (See Burgon, Charles and H.)						
Burgroff, Frank, Eldorado, Wis. Lifting device for self-binding harvesters	503,526	Aug. 15	2129	535	64	983
Burgroff, Frank, Eldorado, Wis. Gear for portable engines	505,814	Oct. 3	20	5	65	7
Burk, Alfred E., Philadelphia, Pa. Bar or tack for slitted portions of articles of apparel	509,190	Nov. 21	1985	482	65	1164
Burk, Henry. (See Norris, William M., assignor.)						
Burk, Henry, et al. (See Little, Arthur D., assignor.)						
Burk, Michael F. (See Kenison and Burk.)						
Burk, Michael F., assignor of one-half to J. B. Kenison, Lynn, Mass. Folding shingling-bracket	511,721	Dec. 26	3215	788	65	2045
Burk, William H., Sheboygan, Wis. Feed-water heater	500,377	June 27	2716	667	63	1905
Burkard, David, Waverly, Md. Bushing	488,982	Jan. 3	12	3	62	5
Burke, Charles C., New York, N. Y. Pressure-filter	499,515	June 13	1306	307	63	1633
Burke, George H., Springfield, Vt., assignor of one-half to A. E. Snow, Brooklyn, N. Y. Lamp-stand	495,016	Apr. 11	762	194	63	161
Burke, James E., Anderson, Ind. Oyster-sack	501,053	July 11	819	213	64	164
Burke, James V., Chicago, Ill. Smokeless furnace	489,788	Jan. 10	1236	323	62	271
Burke, John. (See Hauty, Auguste J., assignor.)						
Burke, John, Niles, Mich. Tubular well	497,302	May 16	1495	376 377	63	920
Burke, John B., and J. F. Badger, Quitman, Ga. Combined planter and cultivator	493,063	Mar. 7	451	114	62	1448
Burke, John J., Roseburg, Ore. Railway cattle-guard	493,972	Mar. 21	1955	498	62	1788
Burke, Mary J., Rowley, Mass. Window-ventilator	496,839	May 2	712	189	63	746
Burke, Patrick J., assignor of one-half to J. J. Wade, Chicago, Ill. Closet-safe-pipe junction	506,842	Oct. 17	1776	447	65	362
Burke, Washington P., Quitman, Ga. Washboiler	503,262	Aug. 15	1710	421	64	908

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Burke, William P., Edina, Mo. Band-cutter and feeder.....	507,879	Oct. 31	3549	{ 873 874	{ 65	717
Burkhard, Thomas, Brooklyn, N. Y. Cooling apparatus.....	494,841	Apr. 4	511	128	63	99
Burkhardt, August G., Stuttgart, and G. Schüle, Hohenheim, Germany. Apparatus for distilling and rectifying.....	508,913	Nov. 21	1535	{ 374 212 213	{ 65	1075
Burkhardt, Lorenz, Kansas City, Mo. Railway-rail joint.....	510,381	Dec. 5	883	{ 724 725	{ 62	1578
Burkholder, John H., Ashland, Ohio. Adjustable stop device for hay-carriers.....	490,738	Jan. 31	2820	17	62	627
Burkland, Peter. (See Forstburg and Burkland.)						
Bürkle, Georg, Blaubeuren, Germany. Jacquard mechanism for looms.....	504,323	Sept. 5	17	5, 6	64	1274
Burkman, Walfrid, Tacoma, Wash. Combined trunk and dressing-case.....	506,033	Oct. 3	354	94	65	69
Burleigh, Joseph A., assignor of one-half to J. C. Moore, Lakeport, N. H. Knitting-machine.....	497,118	May 9	1166	{ 299 300 301	{ 63	847
Burleigh, Samuel G., Grand Rapids, Mich. Bed-bottom.....	495,690	Apr. 18	1880	471	63	381
Burlingame, Henry A., Pawtucket, R. I. Dental impression-tray.....	508,677	Nov. 14	1132	279	65	987
Burneister, Frederick, Cleveland, Ohio. Hot-air register.....	491,524	Feb. 14	762	194	62	915
Burnet, Robert, East Orange, N. J. Paper-feeding machine.....	489,925	Jan. 17	1455	{ 380 381	{ 62	331
Burnett, Christenberry L., Spartanburg, S. C. Folding harrow.....	504,428	Sept. 5	192	49	64	1306
Burnett, Elisha C., Cifax, Va. Horse-detacher.....	501,490	July 18	1522	382	64	308
Burnett, Henry D., Lynn, and S. E. Doane, Swampscott, Mass., assignors to General Electric Company, of New York. Electric incandescent lamp.....	500,849	July 4	500	130	64	91
Burnett, Henry D., Lynn, and S. E. Doane, Swampscott, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Incandescent electric light.....	505,913	Oct. 3	177	45	65	35
Burnett, Henry D., Lynn, and S. E. Doane, Swampscott, Mass., assignors to General Electric Company, of New York. Apparatus for treating filaments for incandescent electric lamps.....	508,678	Nov. 14	1133	290	65	987
Burnett, Isaac, Joliet, Ill. Coal-chute.....	489,926	Jan. 17	1459	381	62	332
Burnett, Rufus S., Dallas, Tex. Forge-tray.....	503,194	Aug. 15	1604	394	64	889
Burnett, William E. (See Merritt and Burnett.)						
Burnett, William S., Milwaukee, Wis. Combined phonograph and coin-operated mechanism.....	502,246	July 25	2749	695	64	548
Burnham, Arthur M., Gardiner, Me., assignor to L. Moody, Brooklyn, N. Y., and F. Hildreth, West Gardiner, Me. Mop-wringer.....	504,077	Aug. 29	3009	752	64	1181
Burnham, Arthur M., Gardiner, Me., assignor to L. Moody, Brooklyn, N. Y., and F. Hildreth, Gardiner, Me. Mop-wringer.....	509,070	Nov. 21	1777	438	65	1123
Burnham, Frank A., assignor to Union Manufacturing Company, Battle Creek, Mich. Valve for direct-acting engines.....	492,188	Feb. 21	1795	448	62	1139
Burnham, George, Jr., Portland, Me. Machine for cooking corn.....	503,577	Aug. 22	2222	557	64	1016
Burnham, William A., Irvington, N. Y. Ventilating apparatus.....	507,993	Nov. 7	23	7	65	763
Burnham, William H. (See Miller and Burnham.)						
Burnham, William H., and J. H. Miller, assignors to United States Wind Engine and Pump Company, Batavia, Ill. Windmill-tower.....	490,267	Jan. 24	2052	537	62	460
Burnham, Williams & Co. (See Volmer and Thomas, assignors.)						
Burnley, William, North East, Pa. Galvanic battery.....	498,422	May 30	3281	818	63	1269
Burns, George W., Thompsonville, Ill. Fencing-tool.....	506,155	Oct. 3	563	146	65	109
Burns, Henry B., assignor of one-half to W. Fick, Eau Claire, Wis. Sewing-machine attachment.....	510,771	Dec. 12	1583	394	65	1720
Burns, James, Otter River, Mass. Spinning-mule.....	498,105	May 23	2758	689	63	1161
Burns, James A., et al. (See Gersting, Charles H., assignor.)						
Burns, James M., Chicago, Ill., assignor to Lamson Consolidated Store Service Company, Boston, Mass. Store-service apparatus.....	502,277	Aug. 1	19	5	64	570
Burns, James M., Chicago, Ill., assignor to Lamson Consolidated Store Service Company, Boston, Mass. Store-service apparatus.....	502,395	Aug. 1	243	55	64	610
Burns, John, Los Angeles, Cal. Vegetable-digging machine.....	495,017	Apr. 11	764	195	63	162
Burns, John, Rochester, assignor of one-half to J. H. Reynolds, Troy, N. Y. Apparatus for burning hydrocarbons mixed with air and superheated steam.....	490,470	Jan. 24	2372	614	62	524
Burns, Michael J., Lowell, Mass., assignor to Gamewell Fire Alarm Telegraph Company, of New York. Signaling-telegraph.....	509,873	Dec. 5	33	8	65	1417
Burns, Oreian B., San Francisco, Cal. Brake for bicycles.....	502,949	Aug. 8	1204	296	64	802
Burns, Priscilla M., St. Louis, Mo. Flour-sifter with reversible closed bottom and cover.....	491,008	Jan. 31	3259	833	62	712
Burns, Samuel A., Bridgeport, Conn. Brake-handle.....	500,529	June 27	2946	723	63	1947
Burns, Walter F., San Francisco, Cal. Automatic weighing and recording scale.....	502,232	July 25	2699	681	64	539
Burns, William A., East Hickory, Pa. Hame-tug.....	489,706	Jan. 10	1106	285	62	245
Burns, Willis B., Syracuse, N. Y. Car-coupling.....	507,781	Oct. 31	3389	830	65	688
Burpee, George H., assignor to American Fuel Economizer and Engineering Company, New York, N. Y. Tube-scraper for feed-water heaters.....	502,223	July 25	2701	681	64	539
Burr, Aaron J., Griffin, Ga. Scraper-plow.....	511,583	Dec. 26	2991	729	65	2006
Burr, Archer H., Omaha, Nebr. Thermometer-frame.....	496,995	May 9	980	254	63	813
Burr, Charles T., Ithaca, assignor to Greene, Tweed & Co., New York, N. Y. Ratchet-drill.....	507,968	Oct. 31	3690	917	65	744
Burr, David J., Richmond, Va. Machine for applying labels to plug-tobacco.....	493,476	Mar. 14	1112	{ 285 286	{ 62	1590
Burr, James B., Bayshore, N. Y. Horseshoe.....	507,525	Oct. 31	2953	724	65	606
Burr, Melbourne C., Minneapolis, Minn. Clothes-drier.....	494,247	Mar. 28	2412	608	62	1869
Burrell & Co., D. H. (See Hart, Frederick, assignor.)						
Burrell & Co., D. H. (See Lundstrom, Carl J., assignor.)						
Burrell & Co., D. H. (See Womersley, William, assignor.)						
Burrell, James B., and W. J. Doidge, Wright's, Cal. Machine for pricking prunes or plums.....	499,182	June 6	737	175	63	1519
Burrell & Whitman. (See Naylor, James, Jr., assignor.)						
Burress, John. (See Tullis, John T., assignor.)						
Burroughs, William S., assignor to American Arithmometer Company, St. Louis, Mo. Calculating-machine.....	504,963	Sept. 12	1075	{ 275 276 277	{ 64	1487
Burroughs, William S., assignor to American Arithmometer Company, St. Louis, Mo. Recording device for calculators, &c.....	505,078	Sept. 12	1278	329	64	1525
Burrowes, Edward T., Portland, Me. Attachment to frictional holding mechanisms for spring-actuated shades.....	493,885	Mar. 21	1789	457	62	1738
Burrowes, Edward T., Portland, Me. Holding mechanism for spring-actuated shades.....	501,674	July 18	1821	454	64	362
Burrowes, Edward T., Portland, Me. Holding mechanism for spring-actuated shades.....	510,114	Dec. 5	461	{ 103 104	{ 65	1496
Burrows, Amos E., and W. E. Clark, Picture Rocks, Pa. Automatic pump-controlling device.....	507,211	Oct. 24	2427	{ 598 599	{ 65	492
Burrows, Taylor. (See Donisthorpe and Burrows.)						
Burry, John, New York, N. Y. Circuit-breaking apparatus.....	510,156	Dec. 5	531	122	65	1510

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Burson, William W., Chicago, Ill. Knotting-hook for tyers for grain-binders.....	490,636	Jan. 31	2656	685	62	595
Burt, Charles A., Rochester, N. Y. Can-labeling machine.....	502,480	Aug. 1	385	92	64	637
Burt, Charles A., assignor to Burt Manufacturing Company, Rochester, N. Y. Can-wiping machine.....	490,100	Jan. 17	1761	459	62	392
Burt, Frank B., New York, N. Y. Block-signal for railways.....	493,228	Mar. 7	708	182	62	1497
Burt, George H., Millburn, N. J. Pool-ball.....	507,880	Oct. 31	3550	874	65	718
Burt, John J., Tres Pinos, assignor of one-half to M. P. Minor, San Francisco, Cal. Wheel for single-track railways.....	496,293	Apr. 25	2401	701	63	568
Burt Manufacturing Company. (See Burt, Charles A., assignor.)						
Burtch, Frank F. (See Devendorf and Burtch.)						
Burtchaell, Samuel W., San Francisco, Cal. Insulating-joint.....	506,034	Oct. 3	355	94	65	69
Burner, George A., Altoona, Pa. Lamp-burner.....	504,554	Sept. 5	405	103	64	1345
Burton, Augustus G., Chicago, Ill. Safe-locking device.....	502,613	Aug. 1	609	145 146	64	678
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Working brass by electricity.....	496,592	May 2	311	84	63	676
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electric forge.....	496,593	May 2	314	84, 85	63	676
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Apparatus for making blanks by electricity.....	496,591	May 2	310	84	63	676
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge.....	496,594	May 2	315	85	63	677
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge.....	496,775	May 2	611	163	63	728
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric-bath metal-heating apparatus and process.....	499,964	June 20	2023	491	63	1771
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electrical metal-working.....	505,263	Sept. 19	1558	406 407	64	1590
Burton, George F. (See Cairncross, John H., assignor.)						
Burton, George F. See Mann, George, assignor.)						
Burton, John M., Wichita, Kans. Stock-car.....	492,344	Feb. 21	2035	506 507	62	1188
Burton, John M., Wichita, Kans. Stock-car.....	492,345	Feb. 21	2039	507 508	62	1188
Burton, John M., Wichita, Kans. Stock-car.....	497,945	May 23	2515	628 629	63	1118
Burton, Mason M., North Salem, Mo. Hay-ricker.....	510,628	Dec. 12	1339	329	65	1675
Burton, Matthew, Chicago, Ill., assignor to Gilbert & Bennett Manufacturing Company, Georgetown, Conn. Animal-trap.....	498,909	June 6	228	67	63	1443
Burtscher, George, Chicago, Ill. Rivet-holding device.....	503,943	Aug. 29	2789	699	64	1141
Burvill-Holmes, Ernest, assignor of two-thirds to E. Y. Marsteller, Royersford, and A. Z. Keelor, Boyerstown, Pa. Anticribbing device.....	505,590	Sept. 26	2155	545	64	1716
Burwell, George A. (See Moore and Burwell.)						
Burwell, John J., Covington, Ky. Heating and ventilating railway-cars.....	491,468	Feb. 7	673	169	62	877
Bus, Caroline du, Horrem, Germany. Safety-catch for pins.....	501,184	July 11	1044	264	64	205
Busby, Nahum J., Maplewood, Mass. Bell.....	492,779	Mar. 7	9	3	62	1361
Busby, Nahum J., Maplewood, Mass. Gong or call-bell.....	504,705	Sept. 12	648	164	64	1404
Busek, Rudolf, Vienna, Austria-Hungary. Ticket stamping and cutting machine.....	500,797	July 4	424	111 112	64	78
Busenbenz, Jacob J., Rock Island, Ill. Dust-guard for axle-boxes.....	501,325	July 11	1262	316	64	242
Busenbenz, Jacob J., Rock Island, Ill. Car journal-box.....	503,405	Aug. 15	1941	482	64	949
Busenbenz, Jacob J., Rock Island, Ill. Dust-guard for journal-boxes.....	503,715	Aug. 22	2456	611	64	1058
Busenbenz, Jacob J., Rock Island, Ill. Dust-guard for journal-boxes.....	504,197	Aug. 29	3222	802 803	64	1221
Busenbenz, Jacob J., assignor to American Perfuming Machine Company, Chicago, Ill. Vending apparatus.....	489,432	Jan. 3	687	185	62	148
Busenbenz, Jacob J., and A. Woltmann, Rock Island, Ill. Guard attachment for car-axle-box lids.....	507,105	Oct. 24	2212	546	65	455
Bush, Andrew L. (See Daniels, Wolcott O., assignor.)						
Bush, Charles, Newburg, N. Y. Pot for molten metal.....	503,783	Aug. 22	2561	638	64	1079
Bush, Charles, Newburg, N. Y. Reed-puff.....	503,827	Aug. 22	2616	654	64	1090
Bush, Henry J., Westfield, Mass. Whip.....	492,606	Feb. 26	2471	614	62	1290
Bush, Hiram T., Detroit, Mich., assignor to Ideal Manufacturing Company, of Michigan. Support for water-closet seats.....	497,230	May 9	1334	339	63	877
Bush, William C., Wilmington, Del. Cartridge.....	505,089	Sept. 19	1299	334	64	1542
Bush, William H., Texarkana, Ark. Car-coupling.....	497,859	May 23	2370	593 594	63	1092
Bush, Zachariah T., assignor of one-half to H. H. Howe, Stanton, Mich. Lawn-mower sharpener.....	498,219	May 23	2943	732	63	1192
Bushnell, Benjamin F. (See Camp, Charles, assignor.)						
Bushnell, Emma F. A., Haverstraw, N. Y. Pocket outdoor mosquito-cap.....	499,965	June 20	2026	491 442 443 444 445 446 447	63	1772
Buss, Edward, St. Gall, and A. Saurer, Arbon, Switzerland. Embroidering-machine.....	503,309	Aug. 15	1788	444 445 446 447	64	921
Bussard, William, Port Jefferson, Ohio. Making artificial-stone pavements.....	500,530	June 27	2947	723	63	1947
Bustin, Robert, and T. I. McMackin; said Bustin assignor to C. F. Thompson, Boston, Mass. Safety attachment for cars.....	495,928	Apr. 18	2248	567	63	448
Bustin, William H., Boston, Mass. Die for manufacturing metallic harness-saddle trees.....	505,079	Sept. 12	1280	330	64	1525
Butcher, Tilman H., Blooming Grove, Tex. Load lifter and carrier.....	508,866	Nov. 14	1424	353	65	1041
Butfield, Charles J., et al. (See Gebhardt, William C., assignor.)						
Butler, Charles E., St. Michael's, Md. Dumping-wagon.....	502,278	Aug. 1	24	5	64	570
Butler, David V., New York, N. Y. Case hook and handle.....	510,526	Dec. 12	1127	273	65	1637
Butler, Elbridge, Conshohocken, Pa. Freezing-can for ice-machines.....	511,120	Dec. 19	2216	543	65	1850
Butler, Fred H., et al. (See Sherman, George C., assignor.)						
Butler, George, Cincinnati, Ohio. Brake-lever for vehicles.....	489,456	Jan. 10	739	197	62	171
Butler, George E., et al. (See Butler, James L., assignor.)						
Butler Hard Rubber Company. (See Gurnee, Isaac Q., assignor.)						
Butler Hard Rubber Company. (See Kiel, William, assignor.)						
Butler, Henry G. (See Butler, William and H. G.)						
Butler, Henry G., assignor of one-half to W. Butler, Kenosha, Wis. Scraper-operating apparatus.....	491,765	Feb. 14	1141	287	62	992

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Butler, Henry G., assignor of one-half to W. Butler, Kenosha, Wis. Scraper	493,421	Mar. 14	1012	261	62	1573
Butler, Jacob, assignor of one-half to J. Roth, Willow Point, Tex. Feed-cutter	503,716	Aug. 22	2458	611	64	1058
Butler, James F., Scranton, Pa. Mining-drill	489,246	Jan. 3	412	{ 114 115 }	62	92
Butler, James L., assignor of two-thirds to G. E. Butler and S. A. Howard, Huntley, N. C. Apparatus for wiring wood fences	492,323	Feb. 21	2001	498	62	1182
Butler, John, Ellsworth, Minn. Snoko purifier and consumer	494,522	Mar. 28	2854	714	62	1950
Butler, John S., Tehama, Cal. Gang-plow	498,741	May 30	3848	949	63	1368
Butler, Louis W. (See Bunker and Butler.)						
Butler, Maguler, assignor of one-half to Archer Manufacturing Company, Rochester, N. Y. Dental chair	490,637	Jan. 31	2657	{ 685 686 }	62	595
Butler, Maguler, assignor to C. J. Wichmann and L. W. Horn, Rochester, N. Y. Car-brake	495,165	Apr. 11	1042	260	63	211
Butler Manufacturing Company. (See Snell, Norman S., assignor.)						
Butler, Mary J., Peoria, Ill. Armpit-shield	498,877	June 6	229	54	63	1433
Butler, Paul, Lowell, Mass. Cartridge-machine	495,959	Apr. 25	2293	{ 578 579 }	63	472
Butler, Thomas H. (See Levey, Butler, and MacDonald.)						
Butler, Warren T., Chelsea, Mass. Canceling and register-actuating device for ballot-boxes	500,850	July 4	501	130	64	91
Butler, William. (See Butler, Henry G., assignor.)						
Butler, William. (See Davis and Butler.)						
Butler, William and H. G., Kenosha, Wis. Burning clay to make ballast, &c.	491,764	Feb. 14	1138	286	62	992
Butler, William and H. G., Kenosha, Wis. Scraper apparatus	494,320	Mar. 28	2523	636	62	1890
Butler, William H., Brooklyn, N. Y. Cigarette-machine	498,762	June 6	14	4	63	1391
Butler, William H., Brooklyn, N. Y. Cigarette	498,927	June 6	319	75	63	1448
Butler, William H., Waldwick, assignor to himself, A. Pflugh, and P. Stewerwald, Hoboken, N. J. Apparatus for drying brewers' grains, &c.	496,852	May 9	737	196	63	770
Buttricks, Frederick D., New Haven, Conn., assignor to W. S. King, Minneapolis, Minn. Lasting-machine	507,782	Oct. 31	3392	{ 830 831 }	65	688
Butt, Addison W., assignor to F. G. Butt, Springfield, Ohio. Cultivator	491,797	Feb. 14	1193	{ 298 299 }	62	1002
Butt, Frances G. (See Butt, Addison W., assignor.)						
Butt, Leroy S., North East, Pa., assignor to P. P. Mast & Company, Springfield, Ohio. Cultivator	505,506	Sept. 26	1977	508	64	1681
Butt, Moses E. (See Cadenhead, Benjamin F., assignor.)						
Büttel, Harry B., and W. H. Colson, Newark, N. J. Railway-switch	496,996	May 9	981	254	63	813
Butterfield-Mitchell Electric Heating Company. (See Jenkins, Samuel B., assignor.)						
Butterfield-Mitchell Electric Heating Company. (See Mitchell, Willis, assignor.)						
Butterfield, Walter A., Marseilles, Ill. Restaurant service	509,191	Nov. 21	1986	483	65	1164
Butterfield, William, Chicago, Ill. Self-binding harvester	494,321	Mar. 28	2525	636	62	1891
Butters, Samuel L., Clarksburg, W. Va. Folding crate	502,481	Aug. 1	389	93	64	638
Butterworth, Benjamin. (See Heckert, William, assignor.)						
Butterworth, John, Jr. (See Butterworth, William H. and J. Jr.)						
Butterworth, John B., San Francisco, Cal. Water-heating apparatus	506,975	Oct. 17	1988	492	65	402
Butterworth, William H. and J. Jr., Trenton, N. J. Thrashing-machine	490,944	Jan. 31	3156	{ 809 810 }	62	692
Button, Jesse, Springfield, Mass. Well-drilling machine	506,204	Oct. 10	694	{ 174 175 }	65	142
Buttrick, Charles G., Holyoke, Mass. Spindle bolster and step	490,337	Jan. 24	2167	565	62	485
Buttrick, Charles G., Holyoke, Mass. Spinning-machine spindle	505,507	Sept. 26	1979	508	64	1681
Butts, Arthur C. (See O'Marra, John, assignor.)						
Butts, Arthur C., and J. O'Marra, New York, N. Y. Cart	495,722	Apr. 18	1939	488	63	391
Butts, Charles W., Sag Harbor, N. Y., assignor to Fahys Watch Case Company, of New York. Apparatus for forming watchcase-pendants	492,739	Feb. 28	2670	{ 662 663 }	62	1329
Butts, Edward A., and H. L. Page, Washington, D. C. Cork-extractor	508,367	Nov. 7	633	155	65	875
Butts, Henry E., assignor of one-half to W. H. Mercer, Detroit, Mich. Car-wheel	499,778	June 20	1728	417	63	1720
Butz, Albert M., Oak Park, Ill. Temperature-regulator for electric heaters	510,889	Dec. 19	1827	451	65	1776
Butz, Edward M., Allegheny, Pa. Rolling-mill	499,651	June 13	1512	{ 362 363 364 }	63	1668
Butz, Edward M., Allegheny, Pa. Structural shape	499,652	June 13	1516	364	63	1669
Buxbaum, Asher I. F., Cincinnati, Ohio. Device for measuring tooth-roots	510,325	Dec. 5	799	193	65	1562
Buxbaum, Herbert H., Philadelphia, Pa. Coin-controlled apparatus	504,555	Sept. 5	406	{ 103 104 }	64	1345
Buxton, John E., Owatonna, Minn. Automatic grain-measurer	497,424	May 16	1678	424	63	953
Buxton, Parker J., et al. (See Pickering, Benjamin A., assignor.)						
Buxtorf, Emmanuel, Paris, France. Yarn-feeding device for knitting-machines	495,472	Apr. 18	1535	{ 384 385 386 }	63	322
Buyck, Florentin, Philadelphia, Pa. Heddle-actuating mechanism for looms	500,112	June 27	2258	{ 549 550 }	63	1823
Buyse, Edward, South Bend, Ind. Bicycle-lock	491,335	Feb. 7	458	118	62	835
Buzby, Isaac W. (See Williamson and Buzby.)						
Bye, Martin, and E. G. Parry, Worcester, Mass. Breech-loading firearm	490,065	Jan. 17	1705	445	62	379
Bye, Martin, and E. G. Parry, Worcester, Mass. Safety device for breakdown guns	495,298	Apr. 11	1256	{ 313 314 }	63	250
Byers, David A., King, Ind. Wire-ropeway grip	508,810	Nov. 14	1324	329	65	1023
Byers, Edward N. and J. J., Cameron, Mo. Car-coupling	508,277	Nov. 7	492	118	65	849
Byers, Henry W., New Castle, Pa. Automatic rail-frog	508,867	Nov. 14	1425	353	65	1041
Byers, Henry W., New Castle, Pa. Apparatus for unloading and distributing rails	508,868	Nov. 14	1426	354	65	1041
Byers, Jacob J. (See Byers, Edward N. and J. J.)						
Byers, Jesse S., Knoxville, Ill. Rake and loader	509,852	Nov. 28	3130	756	65	1392
Byers, John F., assignor to John F. Byers Machine Company, Ravenna, Ohio. Friction-brake	499,207	June 13	779	185	63	1540
Byers, John F., assignor to John F. Byers Machine Company, Ravenna, Ohio. Friction-clutch	499,208	June 13	780	185	63	1540
Byington, Albert, Rochelle, Ill. Scraper for disk harrows	492,385	Feb. 28	2107	525	62	1215
Byington, Albert, Rochelle, Ill. Harrow	497,367	May 16	1594	403	63	938
Byler, James K., Morgantown, Pa. Railway signaling apparatus	491,798	Feb. 14	1197	299	62	1003
Byler, James K., and H. S. Zook, Morgantown, Pa. Carriage-wrench	496,595	May 2	317	86	63	677
Byrd, Walter M., assignor of one-half to A. D. and W. D. Clark, Mount Gilead, N. C. Rotary steam-engine	501,598	July 18	1692	422	64	341
Byrkit, Christian S., assignor of one-half to L. C. Smith, Des Moines, Iowa. Book-holder	488,983	Jan. 3	13	4	62	5

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Byrkit, George E. (See Milburn, Byrkit, and Crabbs.)						
Byrne, Charles T., Chicago, Ill. Combined discharge and overflow siphon for washbasins, &c.	495,018	Apr. 11	767	195	63	162
Byrne, John F., Norwich, Conn. Stage apparatus	510,772	Dec. 12	1584	394	65	1720
Byrne, Joseph W., Boston, Mass. Anchor	503,694	Aug. 22	2423	603	64	1051
Byrne, William C., Chicago, Ill. Drier	491,075	Feb. 7	20	6	62	752
Byron, Henry, New York, N. Y. Coin-operated vending-machine	493,973	Mar. 21	1956	{ 498 499 }	{ 62 62 }	1768
Byron, Henry, assignor to Weeks & Campbell Company, New York, N. Y. Combined pen and penholder	499,653	June 13	1517	364	63	1669
C. T. Ham Manufacturing Company. (See Bergener, Charles, assignor.)						
C. T. Ham Manufacturing Company. (See Ham, Charles T., assignor.)						
Cabell, Flora B., et al. (See Cabell, Samuel G., assignor.)						
Cabell, Milton S., et al. (See Cabell, Samuel G., assignor.)						
Cabell, Samuel G., assignor to F. B. Cabell, Washington, D. C., M. S. Cabell, Quincy, Ill., and H. S. Brown, San Francisco, Cal. Apparatus for purifying feed-water	495,242	Apr. 11	1168	292	63	235
Cable, Albert, Pottsville, Pa. Fishing-rod	499,779	June 20	1730	418	63	1720
Cable, Frank D., assignor to Yost Manufacturing Company, Toledo, Ohio. Bicycle-saddle	494,408	Mar. 28	2675	671	62	1918
Cable, Frank D., assignor to Yost Manufacturing Company, Toledo, Ohio. Bicycle	494,803	Apr. 4	445	110	63	86
Cable, Frank D., assignor to Yost Manufacturing Company, Toledo, Ohio. Chain adjustment	494,804	Apr. 4	447	111	63	87
Cable, Frank D., assignor to Yost Manufacturing Company, Toledo, Ohio. Bicycle-saddle	495,391	Apr. 11	1396	349	63	276
Cable, Frank D., assignor to Yost Manufacturing Company, Toledo, Ohio. Attaching sprocket-wheels to crank-shafts of bicycles	496,681	May 2	462	124	63	703
Cable, Frank D., assignor to Yost Manufacturing Company, Toledo, Ohio. Mud-guard support for bicycles	511,405	Dec. 26	2711	657	65	1953
Cable, George W., New York, N. Y., assignor to himself, and J. T. Morehead, Leaksville, N. C. Machine for stripping and stemming tobacco-leaves	491,871	Feb. 14	1306	{ 322 323 324 }	{ 62 62 62 }	1025
Cable, Martin L., Reidsville, N. C. Car-coupling	490,800	Jan. 31	2920	750	62	645
Cabot, Godfrey L., Cambridge, Mass. Manufacture of lampblack	491,923	Feb. 14	1385	{ 346 347 }	{ 62 62 }	1041
Cabot, John A., assignor of one-half to F. A. Kirchner, Cincinnati, Ohio. Electro-medical apparatus	501,558	July 18	1632	408	64	330
Cabot, John W., Boston, Mass. Valve	490,945	Jan. 31	3161	810	62	693
Cabot, Samuel, Brookline, Mass. Sound-deadening packing for builders' use	511,584	Dec. 26	2992	729	65	2006
Cabus, Joseph, New York, N. Y. Door-check	505,893	Oct. 3	147	38	65	29
Caccialupi, Epimaco O., San Severino, Italy, assignor of one-half to A. Angeli, London, England. Clock striking mechanism	500,704	July 4	273	73, 74	64	51
Cacciatori, Peter, Chicago, Ill. Roasting apparatus	501,867	July 18	2118	524	64	414
Caddell, William E., London, England. Filter	502,030	July 25	2389	601	64	479
Cadenhead, Benjamin F., assignor of one-half to M. E. Butt, Blountsville, Ala. Cotton-scraper	489,119	Jan. 3	214	56	62	49
Cadenhead, Benjamin F., Union Grove, assignor of one-third to E. Gilbreath, Gunter-ville, Ala. Car-coupling	504,556	Sept. 5	408	104	64	1345
Cady, Frank E., Auburn, N. Y. Filter and cooler	500,737	July 4	329	88	64	62
Cady, George L., Lowell, Mass., assignor to Jackson-Cady Electric-Railway Signal Company, Portland, Me. Auto-mechanical railway-signal	495,691	Apr. 18	1881	471	63	381
Cady, Henry G., Pine Bluff, Ark. Stalk-cutter	494,248	Mar. 28	2413	608	62	1869
Caesar, Peter J., Duluth, Minn. Mail-bag	494,119	Mar. 28	2205	{ 562 563 }	{ 62 62 }	1831
Caffrey, Charles S., Camden, N. J. Sulky	506,414	Oct. 10	1078	268	65	218
Caffrey, James H., Philadelphia, Pa. Screen for carriages	510,773	Dec. 12	1585	{ 394 395 }	{ 65 65 }	1721
Cage, Henry B., (See Sherrod, Fletcher, assignor.)						
Cagigal, Justo P., San Augustin, Cuba. Stake-pocket for cars	494,409	Mar. 28	2676	671	62	1918
Cahall, William C., Philadelphia, Pa. Galvanic battery	489,522	Jan. 10	851	221	62	193
Cahill, Daniel M., (See Barry and Cahill.)						
Cahill, Edward, Emmetsburg, Iowa. Gate	493,477	Mar. 14	1115	286	62	1591
Cahill, Edward J., (See Brown, George M., assignor.)						
Cahill & Hall Elevator Company. (See Hall, Cofran I., assignor.)						
Cahill, Isaac W., and L. A. Dickinson, Salem, Oreg. Hop-carriage	507,881	Oct. 31	3552	874	65	718
				{ 187 188 189 190 191 192 }		
Cahill, Thaddeus, Washington, D. C. Type-writing machine	502,700	Aug. 8	771		64	729
Cahn, Alphonse. (See Herzberg, Nachman H., assignor.)						
Cahn, Isidor. (See Weyrich, Otto, assignor.)						
Cahoona, William, Jr., assignor to W. B. Young, New York, N. Y. Coin-controlled dice-throwing machine	502,876	Aug. 8	1068	263	64	778
Cahoone, Edwin R., Newark, N. J. Bridle-bit	510,890	Dec. 19	1828	451	65	1776
Caille, Adolph A., Saginaw, Mich. Store-service apparatus	491,076	Feb. 7	22	6, 7	62	752
Cain, John H., Brooklyn, N. Y. Pipe-hanger	508,914	Nov. 21	1537	374	65	1076
Cain, Jules. (See Nye, Charles, assignor.)						
Cain, Michael H., (See Stacey, Henry, assignor.)						
Caird, David, London, England. Manufacture of metal barrels or other like vessels	502,846	Aug. 8	1025	251	64	770
Cairncross, John H., assignor to G. F. Burton, Toronto, Canada. Advertising device	510,157	Dec. 5	534	123	65	1511
Cairns, Robert, Watertown, Wis. Differential-pattern machine	507,783	Oct. 31	3693	{ 831 832 }	{ 65 65 }	688
Cajar, Friedrich. (See Hunter and Cajar.)						
Calcutt, Reginald B., Chicago, Ill. Fruit-jar and cover	495,299	Apr. 11	1252	314	63	251
Calderon, Eustorjio. (See Santillana, Juan F., assignor.)						
Calderwood, George G., Biddeford, Me. Stovepipe attachment	503,760	Aug. 22	2530	629	64	1073
Caldwell, Alexander, Essex, Iowa. Disk attachment for cultivators	501,916	July 25	2221	{ 553 554 }	{ 64 64 }	448
Caldwell, Alexander, Essex, Iowa. Cleaner for cultivator-disks	501,917	July 25	2222	554	64	448
Caldwell, Alexander, Essex, Iowa. Agricultural implement	502,032	July 25	2395	602	64	480
Caldwell, Arthur R., (See McCruden, James, assignor.)						
Caldwell, Chester L., et al. (See Dion, Charles J., assignor.)						
Caldwell, Edward P., (See Heath and Caldwell.)						
Caldwell, Edward P., and F. H. Heath, Minneapolis, Minn., assignors to Heath Rail Joint Company, Waterloo, Iowa. Combined rail joint and tie	496,218	Apr. 25	2689	{ 674 675 }	{ 63 63 }	546

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Caldwell, Henry A., assignor to Electric Cutting Machine Company, Chicago, Ill. Cloth-cutting machine	502,031	July 25	2390	{ 601 602 }	64	479
Caldwell, Henry W., Chicago, Ill. Coupling for hollow shafts	501,918	July 25	2223	554	64	448
Caldwell, Homer M., Worcester, Mass. Revolver	511,406	Dec. 26	2712	658	65	1953
Caldwell, John A., Vancouver, Canada. Stair-beveling instrument	495,300	Apr. 11	1260	314	63	251
Caldwell, Robert W. (See Dixon, George E., assignor.)						
Caldwell, Sarah C., Nessen City, Mich. Kitchen article	501,823	July 18	2057	507	64	403
Caldwell, William. (See Boyne and Caldwell.)						
Caldwell, William, Coolamon, New South Wales. Point for augers	504,018	Aug. 29	2926	733	64	1165
Calhoun, Allan, <i>et al.</i> (See Jones, Joseph R., assignor.)						
Calhoun, Clara S. (See Calhoun, Daniel I., assignor.)						
Calhoun, Daniel I., Chicago, Ill., assignor to C. S. Calhoun. Excavating-scraper	506,667	Oct. 17	1478	{ 371 372 }	65	307
Calhoun, Hugh, Hot Springs, and A. M. Beam, Bear, assignors of one-third to P. H. Ellsworth, Hot Springs, Ark. Amalgamator	489,216	Jan. 3	364	101	62	83
Calhoun, Hugh, Hot Springs, and A. M. Beam, Bear, assignors to United States Desulphurizing, Dry-Chloridizing, and Amalgamating Company, Hot Springs, Ark. Extracting metals from ores	504,706	Sept. 12	649		64	1405
Calhoun, John C. (See Gause, Benjamin, assignor.)						
Calif, Stephen E., Wilson, Mo. Sulky-plow	508,811	Nov. 14	1326	329	65	1023
Califf, Frank, Elk Creek, S. D. Buckle	503,898	Aug. 22	2719	683	64	1110
California Petroleum and Asphalt Company. (See Bell, Arthur F. L., assignor.)						
Calkins, Almon H., Evanston, assignor to Chicago Oil Burner and Stove Company, Chicago, Ill. Oil-burner	497,490	May 16	1795	451	63	973
Call, Harry H., and A. A. Clough, Denver, Colo. Cotton-picker	490,101	Jan. 17	1764	439	62	392
Call, Harry H., and A. A. Clough, Denver, Colo. Cotton-picker	492,378	Feb. 21	2090	522	62	1198
Call, Theodore A., and R. A. Clark, Lewistown, Mont. Stove-hood	500,259	June 27	2526	618	63	1871
Call, Theodore A., and R. A. Clark, Lewistown, Mont. Stove-hood	506,205	Oct. 10	696	176	65	143
Callaghan, George F., Baltimore, Md., assignor of one-half to E. D. Durborow. Pneumatic tire	503,560	Aug. 15	2191	547	64	994
Callaghan, John J., and A. R. Horn, Stevens Point, Wis. Cattle-guard	489,601	Jan. 10	963	250	62	215
Callaghan, William S., assignor of one-half to C. T. Holloway, Baltimore, Md. Pneumatic tire	496,336	Apr. 25	2883	720	63	583
Callahan, Charles H., Alexandria, Va. Stair-builder's laying-out tool	494,322	Mar. 28	2526	{ 636 647 }	62	1891
Callahan, Cornelius, Canton, Mass. Car-signal	494,366	Mar. 29	2606	655	62	1905
Callahan, Frank, assignor to J. B. Klein, Bridgeport, Conn. Electrically-controlled door	509,116	Nov. 21	1866	457	65	1140
Callahan, John, Durango, Colo. Builder's jack	494,842	Apr. 4	512	128	63	99
Callan, James, assignor to Randolph & Clowes, Waterbury, Conn. Metal tubing	498,458	May 30	3347	833	63	1281
Callender, James J., Geneseo, Ill. Harrow	509,791	Nov. 28	3024	730	65	1371
Callender, Romaine, assignor of two-thirds to E. Hart and E. L. Goold, Brantford, Canada. Electro-motive device	498,763	June 6	16	4	63	1391
Callow, John J., Cleveland, Ohio. Making sign-letters	497,302	May 16	1497	377	63	920
Calm, Elizabeth, New York, N. Y. Cloth-winding attachment for sewing-machines	497,425	May 16	1680	{ 424 425 }	63	954
Cameron, Jay, assignor of three-fifths to A. Snow, Jr., New Bedford, Mass. Device for supplying abrading or polishing materials to cutting and polishing tools	507,212	Oct. 24	2429	599	65	493
Cambria Iron Company. (See Short, John N., assignor.)						
Cambridge City Punch, Shear and Roll Company. (See Horner, Elwood T., assignor.)						
Camden Iron Works. (See Matton, Frederick V., assignor.)						
Cameron, Alexander A., Cobbville, Ga. Bed-bottom	492,135	Feb. 21	1708	425	62	1121
Cameron, Alexander A., Cobbville, Ga. Bedstead	506,468	Oct. 10	1174	292	65	236
Cameron, Charles H., Rusk, Tex. Safety-valve	506,624	Oct. 10	1403	353	65	282
Cameron, David P., San Francisco, Cal. System for dumping cars	510,674	Dec. 12	1420	351	65	1690
Cameron, Frederick, and E. Potter, Quaker Springs, N. Y. Churn	507,414	Oct. 24	2760	677	65	557
Cameron, George W., Poplar Bluff, Mo. Watchmaker's tool	509,594	Nov. 28	2709	655	65	1312
Cameron, James W., West Bend, Wis. Window	491,279	Feb. 7	347	87	62	815
Cameron, John A., <i>et al.</i> (See Fishburn, John, assignor.)						
Cameron, John A., Cornwall, Canada. Antifriction journal-bearing	501,868	July 18	2119	524	64	414
Cameron, John M., East Lake, Ala. Cast-metal monument	498,506	May 30	3427	850	63	1295
Cameron, John S., assignor of one-half to W. Erskine, Evansville, Ind. Bran-packer	501,326	July 11	1263	317	64	242
Cameron, Joseph, assignor of two-thirds to A. M. Sheppard and J. Goodman, Findlay, Ohio. Dumping-wagon	496,853	May 9	739	196	63	770
Cameron, Murdick, assignor of one-half to A. McDonald, Minneapolis, Minn. Meat or bread cutter	489,457	Jan. 10	742	197	62	172
Cameron, Murdick, assignor of one-half to A. McDonald, Minneapolis, Minn. Fabric-turfing machine	492,780	Mar. 7	10	3, 4	62	1361
Cameron, Robert, Bernalillo, N. Mex. Ter. Bung or tenon extractor	507,611	Oct. 31	3114	761	65	636
Cameron, William, Milpitas, Cal. Hydraulic pump	502,950	Aug. 8	1205	296	64	802
Cammann, Oswald N. (See Brown, Cammann, and Wilcox.)						
Camp, Charles, assignor of one-half to B. F. Bushnell, Chicago, Ill. Smoke-consumer	490,539	Jan. 24	2483	640	62	546
Camp, Daniel W., Jr. (See Boardman, Wyman, assignor.)						
Camp, Horace B., Cuyahoga Falls, Ohio. Fence-post	505,156	Sept. 19	1400	359	64	1560
Camp, John C. (See Rosson, Alpine B., assignor.)						
Camp, John C., Vernon, Tex. Harness attachment	500,531	June 27	2948	724	63	1947
Company, Milton E., Hamilton, assignor of one-half to H. B. Peck, Kalamazoo, Mich. Car-brake	494,505	Mar. 28	2823	708	62	1945
Company, Milton E., Hamilton, assignor of one-half to H. B. Peck, Kalamazoo, Mich. Car-brake	495,960	Apr. 25	2296	580	63	472
Company, Milton E., Hamilton, assignor of one-half to H. B. Peck, Kalamazoo, Mich. Friction-clutch	506,767	Oct. 17	1652	414	65	339
Company, Milton E., Hamilton, assignor of one-half to H. B. Peck, Kalamazoo, Mich. Folding step for cars	507,415	Oct. 24	2761	677	65	557
Campbell, Albert, Branford, Conn. Device for sharpening drills	491,766	Feb. 14	1144	287	62	993
Campbell, Alexander, Griswold, Iowa. Plow-shield	4-9,145	Jan. 3	250	69	62	58
Campbell, Alexander, Hespeler, Canada. Car-brake	497,119	May 9	1177	301	63	849
Campbell, Alonzo C., Nashville, Tenn. Ore-separator	506,976	Oct. 17	1989	{ 492 493 }	65	402
Campbell, Archibald F., Portage la Prairie, Canada. Grain-scourer	493,065	Mar. 7	456	115	62	1449
Campbell Barrel Machine Company. (See Campbell, Henry, assignor.)						
Campbell & Bayly. (See Meermann, Gustav, assignor.)						
Campbell, Benjamin F., and J. H. McHugh, Newport, Ark. Air-alarm whistle	499,209	June 13	780	185	63	1540
Campbell, Carl T., assignor of two-thirds to L. M. Clark and A. R. Beack, Warren, Pa. Extension step-ladder	501,406	July 11	1407	352	64	270

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Campbell, Charles H., <i>et al.</i> (See Stebbins, James H., Jr., assignor.)						
Campbell, Charlie H., Ocala, Fla. Camera-stand for bicycles	511,043	Dec. 19	2078	515	65	1822
Campbell & Clute. (See Vermilyea, Eugene, assignor.)						
Campbell, Elmer F. (See Wilde and Campbell.)						
Campbell, Eveline L., San Francisco, Cal. Child's carriage	495,301	Apr. 11	1261	314	63	251
Campbell, George L., <i>et al.</i> (See Palmer, Israel Y., assignor.)						
Campbell, Hardy W., Aberdeen, S. D., assignor to T. H. Green, Minneapolis, Minn. Heater	502,701	Aug. 8	799	193	64	727
Campbell, Henry, Baltimore, Md. Method of and machine for doweling	502,656	Aug. 1	685	164 165	64	692
Campbell, Henry, Baltimore, Md. Crozing-machine	505,591	Sept. 26	2157	545 546	64	1716
Campbell, Henry, assignor to Campbell Barrel Machine Company, Baltimore, Md. Crozing-machine	492,137	Feb. 21	1710	426	62	1121
Campbell, Henry, assignor to Campbell Barrel Machine Company, Baltimore, Md. Stave-crozing machine	492,138	Feb. 21	1711	426	62	1121
Campbell, Henry, assignor of two-thirds to J. Marr and J. Barkley, Baltimore, Md. Thermometer	504,298	Aug. 29	3382	846	64	1251
Campbell, Henry H., Cleveland, Ohio, assignor of one-half to N. W. Taylor. Inclined grate, &c.	505,748	Sept. 26	2417	610	64	1762
Campbell, J. B., <i>et al.</i> (See Eldridge, Edward E., assignor.)						
Campbell, James A., assignor of one-half to J. M. Lockhart, New Orleans, La. Barrel-head-cutting machine	493,064	Mar. 7	452	114 115	62	1449
Campbell, James A., assignor of one-half to J. M. Lockhart, New Orleans, La. Oil-can	496,246	Apr. 25	2736	684	63	555
Campbell, James C., assignor of one-half to J. D. Roberson and J. D. Robinson, Bath, Me. Car-coupling	497,047	May 9	1054	269	63	827
Campbell, James L., Monticello, Ga. Back-band	508,128	Nov. 7	246	62	65	804
Campbell, James M., Jordan's Store, assignor to himself, and L. B. Vaughan, Richmond, Va. Tobacco-hanger	490,224	Jan. 17	1969	516	62	433
Campbell, James W., Germantown, assignor to Ferguson Brothers, New York, N. Y. Joint for bar structures	494,733	Apr. 4	327	83	63	64
Campbell, John J., Gleeson Station, Tenn. Flood-fence	492,136	Feb. 21	1709	425	62	1121
Campbell, John N., assignor of one-half to M. H. McKenna, Denver, Colo. Car-coupling	490,634	Jan. 24	2653	683	62	580
Campbell, John R., assignor to J. A. McCabe, Arlington, Mass. Measuring-jacket	490,606	Jan. 24	2580	665	62	565
Campbell, John S., London, England, assignor to E. A. Pierce, New York, J. O. Cox, Brooklyn, and Carroll Aluminum Manufacturing Company, New York, N. Y. Dental engine. (Reissue)	11,376	Oct. 17	2181	540	65	436
Campbell, Joseph A., Portland, Ind. Scraper or shovel	509,875	Dec. 5	44	10	65	1419
Campbell, Joseph H., <i>et al.</i> (See Stebbins, James H., Jr., assignor.)						
Campbell Machine Company. (See Arnold, Ezra P. and E. F., assignors.)						
Campbell, Malcolm, Boston, Mass., assignor to Woonsocket Machine and Press Company, Woonsocket, R. I. Cloth-pressing machine	506,469	Oct. 10	1176	292	65	237
Campbell, Malcolm, Boston, Mass., assignor to Woonsocket Machine and Press Company, Woonsocket, R. I. Fly-frame	511,725	Dec. 26	3219	759 790	65	2046
Campbell, Mark, Chicago, Ill. Crimping-iron	489,217	Jan. 3	365	101	62	83
Campbell, Matthew F., Fort Madison, Iowa. Draft-regulator	495,473	Apr. 18	1538	386	63	322
Campbell, Norman S. (See Vollmer and Campbell.)						
Campbell, O. A., Jr., <i>et al.</i> (See Porter, Wallace N., assignor.)						
Campbell, Peter, Newark, N. J. Machine for flooding fabrics with oil	497,763	May 23	2232	559	63	1068
Campbell Printing Press and Manufacturing Company. (See Wood, Henry A. W., assignor.)						
Campbell, Robert, Allegheny, Pa. Differential lever	494,756	Apr. 4	364	92	63	72
Campbell, Robert, Allegheny, Pa. Differential lever	503,561	Aug. 15	2192	547	64	995
Campbell, Robert, Gadsden, Ala. Molding-machine	501,824	July 18	2058	507	64	403
Campbell, Stephen J., Stevens Point, Wis. Roller-bearing vehicle-axle	500,249	June 27	2510	613	63	1869
Campbell, Thomas B., Ithaca, N. Y. Pug-mill	509,360	Nov. 23	2288	555	65	1231
Campbell, Thomas B., Ithaca, N. Y. Separator for brick-machines	509,361	Nov. 23	2290	556	65	1231
Campbell, William H., New York, N. Y. Receipt-form and stripper therefor	490,897	Jan. 31	3081	790	62	678
Campbell, William H., New York, N. Y. Slip holder and stripper	499,371	June 13	1049	254	63	1588
Campbell, William H., assignor of one-half to I. R. Darrow, Denver, Colo. Water-elevator	507,882	Oct. 31	3553	874 875	65	718
Campbell, William S., Hamer, S. C. Car-coupling	497,626	May 16	2006	500	63	1010
Campi, Luigi F., Birmingham, England. Machine for engraving or sinking dies, matrices, or other objects	500,317	June 27	2626	642 643	63	1889
Campini, Carlo, New York, N. Y. Bottle-labeling machine	507,673	Oct. 31	3218	787 788	65	655
Canan, James, Owen Sound, Canada. Dredger	505,974	Oct. 3	268	71	65	53
Canavan, Josephine, Washington, D. C. Stove-hood	499,210	June 13	781	186	63	1540
Canda, Ferdinand E., New York, N. Y. Cattle-car	509,192	Nov. 21	1988	483	65	1164
Canet, Jean B. G. A., Paris, France. Gun-mounting	508,278	Nov. 7	493	119	65	849
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Manchester, England. Gun-mounting	497,704	May 16	2128	531 532	63	1033
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Manchester, England. Carriage for quick-firing guns	499,516	June 13	1308	308	63	1633
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, Manchester, England. Breech mechanism for ordnance	502,172	July 25	2619	660 661	64	523
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Manchester, England. Gun carriage or mounting	503,072	Aug. 8	1387	343	64	836
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, Manchester, England. Gun-mounting	504,198	Aug. 29	3224	803 804	64	1221
Canfield, Carlton W., Winthrop, Minn. Sliding friction-tongs	491,872	Feb. 14	1311	324	62	1026
Canfield, Charles E., assignor of one-half to H. Cochran, Chester, Pa. Truck-frame for motor-cars	511,680	Dec. 26	3149	770	65	2033
Canfield, Robert H., Corning, N. Y. Switch-stand	504,964	Sept. 12	1084	277	64	1488
Canney, Joseph, Butte City, Mont. Nipple-holder	502,224	July 25	2703	682	64	540
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Actuating mechanism for doffer-combs of carding-engines	492,537	Feb. 28	2360	586	62	1267
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Feed-roll-weighting device for carding-engines	504,707	Sept. 12	650	165	64	1405
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Fly-frame	505,436	Sept. 26	1855	477 478	64	1659
Cannon, Burrell, Gladewater, Tex. Machine for cleaning seed-cotton	495,392	Apr. 11	1398	350	63	276
Cannon, Burrell, Gladewater, Tex. Churn-dasher	497,304	May 16	1497	377	63	920

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Cannon, Henry J. (See Smith, Howard F., assignor.)						
Cannon, Warren B., assignor to C. D. Fuller, Kalamazoo, Mich. Grinding attachment for lathes	499,905	June 20	1943	{ 471 472 }	{ 63 62 }	1757 1719
Cantner, Joseph, Millheim, Pa. Buckle	493,818	Mar. 21	1695	432	62	1719
Canton Glass Company. (See Bockius, Charles J., assignor.)						
Cantrell, Milton C., Springfield, Mo. Electric fire-alarm	510,115	Dec. 5	462	104	65	1497
Cantwell, Edward L., Calcutta, India. Milk-can, &c.	489,554	Jan. 10	889	233	62	201
Capaccioli, John, Buffalo, N. Y. Fire-escape	506,903	Oct. 17	1876	467	65	380
Capazza, Louis, Paris, France. Aerostatic parachute	496,854	May 9	741	197	63	771
Capek, John V., New York, N. Y. Telephone-transmitter	506,415	Oct. 10	1079	268	65	218
Capek, John V., assignor of one-half to E. H. Johnson, New York, N. Y. Electric motor and controlling apparatus for cars	491,982	Feb. 21	1476	368	62	1073
Capek, John V., assignor of one-half to E. H. Johnson, New York, N. Y. Electrically-heated vessel	493,422	Mar. 14	1014	{ 261 262 }	{ 62 62 }	1573
Capell, Joseph A., et al. (See Markley, John A., assignor.)						
Capellen, William H., and H. A. Crabtree, Lake Park, Iowa. Hay-rack	492,709	Feb. 28	2628	651	62	1321
Caperton, Emma R., assignor to Strawbridge & Clothier, Philadelphia, Pa. Corset	507,482	Oct. 24	2852	701	65	576
Capewell, George J., Hartford, Conn. Tack-puller	501,919	July 25	2224	554	64	448
Capewell, George J., Hartford, Conn. Nail-puller	505,815	Oct. 3	21	5, 6	65	7
Capitol Manufacturing Company. (See Cook, Frank S., assignor.)						
Caplis, Catharine, Rondout, N. Y. Fire-escape	496,509	May 2	185	51	63	653
Capron, Oliver, et al. (See Key, Isaac, assignor.)						
Caps, John E., Kansas City, Mo. Carburetor for gas-engines	509,462	Nov. 28	2505	605	65	1272
Capwell, Thomas R., and W. C. Fuller, Dunkirk, N. Y. Vehicle	493,614	Oct. 14	1351	344	62	1638
Caraway, Emmet L., Rector, Ark. Corn-planter	503,944	Aug. 29	2790	699	64	1141
Caraway, John H., Chrisman, Ill. Flood-gate	505,390	Sept. 19	1773	459	64	1630
Carbo-Alumina Metal Company. (See Stark, Frank G., assignor.)						
Carborundum Company. (See Acheson, Edward G., assignor.)						
Card, George C., Spencerport, N. Y. Pocket-lamp	506,307	Oct. 10	877	216	65	179
Cardarelli, Emilio, Sumter, S. C. Hand-truck	507,483	Oct. 24	2859	{ 701 702 }	{ 65 65 }	576
Cardarelli, Emilio, assignor of one-half to G. W. Dick, Sumter, S. C. Loading or unloading apparatus	505,749	Sept. 26	2418	611	64	1763
Cardarelli, Emilio, assignor of one-half to G. W. Dick, Sumter, S. C. Water-heating and cooking apparatus	506,810	Oct. 17	1724	434	65	352
Cardarelli, Emilio, assignor of one-half to G. W. Dick, Sumter, S. C. Hand-truck	507,106	Oct. 24	2213	547	65	455
Cardinal, Eduard A., Kirkland, and J. Love, Newcastle, Wash. Cultivator	499,415	June 13	1139	{ 272 273 }	{ 63 63 }	1603
Cardozo, John H. (See Erdody, Joseph, assignor.)						
Cardozo, Daniel P. F., Rio Janeiro, Brazil. Process of and apparatus for making salt	508,915	Nov. 21	1538	375	65	1076
Cardozo, Daniel P. F., New York, N. Y. Apparatus for roasting coffee or other substances	509,298	Nov. 21	2174	523	65	1198
Cardwell, Arthur M. (See Cardwell, Holme, assignor.)						
Cardwell, Holme, Rome, Italy, assignor to A. M. Cardwell, county of Middlesex, England. Darning apparatus	511,681	Dec. 26	3151	770	65	2034
Cardwell, Wesley K. (See Waggener and Cardwell.)						
Cardy, Joseph, Tampa, Fla., assignor of one-fourth to G. H. Parmelee, Washington, D. C. Screw-propeller	496,812	May 2	676	179	63	739
Carey, Anson, Ashland, Neb. Stock watering device	493,478	Mar. 14	1116	286	62	1591
Carey, Christopher, Birmingham, England. Pneumatic tire	509,193	Nov. 21	1991	484	65	1165
Carey, Henry, et al. (See Robertson, Archibald J., assignor.)						
Carey, James L. (See Black and Carey.)						
Carey, John, assignor to W. B. Bishop, New York, N. Y. Fortune-teller	503,784	Aug. 22	2562	638	64	1079
Carey, Philip, Cincinnati, Ohio. Paper tube	489,927	Jan. 17	1461	382	62	332
Carey, Philip, Cincinnati, Ohio. Manufacture of fireproof coverings for steam-pipes	506,870	Oct. 17	1819		65	369
Carey, Richard, Chicago, Ill. Smoke-burning apparatus for steam-boilers	497,305	May 16	1498	378	63	920
Carey, Richard, Chicago, Ill. Interlocking and interchangeable rocking grate-bar	503,578	Aug. 22	2223	557	64	1016
Carey, Samuel F. (See Poland and Carey.)						
Carey, Wilson, Forest Hill, Cal. Hand-punch	499,094	June 6	598	144	63	1495
Carl, Hiram A. (See Carl, John and H. A.)						
Carl, John and H. A., Allentown, Pa. Folding table	493,479	Mar. 14	1117	286	62	1591
Carland, Willis W., et al. (See Phillips, Elwood C., assignor.)						
Carlin, William P., Jeffersontown, Ky., assignor of one-half to J. M. Marlin, Dawson, Ga. Coffee pot	503,342	Aug. 15	1850	458	64	932
Carlinet, John G., assignor of seven-tenths to W. O'Neill, J. Wolstencroft, and W. H. Soley, Philadelphia, Pa. Pneumatic tool	498,742	May 30	3850	949	63	1363
Carlisle, Joseph A., assignor of one-half to E. Zinn, Orchard, Ohio. Hay-stacker	494,506	Mar. 28	2825	708	62	1945
Carlisle, Martin L. (See McConnell and Carlisle.)						
Carlisle, William W., Cleveland, Ohio. Lawn-rake	507,484	Oct. 24	2861	702	65	576
Carlman, Frank L. T., Salem, Mass. Damper-regulator	493,149	Mar. 7	587	147	62	1474
Carlson, Andrew. (See Stromberg and Carlson.)						
Carlson, Andrew E., Wallace, Idaho. Mechanical index	492,269	Feb. 21	1924	480	62	1165
Carlson, August, Peoria, Ill. Car-coupling	491,698	Feb. 14	1038	263	62	973
Carlson, Carl A., Boston, Mass. Valve for steam-engines	510,116	Dec. 5	464	104	65	1497
Carlson, Charles F., Honolulu, Hawaii. Hub-attaching device	490,136	Jan. 17	1826	477	62	406
Carlson, Charles G. (See Carlson, Fred and C. G.)						
Carlson, Conrad, Brooklyn, N. Y. Hod-elevator	495,781	Apr. 18	2028	{ 513 514 }	{ 63 62 }	408
Carlson, Fred and C. G., Topeka, Kans. Lawn-mower	494,120	Mar. 28	2210	563	62	1832
Carlson, Gustave H., San Francisco, Cal. Splint laundry-basket	500,991	July 4	718	189	64	130
Carlson, Gustave H., Hoquiam, Wash. Means for utilizing tide-water as motive power	509,997	Dec. 5	259	60	65	1458
Carlson, Gustave H., assignor of one-half to C. W. Weston, San Francisco, Cal. Splint basket and basket-hamper	497,306	May 16	1500	378	63	920
Carlson, John A., Rockford, Ill. Meat-pounder	489,928	Jan. 17	1461	382	62	332
Carlton, Edwin L. (See Davies, Thomas W., assignor.)						
Carlton, Howard. (See Myer and Carlton.)						
Carlton, Howard. (See Robertson and Carlton.)						
Carlyle, George, assignor to Standard Pearl Button Company, Limited, Detroit, Mich. Machine for forming pearl buttons	490,471	Jan. 24	2374	614	62	524
Carman, Francis J., Washington, D. C. Refining sulphurous petroleum	501,988	July 25	2319	579	64	467
Carman, Michael, O'Neal, S. C. Tool-handle fastener	510,326	Dec. 5	800	193	65	1562
Carman, Ringgold W. (See Kato and Carman.)						
Carmichael, Henry, Malden, Mass. Apparatus for manufacturing pulp boxes	503,738	Aug. 22	2495	621	64	1066
Carmony, James D., Evansville, Ind. Transom-lifter	489,846	Jan. 10	1318	343	62	289
Carmona, Ildefonso C., Brooklyn, N. Y. Safety-guard for watches	496,813	May 2	678	179	63	740

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Carmona, Ildefonso C., Brooklyn, N. Y. Safety-guard for watches	497,705	May 16	2130	532	63	1033
Carnahan, Charles M., Newport, Ky., assignor to Globe Company, Cincinnati, Ohio. Portfolio	499,906	June 20	1946	472	63	1758
Carnahan & Co., Magnus J. (See Wagoner, Thomas S., assignor.)						
Carnegie Steel Company. (See Allderice, Taylor, assignor.)						
Carnell, Frederick W., assignor to Sargent & Company, New Haven, Conn. Snap-hook	505,286	Sept. 19	1605	417	64	1599
Carnell, George, Philadelphia, Pa. Brick-mold-sanding machine	507,647	Oct. 31	3182	779	65	649
Carnell, George, Philadelphia, Pa. Brick-machine	507,648	Oct. 31	3184	779	65	649
Carnell, George, Philadelphia, Pa. Re-press brick-machine	507,649	Oct. 31	3186	780	65	649
Carnes, William M., and J. G. Rozelle, Bowling Green, Ohio. Hydrocarbon-burner	497,565	May 16	1914	482	63	994
Carnes, Rufus F., Winfield, Ala. Electric shoe-sole	495,782	Apr. 18	2031	514	63	408
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-register and indicator	490,898	Jan. 31	3082	791	62	679
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-register	496,855	May 9	741	197	63	771
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-register and indicator	497,860	May 23	2372	584	63	1093
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-register	497,861	May 23	2379	585	63	1094
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-register and indicator	507,351	Oct. 24	2656	653	65	536
Caros, William W., Tyrone, Pa. Driving mechanism for cycles	501,054	July 11	820	213	64	165
Caro, Harry and J., New York, N. Y. Mirror-frame	491,525	Feb. 14	763	194	62	915
Caro, Jacob. (See Caro, Harry and J.)						
Carolan, Eugene P., Eagle Pass, E. H. and J. R. Terrell, Seguin, Tex. Desk-receptacle	490,225	Jan. 17	1970	516	62	433
Carpenter, A. H., et al. (See Thibault, Henry, assignor.)						
Carpenter, Asher M. (See Carpenter, Joseph R. and A. M.)						
Carpenter, Benjamin F., Roselle, N. J., assignor to Heat and Odor Extinguisher Company, of New Jersey. Movable hood for stoves or ranges	503,343	Aug. 15	1851	458	64	932
Carpenter, Charles E., assignor to Carpenter Enamel Rheostat Company, Bridgeport, Conn. Rheostat-plate	492,757	Feb. 28	2700	670	62	1335
Carpenter, Charles E., assignor to Carpenter Enamel Rheostat Company, Bridgeport, Conn. Rheostat-plate	492,758	Feb. 28	2701	671	62	1335
Carpenter, Charles E., assignor to Carpenter Enamel Rheostat Company, Bridgeport, Conn. Making resistance-plates	511,407	Dec. 26	2714	658	65	1953
Carpenter, Charles F., Louisville, Ky. Non-magnetic watch-balance	489,790	Jan. 10	1238	324	62	272
Carpenter, Charles M. (See McGregor and Carpenter.)						
Carpenter, Charles W., et al. (See Crowell, Luther C., assignor.)						
Carpenter, Charles W., et al. (See Shattuck, Edwin L., assignor.)						
Carpenter, Charles W., et al. (See Sheldon, Edward P., assignor.)						
Carpenter, Clarence A., et al. (See Beeman, Frank A., assignor.)						
Carpenter, Daniel A., New York, assignor of one-half to E. Pickhardt, Islington, N. Y. Safety-pin	509,998	Dec. 5	261	61	65	1458
Carpenter Enamel Rheostat Company. (See Carpenter, Charles E., assignor.)						
Carpenter, Esther, Helena, Mont. Cuff-holder	489,626	Jan. 10	991	258	62	221
Carpenter, Frank N., Buffalo, N. Y. Game apparatus	505,027	Sept. 12	1181	303	64	1507
Carpenter, Franklin R., Deadwood, S. D. Treating ores	499,318	June 13	941		63	1568
Carpenter, Frederick B., et al. (See Osteman, Carl G., assignor.)						
Carpenter, James C., et al. (See Markley, John A., assignor.)						
Carpenter, James H., West Point, Ga., assignor of one-half to T. T. Eaton and F. D. Hale, Louisville, Ky. Time stock-feeder	489,789	Jan. 10	1237	324	62	271
Carpenter, John N., Philadelphia, Pa. Music-sheet turner	505,307	Sept. 19	1640	424	64	1605
Carpenter, Joseph R. and A. M., Williamsport, Pa. Emery-wheel	500,561	July 4	40	12	64	9
Carpenter, Monroe, assignor of one-half to I. C. Sargent, Rockford, Ill. Animal-trap	510,836	Dec. 12	1689	420	65	1740
Carpenter, Newton F., Menomonee, Wis. Horse or carriage block	489,669	Jan. 10	1046	272	62	233
Carpenter, Orville, Pawtucket, R. I. Elastic toy	494,410	Mar. 28	2677	671	62	1918
Carpenter, Rolla C., Ithaca, assignor to Schaeffer & Budenberg, New York, N. Y., and Buckau-Magdeburg, Germany. Steam-calorimeter	492,710	Feb. 28	2629	651	62	1322
Carpenter, Rolla C., Ithaca, assignor to Schaeffer & Budenberg, New York, N. Y., and Buckau-Magdeburg, Germany. Steam-calorimeter	494,057	Mar. 21	2084	532	62	1793
Carpenter, Varnum F., Cleveland, Ohio. Wrench-milling machine	489,523	Jan. 10	851	221	62	193
Carpigiani, Balilla, Philadelphia, Pa. Rub-flute	493,066	Mar. 7	458	115	62	1450
Carr, Adelbert E., Tower, Minn. Combined tent, bed, and knapsack	510,239	Dec. 5	670	159	65	1537
Carr, Asmus J., Chicago, Ill. Reel	489,286	Jan. 3	468	130	62	102
Carr, Charles, Boston, Mass. Railway system	500,992	July 4	719	189	64	131
Carr, Elmer E. (See Ingram and Carr.)						
Carr, Emory M., New Castle, Ind. Feed-water regulator	495,302	Apr. 11	1262	315	63	251
Carr, Eugene H., Edwardsville, Ill. Copy-holder	499,966	June 20	2027	491	63	1772
Carr, George W., Brooklyn, N. Y. Lawn-mower	505,187	Sept. 19	1446	372	64	1568
Carr, Joseph, Saginaw, Mich. Ice-creeper	504,708	Sept. 12	652	165	64	1405
Carr, Robert S., Hamilton, Ohio. Meat-slicer	492,934	Mar. 7	259	65	62	1410
Carr, Rufus B., assignor of one-half to E. Howard Watch and Clock Company, Boston, Mass. Winding mechanism for tower-clocks	511,408	Dec. 26	2715	658	65	1953
Carr, Walter B., St. Louis, Mo. Numbering attachment for printing-presses	507,416	Oct. 24	2762	677	65	557
Carr, Walter B. and A. G. French, St. Louis, Mo. Matrix-board	507,485	Oct. 24	2862		65	577
Carr, Warren H., Bath, Me. Burglar-proof safe	490,869	Jan. 31	3019	776	62	667
Carr, Warren H., assignor to himself and J. W. Wakefield, Bath, Me. Electric burglar-alarm	490,870	Jan. 31	3020	776	62	667
Carr, William L., Blanchard, assignor of one-half to T. M. Monzingo, Coin, Iowa. Car-mover	489,410	Jan. 3	646	175	62	139
Carragher, Thomas A., Newman Grove, Nebr. Gate-fastener	504,863	Sept. 12	916	237	64	1457
Carrara, Antonio, Newark, N. J. Bottle-stopper	495,663	Apr. 18	1839	460	63	374
Carrara, Antonio, Newark, N. J. Bottle-stopper	495,664	Apr. 18	1841	461	63	374
Carrell, Elger M., et al. (See Dugger, Collin C., assignor.)						
Carrell, William S., assignor of one-half to D. L. Horn, Choctaw City, Oklahoma Ter. Cow-yoke	504,299	Aug. 29	3383	846	64	1251
Carrioco, Francis A., et al. (See Carrioco, Thomas W., assignor.)						
Carrioco, Thomas W., assignor of one-third to F. A. and T. W. Carrioco, Jr., San Antonio, Tex. Apparatus for treating refuse matter	503,073	Aug. 8	1389	343	64	836
Carrington, Bernard W., Heppner, Oreg. Conductor's railway-indicator	499,517	June 13	1309	308	63	1633

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Carrington, Sterling R. (See Whitaker, David W., assignor.)						
Carroll Aluminum Manufacturing Company <i>et al.</i> (See Campbell, John S., assignor.) (Reissue.)						
Carroll, Charles. (See Kreider, William, assignor.)						
Carroll, Charles, assignor to Automatic Machine Company, Limited, New Orleans, La. Coin-controlled race-course	504,312	Aug. 29	3403	⁸⁵³ 854 855 856 857	64	1255
Carroll, Hiram, Pawling, N. Y. Stock-watering trough	491,077	Feb. 7	27	7	62	753
Carroll, Homer L. (See Possons and Carroll.)						
Carroll, Robert E., North La Crosse, Wis. Dinner-pail	499,628	June 13	1479	355	63	1663
Carroll, Thomas, New Haven, Conn. Cash-register	499,192	June 6	752	¹⁷⁸ 179 180	63	1521
Carroll, Thomas, New Haven, Conn. Cash-register	509,071	Nov. 21	1778	⁴³⁸ 439	65	1123
Carroll, Thomas P., Franklin Furnace, N. J. Car-coupling	489,791	Jan. 10	1239	324	62	272
Carrothers, James, Pavonia, Ohio. Rotary cultivator	499,211	June 13	782	186	63	1541
Carse, Henry, Rock Island, Ill. Pumping apparatus for the manufacture of carbonized waters		Sept. 19	1300	334	64	1543
Carskaden, Delos, Chicago, Ill. Rotary engine	495,451	Apr. 11	1490	375	63	294
Carskaden, Delos, Chicago, Ill. Rotary engine	497,403	May 16	1648	⁴¹⁶ 417	63	948
Carson, Alfred H., Grant's Pass, Oreg. Fruit-drier	505,090	Aug. 22	2920	683	64	1110
Carson, Robert J., assignor of one-half to G. Delfino, San Francisco, Cal. Paving-machine.	509,117	Nov. 21	1867	458	65	1140
Carson, William H. (See Brazier, Daniel, assignor.)						
Carstarphen, William P., Jr., Denver, Colo. Electric motor	508,129	Nov. 7	246	62	65	804
Carstarphen, William P., Jr., assignor of two-thirds to J. E. Gregg, Denver, Colo., and R. W. Webb, Santa Fé, N. Mex. Ter. Electric cigar-lighter	497,263	May 9	1393	352	63	887
Carstarphen, William P., Jr., assignor of two-thirds to J. E. Gregg, Denver, Colo., and R. W. Webb, Santa Fé, N. Mex. Ter. Electric cigar-lighter	497,404	May 16	1650	417	63	948
Carstarphen, William P., Jr., assignor of two-thirds to J. E. Gregg, Denver, Colo., and R. W. Webb, Santa Fé, N. Mex. Ter. Electrical transformer	507,526	Oct. 31	2956	724	65	606
Carter, Byron B. (See Bates and Carter.)						
Carter, Charles, and A. H. Bell, Irapah, Utah Ter. Stamp-mill and amalgamator	508,679	Nov. 14	1136	280	65	988
Carter, Charles M., Denver, Colo. Easel	511,585	Dec. 26	2993	729	65	2006
Carter, Clarence W., Minneapolis, Minn. Car-brake	506,768	Oct. 17	1654	⁴¹⁴ 415	65	340
Carter & Company. (See O'Hara, Walter W., assignor.)						
Carter, David W., Stratford, Canada. Motor for the transmission of power	496,596	May 2	317	86	63	677
Carter, Edward A. (See Lever, Thomas H., assignor.)						
Carter, Edwin H., and J. J. Beard, Providence, R. I. Height-gage	495,019	Apr. 11	769	196	63	163
Carter, Floyd H., Shirland, Ill. Wire-reel carrier	490,899	Jan. 31	3091	793	62	680
Carter, Franklin S., Burlington, N. J. Hotel time-annunciator	493,067	Mar. 7	459	116	62	1450
Carter, George, London, England. Coin-freed gas-meter	504,266	Aug. 29	3329	⁸³² 833	64	1241
Carter, Harriet, Brooklyn, N. Y. Composition of matter for saving fuel	497,627	May 16	2008		63	1011
Carter, Herman, Derby, Ohio. Machine for weaving cross-wires in wire fences	498,459	May 30	3347	834	63	1281
Carter, Horatio E., and W. H. Snyder, Jackson, Mich. Corset-fastening	505,437	Sept. 26	1858	478	64	1660
Carter, James W., Cisco, Tex. Attachment for pianos or organs	507,883	Oct. 31	3554	875	65	718
Carter, John M. and O. M., St. Joseph, Mo. Paper-bag machine	509,874	Dec. 5	34	⁸ 9 10	65	1417
Carter, John T. (See Helm, Thomas W., assignor.)						
Carter, John W., Newton, Mass. Pour-out or discharger for bottles	500,260	June 27	2527	618	63	1871
Carter, Josiah S., New Britain, Conn. Drive-chain link	498,233	May 30	2969	740	63	1212
Carter, Oscar M. (See Carter, John M. and O. M.)						
Carter, William, <i>et al.</i> (See Jenne and Willey, assignors.)						
Carter, William, and C. E. Willey, Louisville, Ky. Electric cigar-lighter	495,929	Apr. 18	2250	567	63	449
Carter, William A. (See Leonard and Carter.)						
Carter, William B., St. Maurice, La. Bedstead attachment	504,557	Sept. 5	410	104	64	1346
Carthy, Florence M., Orange, N. J., assignor to American Writing Machine Company, Hartford, Conn. Attachment for type-writing machines	491,767	Feb. 14	1146	287	62	993
Cartland, John, deceased; T. Emery, Saginaw, Mich., administrator. Door-spring	511,294	Dec. 19	2507	611	65	1903
Cartmell, Edson B., assignor to Hocking Valley Manufacturing Company, Lancaster, Ohio. Hay-loader	491,636	Feb. 14	941	237	62	952
Carter & Co., M. S. (See Hubbard, Albert W., assignor)						
Cartwright, Hiram, Owatonna, Minn. Combined hay and stock rack	495,106	Apr. 11	925	233	63	192
Carty, John J., New York, N. Y., assignor to Metropolitan Telephone and Telegraph Company of New York City. System for protecting telephone apparatus from lightning	495,179	Apr. 11	1062	264	63	215
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard apparatus	505,188	Sept. 19	1447	372	64	1568
Carty, John J., New York, N. Y., and F. A. Pickernell, Newark, N. J. Telephone-gage	495,180	Apr. 11	1064	265	63	215
Carty, Robert F., assignor of one-half to J. C. Goodrich, Detroit, Mich. Knob and spindle lock	509,194	Nov. 21	1992	484	65	1165
Carver, Chester E. (See Carver, James W. and C. E.)						
Carver, Edmund D. (See Carver, Henry C., assignor.)						
Carver, George H., <i>et al.</i> (See Carver, James W. and C. E., assignors.)						
Carver, Henry C., Manchester, assignor to E. D. Carver, Wimbledon, England. Fastening device for wheels, &c	491,469	Feb. 7	673	169	62	877
Carver, James W., assignor of one-half to D. W. Bromley, Pawlet, Vt. Post	493,068	Mar. 7	460	116	62	1450
Carver, James W. and C. E., Pawlet, Vt., assignors to G. H. Carver, Middle Granville, and H. E. Barden, Granville, N. Y. Telegraph-pole	494,710	Apr. 4	292	73	63	58
Cary, Edward E. (See Nickerson and Cary.)						
Cary, Edward E., Boston, Mass. Incandescent electric lamp	500,053	June 20	2168	527	63	1797
Cary, Edward E., Boston, Mass. Incandescent electric lamp	501,491	July 18	1524	382	64	308
Cary, Edward E., Boston, and W. E. Nickerson, Cambridge, Mass. Incandescent electric lamp	503,650	Aug. 22	2352	587	64	1038
Cary Safe Company. (See Goehler, George J. H., assignor.)						
Cary, William H., <i>et al.</i> (See Austin, William H., assignor.)						
Casaday, William L., South Bend, Ind. Wheel	489,458	Jan. 10	743	197	62	172
Casaday, William L., South Bend, Ind. Wheel-plow	498,704	May 30	3768	⁹²⁹ 930	63	1353

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Casares, José. (See Josselin, Louis C., assignor.)	493,974	Mar. 21	1957	499	62	1769
Cascaden, Thomas, Jr., Waterloo, Iowa. Kettle	498,764	June 6	18	4	63	1392
Case, Albert W., Highland Park, Conn. Paper-making machine	500,191	June 27	2425	591	63	1853
Case, Albert W., Highland Park, Conn. Paper-polishing machine	496,857	May 9	753	200	63	773
Case, Alfred W., Highland Park, Conn. Propeller				198		
Case, Charles P., Albany, assignor to Case Rotary Engine Company, Elmira, N. Y. Rotary engine	496,856	May 9	748	199	63	772
				200		
Case, Eliza A., administratrix, <i>et al.</i> (See Grisel, George, assignor.)						
Case, Frank E. (See Clark, Theodore N., assignor.)						
Case, Frank E., Canton, Ohio. Stirrup attachment for chairs	490,540	Jan. 24	2487	641	62	546
Case, Frank E., Canton, Ohio. Head-rest	490,541	Jan. 24	2489	641	62	547
Case, George F. (See Hicks, Thomas H., assignor.)						
Case, George F., Medina, N. Y. Bicycle	503,628	Aug. 22	2618	654	64	1090
Case, Henry, Gloversville, N. Y. Sewing-machine trimmer	495,030	Apr. 11	770	196	63	163
Case, Ira, assignor of one-fourth to A. H. Swarthout, Saginaw, Mich. Cutting apparatus for mowing or reaping machines	499,967	June 20	2028	492	63	1772
Case, Lawrence W., Highland Park, Conn. Electric locomotive	500,851	July 4	504	131	64	92
Case, Milton W., Philadelphia, Pa. Check-bit	510,158	Dec. 5	535	123	65	1511
Case, Norton, assignor of one-half to B. Gratz, St. Louis, Mo. Alarm-clock	506,625	Oct. 10	1406	353	65	282
Case Rotary Engine Company. (See Case, Charles P., assignor.)						
Case, Schuyler S., Elmira, N. Y. Folding table	489,369	Jan. 3	591	159	62	127
Case, Willard E., Auburn, N. Y. Apparatus for electrolysis of fused salts	503,451	Aug. 15	2006	498	64	960
Case, Willard E., Auburn, N. Y. Making aluminum fluosulphate	503,900	Aug. 22	2721		64	1110
Case, Willard E., Auburn, N. Y. Making aluminum compounds	503,901	Aug. 22	2722		64	1110
Case, Willard E., Auburn, N. Y. Making aluminum compounds	504,324	Sept. 5	19		64	1274
Case, Willard E., Auburn, N. Y. Making aluminum compounds	504,325	Sept. 5	20		64	1274
Case, Willard E., Auburn, N. Y. Making aluminum fluosulphate	511,121	Dec. 19	2317	543	65	1850
Case, William H., South Oil City, assignor of one-half to J. A. Hart, Oil City, Pa. Hanger						
Casey, David F., assignor of one-half to A. S. Coe, Harrisonville, Ohio. Churn-operating mechanism	489,155	Jan. 3	262	73	62	61
Casey, George M., Hingham, Mass. Bottle-opening implement	492,570	Feb. 28	2410	601	62	1278
Casey, Hezekiah, Birmingham, assignor to G. Hanna, Rushville, Ill. Disk-sharpener	499,907	June 20	1947	472	63	1758
				473		
Casey, John, and M. S. Chism, Philadelphia, Pa. Key-pouch	493,069	Mar. 7	461	116	62	1450
Casey, Matthew, Smithfield, N. C. Cultivator	491,873	Feb. 14	1313	324	62	1026
Cash, Patrick B., <i>et al.</i> (See De Voe, William R., assignor.)						
Caskey, Samuel S., assignor to Link-Belt Engineering Company, Philadelphia, Pa., Driving-roof-shifting mechanism	501,869	July 18	2120	524	64	414
Casler, Herman, Syracuse, N. Y. Toy	509,362	Nov. 28	2292	556	65	1232
Casler, Herman, assignor of one-half to H. N. Marvin, Syracuse, N. Y. Photographic-camera shutter	509,841	Nov. 28	3105	750	65	1387
Casler, Philo W., Little Falls, N. Y. Ticket-holder	489,627	Jan. 10	992	259	62	221
				484		
Casner, John, Findlay, Ohio. Treefue for glass-blowers	509,195	Nov. 21	1993	485	65	1165
Cason, William N., Kansas City, Mo. Churn	493,681	Mar. 21	1465	373	62	1675
Caspian, Paschal G., Brooklyn, N. Y. Shears	502,809	Aug. 8	960	234	64	757
Cass, Christopher M., Chicago, Ill. Lamp	500,470	June 27	2849	701	63	1929
Cass, James, Cayucos Landing, Cal. Preserving piles	508,279	Nov. 7	496	120	65	850
Cassady, George. (See Kendall and Cassady.)						
Cassel, Henry B., <i>et al.</i> (See Werline, Henry E., assignor.)						
Cassel, Reuben Z., Columbus, Ohio. Pipe-thimble	489,068	Jan. 3	131	36	62	33
Cassella & Co., Leopold. (See Gans and Hoffmann, assignors.)						
Cassella & Co., Leopold. (See Hoffmann, Meinhard, assignor.)						
Cassidey, Jesse J., Toronto, Canada. Car-brake	495,084	Apr. 11	866	221	63	180
Cassidy, James W., deceased. (See Smith and Cassidy.) (Reissue.)						
Cassidy, William A., and T. F. McGee, Amarillo, Tex. Car-coupling	508,085	Nov. 7	180	48	65	791
Casson, Henry. (See Brown, Theodore H., assignor.)						
Casson, William N., Marinette, Wis. Work-box	510,563	Dec. 12	1220	296	65	1654
Casterlin, James B., <i>et al.</i> (See Weidaw, Frank T., assignor.)						
Castle, Alfred M., <i>et al.</i> (See Drake, George H., assignor.)						
Castle, William H., North East, Pa. Animal-trap	507,417	Oct. 24	2764	677	65	558
Castner, Hamilton Y., London, England. Manufacture of oxides of the alkaline metals	494,757	Apr. 4	364	92	63	72
Caswell, Frederick K., Hartford, Conn. Hot-water heater	494,323	Mar. 28	2528	637	62	1892
Caswell, Thomas N. (See Griffith and Caswell.)						
Caswell, William A., assignor to M. H. Naber, Chicago, Ill. Railway-car for transporting horses	491,936	Feb. 14	1408	351	62	1045
				352		
Catchpole, Alfred, Geneva, N. Y. Lathe	491,236	Feb. 7	286	71	62	803
Catchpole, Alfred, Geneva, N. Y. Feed-water apparatus	496,040	Apr. 25	2415	611	63	495
Catchpole, Alfred, Geneva, N. Y. Damper-regulator	510,060	Dec. 5	371	82, 83	65	1480
Cate, Martin L. (See Kohlhepp, Rudolf, assignor.)						
Cate, Rufus L. (See Magney and Cate.)						
Cately, Shepard W., assignor to A. M. Ettling, Cortland, N. Y. Thill-coupling	505,438	Sept. 26	1859	478	64	1660
Cates, George E., and D. Reuschenberg, Brooklyn, N. Y. Car-fender	511,586	Dec. 26	2994	729	65	2006
Cathan, Alonzo, assignor of one-half to T. S. Gerhard, Cleveland, Ohio. Mop-wringer	488,984	Jan. 3	14	4	62	5
Cathcart, Frank H., Lower Merion, Pa. Power-driven tool	494,461	Mar. 28	2747	699	62	1930
				699		
Cathcart, Frank H., Lower Merion, Pa. Rotary engine	495,303	Apr. 11	1263	315	63	252
				316		
Cathrein, Josef, Tunsbruck, Austria-Hungary. Bolt	497,628	May 16	2008	501	63	1011
Cathrein, Josef, Innsbruck, Austria-Hungary. Stand for electric lamps	499,908	June 20	1949	473	63	1759
Catlett, J. H., <i>et al.</i> (See Graves, Cashious M., assignor.)						
Catlin, Emma F. (See Catlin, Seth C., assignor.)						
Catlin, Seth C., assignor to E. F. Catlin, Bloomfield, N. J. Electroplating apparatus	496,597	May 2	318	87	63	677
Caton, Fred E., and F. B. Warring, San José, Cal. Sprinkler	504,965	Sept. 12	1086	278	64	1489
				499		
Cattell, Charles F., Darby, Pa. Gas apparatus	493,975	Mar. 21	1958	500	62	1769
Cattern, Frank M. (See Dawdy and Cattern.)						
Catterton, John E., Dayton, Wash. Car-coupling	495,580	Apr. 18	1704	429	63	352
Cattori, Michelangelo, Rome, Italy. Electric railway	492,659	Feb. 28	2557	633	62	1306
Caulbe, Julius R. (See Davis, Riley L., assignor.)						
Caulfield, Luke F., Ashtabula, Ohio. Leather-frame	490,338	Jan. 24	2169	565	62	485
Caulfield, Luke F., Ashtabula, Ohio. Leather-frame	490,339	Jan. 24	2170	566	62	485
Caulfield, James P., Baltimore, Md. Reed-organ	492,189	Feb. 21	1797	448	62	1139
Caulfield, James P., Baltimore, Md. Solo attachment for reed-organs	493,014	Mar. 7	385	96	62	1435

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Caustic Soda and Chlorine Syndicate. (See Greenwood, James, assignor.)						
Cavallaro, Francesco, San José, Cal. Beam and girder support	495,783	Apr. 18	2032	514	63	408
Cavallaro, Francesco, San José, Cal. Beam or girder support	508,280	Nov. 7	497	120	65	850
Cavanaugh, Frank, <i>et al.</i> (See Winner, William P., assignor.)						
Cave, Robert W. and T. J., Priceville, Ky. Washer for wheel-spokes	493,397	Mar. 14	983	254	62	1568
Cave, Thomas J. (See Cave, Robert W. and T. J.)						
Caven, William J., <i>et al.</i> (See Monday, Robert, assignor.)						
Caverno, Xenophon, and W. E. Fowler, Denver, Colo. Railway freight-car	498,234	May 30	2970	740	63	1212
Chaywood, Abram, Ithaca, Ohio. Apparatus for heating and moistening air	505,750	Sept. 26	2422	611	64	1764
Chaywood, Albert D., assignor to Underwriters' Hatch Door Company, Chicago, Ill. Safety device for elevator-shafts	493,423	Mar. 14	1016	262	62	1574
Cefrey, Arsène T., Boston, Mass. Floral figure	489,218	Jan. 3	366	102	62	83
Cell, Anson H., and E. G. Paster, Colorado Springs, Colo. Measuring-vessel	502,347	Aug. 1	163	38	64	596
Celluloid Manufacturing Company. (See Stevens and Axtell, assignors.)						
Central Cyclone Company. (See Straker, Sidney, assignor.)						
Central Oilgas Stove Company. (See Wilder, William H., assignor.) (Reissue.)						
Century Cotton Company. (See Prior, Matthew, assignor.)						
Cereal Machine Company. (See Perky and Ford, assignors.)						
Chabault, Emile, Marseilles, France. Closed-conduit system for electric railways	509,651	Nov. 28	2797	673	65	1329
Chabro, Eugène, Paris, France. Spring-busk	494,843	Apr. 4	512	128	63	99
Chadborn, Frederic C., Newburg, N. Y. Ventilating apparatus	502,090	July 25	2486	625	64	497
Chadbourne, Walter H. (See Livengood, Chadbourne, and Gibbons.)						
Chadwick, Charles C., <i>et al.</i> (See Franklin, Nelson G., assignor.)						
Chadwick, Ezra B., Bristol, R. I. Hoof-expander	497,629	May 16	2009	501	63	1011
Chadwick, James M., Gadsden, Ala. Attachment for plows	491,009	Jan. 31	3261	833	62	712
Chadwick, James M., assignor of one-half to A. T. Fuller, Gadsden, Ala. Churn-dasher	507,065	Oct. 17	2135	530	65	428
Chadwick, John L., Cresson, Tex. Gate	491,637	Feb. 14	943	237	62	953
Chadwick, Julian W. (See Ruckmich, Alban V., assignor.)						
Chadwick, Robert, Sumner, Nebr. Check-rower	490,268	Jan. 24	2054	537	62	461
Chadwick, Robert, Sumner, Nebr. Desk-ruler	497,946	May 23	2519	629	63	1118
Chaffee, George B. F. (See Shartle, Henry H., assignor.)						
Chailly, François, Chicago, Ill. Tanning apparatus	508,281	Nov. 7	498	120	65	850
Chain, Elmer E., Boston, Mass. Spring-compressing apparatus	510,956	Dec. 19	1948	476	65	1799
Chain-Stay Fence Company. (See Boggs, Alden B., assignor.)						
Chalandre, Antoine J. O., assignor to Society Outhenin Chalandre Fils et Cie., Paris, France. Electrolyzing apparatus	511,682	Dec. 26	3152	771	65	2034
Chalfant, Horace W. (See McLellan, John T., assignor.)						
Chalk, William M., Spivey, assignor of one-half to H. A. Post, Wichita, Kans. Steering apparatus for wheat-headers	508,368	Nov. 7	634	156	65	875
Challoner, Frank, Omro, Wis. Shingle-sawing machine	493,682	Mar. 21	1467	373 374	62	1675
Chalmers, William J., <i>et al.</i> (See Allen, Charles M., assignor.)						
Chalmers, William J., <i>et al.</i> (See Trent, Lamartine C., assignor.)						
Chamberlain, Alice J., Bridgeport, Conn. Rake	494,324	Mar. 28	2529	637	62	1892
Chamberlain, George D. (See Selden and Chamberlain.)						
Chamberlain, George D., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Tire for velocipede-wheels	490,425	Jan. 24	2209	597	62	509
Chamberlain, Henry J. (See Robinson and Chamberlain.)						
Chamberlain, Henry J., assignor to J. T. Robinson & Co., Hyde Park, Mass. Loose-pulley lubricator	503,902	Aug. 22	2723	683	64	1111
Chamberlain, Marcus W., assignor of one-half to S. Bartley, Bartley, N. J. Sawmill-dog	510,891	Dec. 19	1829	452	65	1777
Chamberlain, Myron L., Boston, Mass. Rubber-tread horseshoe	510,402	Dec. 12	928	223	65	1601
Chamberlain, Myron L., Boston, Mass. Compound horseshoe	510,403	Dec. 12	929	224	65	1601
Chamberland, Charles E., Paris, France. Sun-dial	490,185	Jan. 17	1899	494	62	420
Chamberlin, George S., New York, N. Y. Bottle-stopper	498,003	May 23	2608	652	63	1134
Chamberlin, James R., assignor of two-thirds to M. Rees and L. W. Morgan, Pemberville, Ohio. Line-holder	507,418	Oct. 24	2766	678	65	558
Chamberlin, John H., St. Paul, Minn. Sash-fastener	494,625	Apr. 4	159	37	63	32
Chamberlin, Thomas P., Fort Recovery, Ohio. Folding buggy-top	491,983	Feb. 21	1479	368	62	1074
Chambers, Alexander, Tarrytown, N. Y. Reaper or mower	507,884	Oct. 31	3555	875	65	719
Chambers, Bering, Quinlan Company. (See Rew, Madison, assignor.)						
Chambers Brothers Company. (See Chambers, Cyrus, Jr., assignor.)						
Chambers, Cyrus, Jr., Wynnewood, assignor to Chambers Brothers Company, Philadelphia, Pa. Transfer-car	493,976	Mar. 21	1960	500	62	1769
Chambers, Cyrus, Jr., Wynnewood, assignor to Chambers Brothers Company, Philadelphia, Pa. Pallet for drying bricks	506,811	Oct. 17	1725	434	65	353
Chambers, George W., and B. F. Gruver, Bitter Water, Cal. Reloader for cartridges	492,324	Feb. 21	2002	498	62	1182
Chambers, James M., assignor to Chambers Patent Barrel Heater Company, St. Louis, Mo. Apparatus for steaming casks	492,346	Feb. 21	2040	508	62	1189
Chambers, John W., Durand, Ill. Wagon-body lifter	498,235	May 30	2971	741	63	1212
Chambers, Josephus C., Detroit, Mich. Electric lamp-lighter	492,913	Mar. 7	228	57	62	1403
Chambers Patent Barrel Heater Company. (See Chambers, James M., assignor.)						
Chambers, Samson, Sheffield, England. Caster	490,424	Jan. 24	2298	597	62	509
Chambers, Silas, Waco, Tex. Fruit-gatherer and pruning implement	498,620	May 30	3623	897	63	1328
Chambers, Solomon, Bay City, Mich. Rocking-chair	508,403	Nov. 14	705	173	65	902
Chambers, Thomas R., Brooklyn, N. Y. Combined jumper and apron	502,113	July 25	2522	632	64	504
Chambers, Thomas R., assignor of one-third to H. M. McCroskey, Glenloch, Tenn. Bedstead	490,066	Jan. 17	1708	446	62	380
Chambers, Thomas R., assignor of one-third to H. M. McCroskey, Glenloch, Tenn. Kitchen-cabinet	500,054	June 20	2168	527	63	1797
Champion Tobacco Machine Company. (See Dela Mar, Joseph, assignor.)						
Champney, George F., Taunton, Mass., assignor of three-fifths to A. H. Harrison, London, England. Making dies	499,820	June 20	1797	437 438	63	1732
Champney, George F., Taunton, Mass., assignor of three-fifths to A. H. Harrison, London, England. Apparatus for making dies	499,821	June 20	1800	438 439	63	1732
Champney, George F., Taunton, Mass., assignor of three-fifths to A. H. Harrison, London, England. Machine for making dies	499,822	June 20	1806	439	63	1733
Champoux, George. (See Hamilton, Boisvert, and Champoux.)						
Chandler, Alfred D., Lowell, assignor to G. Draper & Sons, Hopedale, Mass. Yarn-separator for spinning frames	496,186	Apr. 25	2630	662 663	63	536
Chandler, Charles H. (See Dunshee and Chandler.)						
Chandler, George E., Fall River, assignor to G. Draper & Sons, Hopedale, Mass. Spindle	507,994	Nov. 7	24	8	65	763
Chandler, Jesse, Ames, Kans. Latch	494,819	Mar. 21	1696	432	62	1720

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Chandler, John A., assignor of one-half to N. D. Waters, Kansas City, Mo. Vapor-burner.	497,862	May 23	2390	597	63	1096
Chandler, John A., assignor of one-half to N. D. Waters, Kansas City, Mo. Vapor-burner.	505,508	Sept. 26	1981	508	64	1681
Chandler & Price. (See Price, William H., Jr., assignor.)						
Chandler Pump Company. (See Dunshee and Chandler, assignors.)						
Chandler, Walter A., Lowell, assignor to G. Draper & Sons, Hopedale, Mass. Spindle.	498,952	June 6	357	85	63	1455
Chandler, Walter A., Lowell, assignor to G. Draper & Sons, Hopedale, Mass. Bearing for spindles.	505,786	Sept. 26	2481	626	64	1776
Chandler, Walter A., Lowell, assignor to G. Draper & Sons, Hopedale, Mass. Device for adjusting spindles.	510,404	Dec. 12	932	224	65	1601
Chaney, Nathan P., Buffalo, N. Y. Mattress.	505,649	Sept. 26	2258	572	64	1735
Chanute, Arthur, Denver, Colo. Extracting metals from compound ores.	501,559	July 18	1633		64	330
Chapel, Edward A., Marengo, Ill. Automatic railway-gate.	490,801	Jan. 31	2921	751	62	645
Chapin, Daniel A., Boston, Mass. Mandrel for combined railway chairs and fish-plates.	501,989	July 25	2321	577	64	467
Chaplin-Fulton Manufacturing Company. (See Desmond, John, assignor.)						
Chapman, Albert M., et al. (See De Neal, Jackson, assignor.)						
Chapman, Albert W. (See Shippee, Aaron B., assignor.)						
Chapman, Arthur L., Theresa, N. Y. Cane-stool.	504,326	Sept. 5	20	6	64	1275
Chapman, Charles H., Groton, Mass. Spinning-ring and traveler.	491,526	Feb. 14	764	194	62	915
Chapman, Charles H., Groton, Mass. Ring for spinning-machines.	501,243	July 11	1130	287	64	220
Chapman, Edward E., Boston, Mass. Curling-iron holder.	502,456	Aug. 1	348	83	64	630
Chapman, Frank L. G. (See Hoefler and Chapman.)						
Chapman, Frederick A., assignor of one-half to C. F. Wall and L. L. D. Chapman, Toledo, Ohio. Automatic switch.	507,352	Oct. 24	2658	653	65	537
Chapman, George B. (See Alleston and Chapman.)						
Chapman, George T., assignor to W. H. Merritt, New York, N. Y. Wagon-spring.	500,532	June 27	2949	724	63	1947
Chapman, George T., assignor to W. H. Merritt, New York, N. Y. Vehicle-spring.	503,761	Aug. 22	2531	629	64	1073
Chapman, George T., assignor to W. H. Merritt, New York, N. Y. Wagon-spring.	509,876	Dec. 5	44	10	65	1419
Chapman, Henry, et al. (See Wilbrant, Henri, assignor.)						
Chapman, Henry P., Ivoryton, Conn. Flange for piano-actions.	492,346	Feb. 28	2108	526	62	1215
Chapman, Herbert W., Newark, N. J. Machine for turning crank-pins.	499,010	June 6	474	110	63	1474
Chapman, James E., San José, Cal. Border for walks, &c.	489,792	Jan. 10	1240	325	62	272
Chapman, Louis L. D., et al. (See Chapman, Frederick A., assignor.)						
Chapman, Samuel. (See Speight and Chapman.)						
Chapman, Samuel. (See Speight, Chapman, and Todd.)						
Chapman, William, Washington, D. C. Differential pulley.	511,505	Dec. 26	2868	695	65	1982
Chapman, William E. (See Hutton, Milton C., assignor.)						
Chapman, William H., Bradford, Ark. Quilting attachment for sewing-machines.	504,558	Sept. 5	411	105	64	1346
Chappel, John H., assignor to E. A. Dubey, Brooklyn, N. Y. Chimney cowl or ventilator.	506,812	Oct. 17	1728	434	65	353
Chappell, Abner M., Dell, Va. Fruit-drier.	511,504	Dec. 26	2866	694	65	1982
Chappell, George F., New York, N. Y. Water-meter.	490,871	Jan. 31	3021	777 778	62	667
Chappell, George F., New York, N. Y. Rotary water-meter.	502,247	July 25	2751	695 696 303	64	548
Chappell, George H., assignor to New Power Company, New York, N. Y. Apparatus for using gases under high pressure for power.	505,028	Sept. 12	1182	304 305 646 647	64	1507
Chappell, Thomas C., Baltimore, Md. Conduit provided with conduit-couplings.	509,567	Nov. 28	2669	647	65	1304
Chaquette, Ephraim, San Francisco, Cal. Bolt or rod cutter.	496,396	May 2	13	4	63	621
Chaquette, Ephraim, Bridgeport, Conn. Saw-frame.	510,774	Dec. 12	1586	395	65	1721
Charcol, Frank, Paterson, N. J. Jacquard mechanism for looms.	500,852	July 4	505	131	64	92
Charles Lennig & Company. (See Farmer, John, assignor.)						
Charlton, Frank B. (See Howell, Thomas M., assignor.)						
Charlton, Thomas. (See Vail and Charlton.)						
Charnock, John M., Boston, Mass., assignor to H. E. Holmes. Leather-stretching machine.	501,920	July 25	2225	555 556	64	448
Charron, Leon, Woonsocket, R. I. Plumber's lamp.	506,871	Oct. 17	1820	456	65	369
Charvat, Joseph L., Chicago, Ill. Chimney or flue cowl.	489,459	Jan. 10	744	198	62	172
Chas. Truax Greene & Company. (See Scheffer, David M., assignor.)						
Chase, Andrew J., Boston, Mass. Apparatus for producing a liquid product of smoke.	511,288	Dec. 19	2495	608	65	1901
Chase, Arthur T., Cambridge, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric elevator.	508,680	Nov. 14	1138	280	65	988
Chase, Charles A., Moro, Me. Water-wheel.	492,862	Mar. 7	141	34	62	1386
Chase, Frank H. (See Hall and Chase.)						
Chase, Frank H., Grand Rivers, Ky., assignor of one-half to J. L. Hall, Kingston, Mass. Antifriction-bearing.	497,764	May 23	2233	559	63	1068
Chase, Frederick S., assignor to Waterbury Manufacturing Company, Waterbury, Conn. Umbrella-ferrule.	510,159	Dec. 5	535	123	65	1511
Chase, George N. (See Kirchner and Chase.)						
Chase, George S. (See Randall and Chase.)						
Chase, Henry S., assignor to Waterbury Manufacturing Company, Waterbury, Conn. Fill-ing-nipple and cap.	504,150	Aug. 29	3137	784	64	1205
Chase, Henry S., assignor to Waterbury Manufacturing Company, Waterbury, Conn. Waste-pipe plug.	506,872	Oct. 17	1821	456	65	370
Chase, Isaac M., Washington, D. C. Type-bar.	490,739	Jan. 31	2823	725	62	627
Chase, James, Rochester, N. Y. Trolley-wire finder.	499,095	June 6	599	144	63	1495
Chase, James, Rochester, N. Y. Dish-drainer.	503,278	Aug. 15	1736	429	64	912
Chase, James, Rochester, N. Y. Mucilage-holder.	506,156	Oct. 3	563	146	65	109
Chase, James, Rochester, N. Y. Electric-railway trolley.	508,538	Nov. 14	923	226	65	944
Chase, Jefferson, Portland, Me. Making artificial leather.	507,213	Oct. 24	2430		65	493
Chase, Jefferson, Portland, Me. Buffing or polishing wheel.	507,214	Oct. 24	2431	599	65	493
Chase, John F., Augusta, assignor to himself, and W. H. Stevens, Portland, Me. Vapor-izer.	492,979	Mar. 7	328	82	62	1424
Chase, Jonathan, assignor to H. Kellogg, Jr., Boston, Mass. Coal-barge.	494,121	Mar. 28	2212	563 564	62	1832
Chase, Jonathan, assignor to H. Kellogg, Jr., Boston, Mass. Coal-barge.	494,122	Mar. 28	2214	564	62	1833
Chase, Joseph E. (See Moore, Morris W., assignor.)						
Chase, Milton, and M. H. Foster, Haverhill, Mass. Heel-stiffener machine.	504,327	Sept. 5	22	7.8	64	1275
Chase, Ralph H., and J. J. Daly, Jacksonville, Fla. Steering-gear for vessels.	497,706	May 16	2131	532	63	1034
Chase & Sanborn. (See Moseley and Walsh, assignors.)						
Chase, Solomon C., North Baltimore, Ohio. Car-mover.	493,615	Mar. 14	1358	344	62	1638
Chase, Willis B., et al. (See Davis, George A., assignor.)						
Chaster, John E., Shawlands, assignor to Regent Gold Extracting Company, Limited, Glasgow, Scotland. Ore-amalgamator.	492,711	Feb. 28	2631	652	62	1322

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Chatellier, Joseph F., New York, N. Y. Clasp	496,721	May 2	521	138	63	714
Chatfield, James M., Thomaston, Conn. Apparatus for charging and discharging annealing-furnaces	491,768	Feb. 14	1148	288	62	994
Chatfield, James M., Thomaston, Conn. Coupling device for trays for annealing-furnaces	492,190	Feb. 21	1798	448	62	1140
Chatillon, George H., New York, N. Y. Spring-scale	505,091	Sept. 19	1301	335	64	1543
Chatillon, George H., New York, N. Y. Compound spring	505,092	Sept. 19	1301	335	64	1543
Chatillon, George H., New York, N. Y. Spring-scale	507,107	Oct. 24	2215	547	65	456
Chatterton, Bertram, London, England. Gas or vapor engine	505,751	Sept. 26	2423	{ 611 612 }	{ 64 64 }	{ 1764 1764 }
Chauncey, Charles T., assignor of one-half to H. Peters, Woodbridge, Canada. Perforating attachment for printing-presses	505,623	Sept. 26	2200	556	64	1724
Chausse, Alfred J., assignor of one-half to J. L. Tillman, Monroeville, Ind. Steam-engine governor	506,977	Oct. 17	1994	494	65	403
Chauvin, Léon, Sr., Cairo, Egypt. Device for stopping runaway horses	494,844	Apr. 4	513	129	63	99
Chavasse, James J., assignor of two-thirds to G. Bengough and A. J. Phillips, Toronto, Canada. Power filling-machine	501,055	July 11	821	214	64	165
Chavez, Augustin M., Mexico, Mexico. Plow	493,246	Mar. 14	744	191	62	1522
Cheadle, Charles B., <i>et al.</i> (See Long and Dimick, assignors.)						
Cheek, Joseph, Plattsmouth, Nebr. Oscillating valve for engines	496,552	May 2	253	68	63	665
Cheeseman, Andrew M., Milldale, Ky. Roofing-tile	511,506	Dec. 26	2870	696	65	1982
Cheeseman, Andrew M., Milldale, Ky. Cresting or hip for roofs	511,508	Dec. 26	2872	{ 696 697 }	{ 65 65 }	{ 1983 1983 }
Cheeseman, Andrew M., Bellwood, Pa. Roofing-tile	511,507	Dec. 26	2871	696	65	1983
Cheeseman, Andrew M., Bellwood, Pa. Roofing-tile	511,683	Dec. 26	3156	771	65	2034
Cheesman, George R., Auburn, N. Y. Bicycle-crank shield	504,121	Aug. 29	3088	773	64	1196
Cheever, John D., New York, N. Y., assignor to New York Belting and Packing Company, Limited, of England. Treating fibrous materials for preserving same	504,199	Aug. 29	3225		64	1222
Chelins, Peter, Trout Creek, N. Y. Sled-brake	505,391	Sept. 19	1775	460	64	1630
Chemical Garbage Reduction Company. (See Best and Hall, assignors.)						
Chemische Fabrik auf Actien, vormals E. Schering. (See Majert and Schmidt, assignors.)						
Chemische Fabrik auf Actien, vormals E. Schering. (See Marckwald, Willy, assignor.)						
Cheney, Henry O., Hopkinton, assignor of one-third to C. F. Pike, Woodville, Mass. Plow	502,877	Aug. 8	1070	264	64	778
Cheney, Joseph W., Three Rivers, Mass. Reed-supporting device for looms	499,870	June 20	1887	459	63	1747
Cheney, Walter L., assignor to Meriden Machine Tool Company, Meriden, Conn. Lathe-tool and support	491,256	Feb. 7	311	78	62	808
Chenoweth, James W., Decatur, Tex. Quilting attachment for sewing-machines	497,231	May 9	1335	{ 339 340 }	{ 63 63 }	{ 877 877 }
Cherbonnier, Caleb, <i>et al.</i> (See Bradley, Jay L., assignor.)						
Cherest, Léon J., Chicago, Ill. Metallic ceiling	490,186	Jan. 17	1901	495	62	420
Cherot, Joseph L., and J. N. Clouse, assignors of one-fourth to W. V. Anderson, St. Louis, Mo. Letter-box	494,976	Apr. 4	701	179	63	134
Cherry, John. (See Wade and Cherry.)						
Chesak, Frank F., Poniatowski, Wis. Puzzle-purse	506,843	Oct. 17	1777	447	65	362
Chesebro, James F., Boston, Mass., assignor to Star Brothers and R. Smith, New London, Conn. Inhaler	496,776	May 2	612	163	63	729
Chesney, Cummings C. (See Kelly and Chesney.)						
Chesney, Cummings C. (See Stanley, Kelly, and Chesney.)						
Chesney, Cummings C., assignor to Stanley Laboratory Company, Pittsfield, Mass. Electric-lighting system	502,702	Aug. 8	800	193	64	727
Cheshire, Edward. (See Reynolds and Cheshire.)						
Chesterton, Arthur W., Boston, Mass. Boiler-tube cleaner	492,935	Mar. 7	259	66	62	1410
Chetwynd, Julia B., London, England. Balcony-hoist	501,455	July 11	1476	369	64	293
Chevron, Pierre F. C., Paris, France. Cloth-measuring machine	498,765	June 6	19	5	63	1392
Chicago Clamp Company. (See Dana, William H., assignor.)						
Chicago Heat-Storage Company. (See Konegan, William A., assignor.)						
Chicago Matrix Machine Company. (See Redfield, Casper L., assignor.)						
Chicago Matrix Machine Company. (See Redfield, Casper L., assignor.) (Reissue.)						
Chicago Meat Chopper Company. (See Leineweber, Herman, assignor.)						
Chicago Oil Burner and Stove Company. (See Calkins, Almon H., assignor.)						
Chicago Railway Equipment Company. (See Harrison, Philip B., assignor.)						
Chicago Railway Equipment Company. (See Robertson and Carlton, assignors.)						
Chicago Railway Equipment Company. (See Robischung, Henry B., assignor.)						
Chichester, Henry B. (See Lane, James H., assignor.)						
Chief Manufacturing Company. (See Tegsgaarden, Freeman M., assignor.)						
Childs, A. H., <i>et al.</i> (See Curry, James H., assignor.)						
Childs, Charles M., Kansas City, Mo. Adjustable desk	493,480	Mar. 14	1118	287	62	1591
Childs, Charles V., Pittsburg, Pa. Ladder	493,977	Mar. 21	1962	501	62	1769
Childs, Eugene, Revere, assignor of one-half to O. L. Noble, Boston, Mass. Lathe	490,426	Jan. 24	2301	597	62	510
Childs, Eugene, Revere, assignor of one-half to O. L. Noble, Boston, Mass. Cutting-off attachment for lathes	490,427	Jan. 24	2303	{ 597 598 }	{ 62 62 }	{ 510 510 }
Childs, J. Morris, <i>et al.</i> (See Savage, Arthur W., assignor.)						
Chilton, Willis E., Lorain, Ohio. Dredging apparatus	501,492	July 18	1524	383	64	308
Chilton, William S., Dayton, Ohio. Hydrocarbon-burner for stoves, furnaces, &c	504,667	Sept. 5	569	144	64	1377
Chinnoek, Charles E., Brooklyn, N. Y. Electrical circuit	497,120	May 9	1178	301	63	849
Chipman, De Witt C. (See Reed, Franklin M., assignor.)						
Chipman, De Yoe C., Peoria, Ill., assignor to Port Huron Engine and Thresher Company, Port Huron, Mich. Flax-threshing machine	491,237	Feb. 7	287	72	62	803
Chipman, Robert J., Paterson, N. J. Game-board	497,307	May 16	1501	378	63	921
Chipman, Robert J., assignor of one-half to J. F. Kerr, Paterson, N. J. Device for shooting marbles	492,491	Feb. 28	2288	568	62	1251
Chipman, Robert J., assignor of one-half to C. P. Cramer, Paterson, N. J. Artesian well	493,651	Aug. 22	2353	587	64	1038
Chisholm, Archibald, Bay City, Mich. Track-cleaner	490,269	Jan. 24	2056	538	62	461
Chisholm, Charles A., Gardeau, Pa. Combined mop and wringer	502,657	Aug. 1	688	165	64	692
Chisholm, Charles P. (See Scott and Chisholm.)						
Chisholm, Colin D., Canandaigua, N. Y. Automatic fire-escape	496,997	May 9	982	{ 254 255 }	{ 63 63 }	{ 814 814 }
Chisholm, James W. (See Cobb, Charles G., assignor.)						
Chisholm, John A. (See Scott and Chisholm.)						
Chisholm, William, Sr. (See Dow, Joseph H., assignor.)						
Chisholm, William R., Barrington, R. I. Cane-harvester	506,904	Oct. 17	1877	468	65	381
Chism, Murray S. (See Casey and Chism.)						
Chittenden, Morgan. (See Bartram, Walker B., assignor.)						
Choate, Parker C., New York, N. Y. Producing metallic zinc	489,460	Jan. 10	745	198	62	172
Choate, Parker C., New York, N. Y. Producing metallic zinc	489,461	Jan. 10	747	198	62	173

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Choen, Wolf, assignor of one-half to S. Zemelman, St. Louis, Mo. Machine for pressing garments	501,327	July 11	1264	317	64	242
Chollar, Benjamin F., Fort Worth, Tex. Grate	494,462	Mar. 28	2751	690	62	1931
Chorley, Frederick O., Reading, England. Tobacco-pipe	493,150	Mar. 7	589	148	62	1475
Chormann, Alvin W., Washington, Pa. Station-indicator	501,477	July 11	1501	378	64	288
Christie, William W. (See Bates and Carter, assignors.)						
Chrisman, Campbell E., The Dalles, Oreg. Fruit-drier	497,308	May 16	1503	379	63	921
Christ, Jacob, Brooklyn, assignor, by mesne assignments, of one-half to C. Ohl and W. D. Stewart, New York, N. Y. Folding-bed	504,328	Sept. 5	26	8	64	1276
Christ, Willi, Detroit, Mich. Broom-holder	502,033	July 25	2396	603	64	480
Christensen, Christian, Racine, Wis. Car-coupling	510,160	Dec. 5	536	124	65	1511
Christensen, Christian N. (See Anderson, Victor, assignor.)						
Christensen, Emil, assignor of one-half to I. Wisler, Portland, Oreg. Machine for connecting button shanks and fasteners	500,993	July 4	721	189 190	64	131
Christensen, Jorgen, assignor of one-half to H. H. Hjul, San Francisco, Cal. Steering mechanism	495,622	Apr. 18	1772	446	63	363
Christensen, Jorgen, assignor of one-half to H. H. Hjul, San Francisco, Cal. Mechanism for controlling ships' rudders	495,623	Apr. 18	1773	446	63	363
Christensen, Niels A., Chicago, Ill. Condensing apparatus	502,922	Aug. 8	1158	285	64	794
Christian, Charles, Clinton, Kans. Gate	496,858	May 9	754	201	63	773
Christian, Oliver, Joliet, Ill. Latch	497,863	May 23	2392	597	63	1096
Christiansen, Emil. (See Thanner, Leonhard, assignor.)						
Christiansen, Simon, New York, N. Y. Garment-fitting pattern	489,793	Jan. 10	1241	325	62	272
Christiansen, Nils, Huntsville, Utah Ter. Dancing toy	509,150	Nov. 21	1918	469	65	1150
Christie, George E., Paterson, N. J. Combined messenger-call and telephone	508,563	Nov. 14	960	236	65	952
Christie, Thomas S., et al. (See Weber, Adolph, assignor.)						
Christman, Edward, and W. G. Mann, assignors to Brennan & Co. Southwestern Agricultural Works, Louisville, Ky. Grain-drill	497,864	May 23	2393	598	63	1096
Christmas, A. J. (See Williams, James G., assignor.)						
Christofferson, Christian A., Indianapolis, Ind. Interlocking switch and signal	489,581	Jan. 10	930	241	62	208
Christopher, George W., Hartford, Conn., assignor of one-half to A. C. Lynch, New York, N. Y. Exhaust-head	493,908	Mar. 21	1826	465	62	1745
Christopher, Calvin F., Spartanburg, S. C., assignor to Christopher Rotary Circular Steam Cylinder Company. Steam-engine	498,895	June 6	259	61	63	1438
Christopher, John M., assignor of one-half to W. C. Ludwig, Baltimore, Md. Sand-box for cars	507,066	Oct. 17	2137	530	65	428
Christopher Rotary Circular Steam Cylinder Company. (See Christopher, Calvin F., assignor.)						
Christy, John K., St. Louis, Mo. Combined shutter closer and fastener	508,404	Nov. 14	706	173	65	903
Christy Knife Company. (See Christy, Russ J., assignor.)						
Christy, Robert C. (See Schmieder, Otto E., assignor.)						
Christy, Russ J., assignor to Christy Knife Company, Fremont, Ohio. Knife	508,916	Nov. 21	1540	375	65	1076
Christy, Russ J., assignor to Christy Knife Company, Fremont, Ohio. Multiple tool and handle therefor	510,775	Dec. 12	1587	395	65	1722
Chronik, August. (See Chronik, Louis and A.)						
Chronik, Louis, Brooklyn, and A. Chronik, New York, N. Y. Magazine-camera	509,611	Nov. 29	2740	661 662	65	1318
Chubb, Daniel. (See Bronson and Chubb.)						
Chubbuck, Elton F., Haskinsville, N. Y. Potato-planter	503,695	Aug. 22	2423	603	64	1051
Clabby, James, assignor of one-half to F. Miller, Jeannette, Pa. Combined flattening and annealing oven	505,418	Sept. 19	1823	469 470	64	1639
Church & Co. (See Sundstrom, Karl J., assignor.)						
Church, Duane H., Waltham, Mass. Grinding-machine	494,058	Mar. 21	2086	532 533	62	1794
Church, Duane H., Newton, Mass. Making bimetallic balances for watches. (Reissue)	11,372	Oct. 10	1450	364	65	290
Church, Dwight M., Williamantic, assignor of fifteen twenty-fourths to A. C. Andrew, Windham, Conn., and E. B. Foss, Bay City, Mich. Railway-switch. (Reissue)	11,390	Nov. 21	2275	551	65	1217
Church, Frank S., assignor of one-half to W. F. Edwards, Detroit, Mich. Machine for maintaining a constant pressure in beer-barrels	488,985	Jan. 3	15	4	62	6
Church, Frank S., assignor of one-half to W. F. Edwards, Detroit, Mich. Vehicle-axle	489,180	Jan. 3	302	84	62	69
Church, Frank S., assignor of one-half to W. F. Edwards, Detroit, Mich. Vehicle-axle	489,181	Jan. 3	303	84	62	69
Church, George E. (See Ettenger, George W., assignor.)						
Church, Melvin B., Grand Rapids, Mich. Forming retarded gypsum	497,947	May 23	2519		63	1118
Church, Melvin B., Grand Rapids, Mich. Manufacturing gypsum composition	497,948	May 23	2520		63	1118
Church, William G., assignor to Woodruff Manufacturing Company, Hartford, Conn. Drill-holder	489,847	Jan. 10	1319	344	62	289
Churchill, Charles F., Melrose, Mass. Metallic rod-packing	493,978	Mar. 21	1963	501	62	1770
Churchill, Margaret E., St. Joseph, Mo. Washing-machine	506,470	Oct. 10	1176	292	65	237
Churchill, Milton, et al. (See Edison, Thomas A., assignor.)						
Churchill, Thomas A., Deland, Ill. Gate	510,957	Dec. 19	1951	476	65	1800
Churchill, William, Detroit, Mich. Puzzle	507,215	Oct. 24	2431	599	65	493
Churchward, James, Brooklyn, N. Y. Railway-spike	492,527	Feb. 28	2344	582	62	1263
Churchward, James, Brooklyn, N. Y. Wear-plate	492,528	Feb. 28	2345	582	62	1263
Churchward, James, Brooklyn, N. Y. Roll for rolling wear-plates	496,327	Apr. 25	2883	721	63	523
Churchward, James, Brooklyn, N. Y. Wear-plate	508,086	Nov. 7	182	49	65	791
Cinamon, Jacob, Basbarton, South African Republic. Covering for ships' bottoms	496,598	May 2	320	87, 88	63	678
Cincinnati Novelty Manufacturing Company. (See Folger, Charles H., assignor.)						
City Bution Works. (See Sheridan and Draher, assignors.)						
Claesen, Henry A., Brooklyn, N. Y. Making fire and water proof fabrics	496,599	May 2	322		63	678
Claassen, Peter L. E. C., Berlin, Germany. Valve for mustard-pots	492,782	Mar. 7	14	4	62	1362
Clafin, Anna J. (See Clafin, George D., Jr., assignor.)						
Clafin, George D., Jr., assignor to A. J. Clafin, Cleveland, Ohio. Apparatus for the continuous preparation of paper-stock	496,814	May 2	679	179	63	740
Clahasey, William G., Lenox, Mass. Two-part horseshoe	502,848	Aug. 8	1028	252	64	770
Clair, Maurice, et al. (See Ford, Charles S., Sr., assignor.)						
Clamer, Francis J., Philadelphia, Pa., assignor to Ajax Lead Coating Company, Camden, N. J. Producing coated metal articles	494,667	Apr. 4	218	55	63	45
Clamer, Francis J., Philadelphia, Pa., assignor to Ajax Lead Coating Company, Camden, N. J. Coating metal articles	494,668	Apr. 4	220	55	63	45
Clamer, George F. S., assignor to Stewart & Mattson Manufacturing Company, Philadelphia, Pa. Bell-cord hanger for railway-cars	503,406	Aug. 15	1942	482	64	949
Clancy, Martin, Jr. (See Shaw and Clancy.)						
Clancy, Michael T., Clifton Heights, Pa. Combined book clasp and handle	510,161	Dec. 5	537	124	65	1511

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Clancy, William, Anaconda, Mont. Apparatus for screening and concentrating ores	508,282	Nov. 7	499	{ 120 131	65	850
Clapham, Thomas D., Ashurst, New Zealand. Apparatus for propelling boats.....	510,117	Dec. 5	465	105	65	1497
Clapp, Dwight C., <i>et al.</i> (See Estey, David M., assignor.)						
Clapp, George A., Quincy, Mass. Opera-chair.....	509,196	Nov. 21	1995	485	65	1165
Clapp, William H., Auburn, N. Y. Grindstone.....	504,329	Sept. 5	28	9	64	1276
Clapper, Theodore. (See Turner, Jacob W., assignor.)						
Clarenbach, Louis, Jr., Philadelphia, Pa., and E. Zoll, Holyoke, Mass. Carding-engine.....	493,752	Mar. 21	1588	404	62	1699
Clark, Alexander H., Fond du Lac, Wis., assignor of one-half to L. H. Clark, Denver, Colo., Bicycle.....	506,626	Oct. 10	1407	{ 353 354	65	282
Clark, Archibald D., <i>et al.</i> (See Byrd, Walter M., assignor.)						
Clark Automatic Telephone Equipment Company. (See Clark, Emery A., assignor.)						
Clark, Byron O., Pasadena, Cal. Irrigating system.....	496,187	Apr. 25	2635	663	63	536
Clark, Carson J., Leslie, Mich. Stone-gathering machine.....	491,984	Feb. 21	1480	{ 368 369	62	1074
Clark, Charles A., Raymondville, N. Y. Milk-cooler.....	495,877	Apr. 18	2177	547	63	434
Clark, Charles A., Portland, Oreg. Street-sprinkler.....	500,853	July 4	507	132	64	93
Clark, Charles E., Rochester, N. H. Exhaust fan or blower.....	501,407	July 11	1408	353	64	270
Clark, Charles H., <i>et al.</i> (See Beecher, Edwin N., assignor.)						
Clark, Charles W., assignor of one-half to I. W. Lamb, Danville, Mich. Book-leaf holder.....	511,122	Dec. 19	2218	543	65	1850
Clark, Chester C., San Angelo, Tex. Quilting attachment for sewing-machines.....	488,986	Jan. 3	17	4	62	6
Clark, Chester W., Mishawaka, Ind. Plow.....	490,542	Jan. 24	2491	642	62	547
Clark, Chester W., Mishawaka, Ind. Boot-tree.....	501,133	July 11	961	245	64	190
Clark, David W., Washington, assignor of one-fourth to C. M. Clarke, Pittsburg, Pa. Tube for viscous substances.....	493,616	Mar. 14	1360	345	62	1638
Clark, Dexter, Milford, Mich. Knob attachment.....	506,388	Oct. 10	1026	256	65	208
Clark, Dwight S., Cambridge, assignor to W. H. Forbes, Boston, Mass. Box.....	499,654	June 13	1517	{ 364 365	63	1669
Clark, Dwight S., Cambridge, assignor to W. H. Forbes, Boston, Mass. Paper box.....	499,655	June 13	1519	365	63	1669
Clark, Edward. (See Jolly, Richard H., assignor.)						
Clark, Edward. (See King and Clark.)						
Clark, Edward, and A. F. Ogren, Lockport, Ill. Track-cleaner for street-railways.....	498,622	May 30	3625	897	63	1329
Clark, Edward L. (See Scholtz, Charles, assignor.)						
Clark Electric Company. (See Clark, Ernest P., assignor.)						
Clark, Eli P. (See Field and Clark.)						
Clark, Emery A., Sioux City, Iowa. Transfer system for telephone-switchboards.....	496,859	May 9	756	201	63	773
Clark, Emery A., assignor to Clark Automatic Telephone Equipment Company, Sioux City, Iowa. Telephone system.....	498,236	May 30	2973	741	63	1212
Clark, Ernest P., New York, N. Y., assignor to Clark Electric Company, of New York. Electric-arc lamp.....	509,842	Nov. 28	3107	751	65	1387
Clark, Eugene P., <i>et al.</i> (See Shaffer, Richard M., assignor.)						
Clark, Everett A., Pittsfield, Mass. Moon-dial for clocks.....	508,467	Nov. 14	795	196	65	920
Clark, Francis L. (See Parke, Clark, and Hogan.)						
Clark, Francis L., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Core-bar.....	491,470	Feb. 7	676	169	62	877
Clark, Francis L., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Engineer's brake-valve.....	496,638	May 2	391	{ 105 106 107	63	690
Clark, Francis L., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Car-brake mechanism.....	496,815	May 2	680	180	63	740
Clark, Francis L., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Fluid-pressure governor for pumping-engines.....	499,450	June 13	1196	285	63	1614
Clark, Francis L., Wilkinsburg, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Engineer's brake-valve. (Reissue).....	11,368	Sept. 26	2516	{ 635 636 637	64	1782
Clark, Frank H., Saratoga Springs, and R. C. Turnbull, Troy, N. Y. Car-coupling.....	498,621	May 30	3624	897	63	1329
Clark, Frank S. (See Bachman and Clark.)						
Clark, Frank W., Mount Desert, Me. Motor.....	503,829	Aug. 22	2618	654	64	1090
Clark, Franklin A., assignor to himself and G. A. Sanders, Worcester, Mass. Meat-press.....	492,781	Mar. 7	13	4	62	1361
Clark, Fred L. (See West, Stillman A., assignor.)						
Clark, Fred L. (See West and Clark.)						
Clark, George B., Bethesda, Ohio. Mail-bag holder.....	511,509	Dec. 26	2873	697	65	1983
Clark, George D., Plainville, Conn. Sash-cord guide.....	495,021	Apr. 11	773	196	63	164
Clark, George H., Boston, Mass., assignor to Clark Manufacturing Company, Portland, Me. Shoe-upper.....	496,969	May 9	941	247	63	807
Clark, George H., assignor to Clark Manufacturing Company, Boston, Mass. Last.....	498,237	May 30	2978	742	63	1214
Clark, George H., assignor to Clark Manufacturing Company, Boston, Mass. Last.....	498,238	May 30	2980	742	63	1214
Clark, George M. (See Frayer, Charles A., assignor.)						
Clark, Henry A. (See Lombard, Nathaniel, assignor.)						
Clark, Henry D., Hub City, Wis. Car-coupling.....	493,481	Mar. 14	1120	287	62	1592
Clark, Henry F., Poughkeepsie, N. Y., assignor to National Switch and Signal Company, Easton, Pa. Torpedo-signal for railways.....	493,482	Mar. 14	1121	{ 287 288	62	1592
Clark, Henry H., <i>et al.</i> (See Beecher, Edwin N., assignor.)						
Clark, Henry J., assignor of one-half C. L. Denneler, Ironton, Ohio. Fire-escape.....	503,365	Aug. 15	1892	469	64	940
Clark, Horace T., and C. B. Russell, Bridgeport, Conn. Pea-sheller.....	489,929	Jan. 17	1462	382	62	332
Clark, James M., and C. W. Hamilton, Chicago, Ill. Portable nesting boat.....	494,285	Mar. 28	2478	625	62	1881
Clark, James O., Newark, N. J. Carpet stretcher and tacker.....	499,372	June 13	1051	255	63	1589
Clark, James R., assignor of one-half to A. Leggoe, Philadelphia, Pa. Pill-machine.....	497,532	May 16	1860	469	63	985
Clark, John A. (See Wyman and Clark.)						
Clark, John G. (See Teegarden and Clark.)						
Clark, John H., Boston, Mass. Electric-current regulator.....	509,363	Nov. 28	2293	556	65	1232
Clark, John K., assignor, by mesne assignments, to M. K. Clark, Buffalo, N. Y. Latch.....	506,978	Oct. 17	1996	494	65	403
Clark, John T., New York, N. Y. Mailing-envelope.....	504,560	Sept. 5	413	105	64	1347
Clark, John W., Menands, assignor of one-half to S. J. Haight, Albany, N. Y. Electric trolley-wheel.....	503,562	Aug. 15	2193	548	64	995
Clark, Joseph, Saginaw, Mich. Lubricator.....	499,011	June 6	476	111	63	1474
Clark, Joseph, San Francisco, Cal. Exploder for projectiles.....	502,348	Aug. 1	164	38	64	596
Clark, Joseph O. (See Hunter and Clark.)						
Clark, Josiah P., Boston, Mass. Retort-lid.....	491,769	Feb. 14	1149	288	62	994
Clark, Josiah P., Boston, Mass. Catch or lock for retort-lids.....	493,424	Mar. 14	1019	262	62	1574
Clark, Lewis M., <i>et al.</i> (See Campbell, Carl T., assignor.)						
Clark, Louie H. (See Clark, Alexander H., assignor.)						
Clark, Lucas C., Plantsville, Conn. Lawn-mower.....	507,579	Oct. 31	3060	748	65	625

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Clark Manufacturing Company. (See Clark, George H., assignor.)						
Clark, Mary E., Corning, N. Y. Glass-fruit-jar protector	502,951	Aug. 8	1206	297	64	802
Clark, Mary K. (See Clark, John K., assignor.)						
Clark, Myron W., Parma, Mich., assignor, by mesne assignments, of one-half to Edward P. Allis Company, Milwaukee, Wis. Flour-bolt	492,270	Feb. 21	1925	480	62	1166
Clark, Myron W., Parma, Mich., assignor, by mesne assignments, of one-half to Edward P. Allis Company, Milwaukee, Wis. Flour-bolt	492,347	Feb. 21	2042	508 509	62	1189
Clark, Myron W., Parma, Mich., assignor, by mesne assignments, of one-half to Edward P. Allis Company, Milwaukee, Wis. Flour-bolt	492,914	Mar. 7	230	57, 58	62	1404
Clark, Nathaniel T., and J. K. Haynie, Sherman Heights, Tenn. Nut and bolt lock	503,195	Aug. 15	1605	394	64	8e9
Clark, Oliver H., Saginaw, Mich. Apparatus for operating furnace-doors	498,507	May 30	3428	850 851	63	1295
Clark, Orson B. (See Foster, Stephen A., assignor.)						
Clark, Peter. (See McNeill, Samuel C., assignor.)						
Clark, Richard J. (See Dotson, John W., assignor.)						
Clark, Robert A. (See Teeguarden and Clark.)						
Clark, Roselle, assignor of two-thirds to R. W. Jacobs and J. Clemence, Minneapolis, Minn. Draft attachment for cars	497,264	May 9	1395	353	63	887
Clark, Rufus A. (See Call and Clark.)						
Clark, Samuel G., Stevens Point, Wis. Indicator for locomotive-engineers	494,189	Mar. 28	2319	587	62	1852
Clark, Smith W., <i>et al.</i> (See Van Stavoren, Samuel J., assignor.)						
Clark, Smith W., Delanco, N. J. Flower-pot machine	511,587	Dec. 26	2996	730	65	2006
Clark, Theodore N., Toronto, Canada, assignor to F. E. Case, Canton, Ohio. Dental chair	508,564	Nov. 14	961	236	65	952
Clark, Thomas B., Zanesville, Ohio. Sanding attachment for street-cars	498,706	May 30	3773	931	63	1354
Clark, Thomas E., Des Moines, Iowa. Rein-support	502,703	Aug. 8	801	193	64	727
Clark, Thomas H. (See Brooke, William E., assignor.)						
Clark, Walter E. (See Burrows and Clark.)						
Clark, Warren A. (See Jable and Clark.)						
Clark, Will C., Washington, D. C. Traveling-trunk	509,197	Nov. 21	1906	485	65	1166
Clark, William, North Greenfield, Wis. Type-writing machine	493,015	Mar. 7	387	96	62	1435
Clark, William, North Greenfield, Wis. Type-writing machine	496,219	Apr. 25	2691	675	63	546
Clark, William, North Greenfield, Wis. Type-writing machine	500,798	July 4	425	112	64	78
Clark, William D., <i>et al.</i> (See Byrd, Walter M., assignor.)						
Clark, William H. (See Fawcett, Richard, assignor.)						
Clark, William H., Star City, Ind. Combined end-gate and scoop-board	502,067	July 25	2448	615	64	490
Clark, William H., assignor to Erie Cash Register Company, Erie, Pa. Cash-register	496,338	Apr. 25	2885	721	63	583
Clark, William H., assignor to Erie Cash Register Company, Erie, Pa. Cash-register mechanism	496,339	Apr. 25	2888	722	63	584
Clark, William H., assignor to Erie Cash Register Company, Erie, Pa. Key-locking and key-coupling mechanism for cash-registers	496,340	Apr. 25	2890	722	63	585
Clark, William H., assignor to Erie Cash Register Company, Erie, Pa. Cash-register	506,471	Oct. 10	1177	292 293 294	65	237
Clark, William H., assignor to Erie Cash Register Company, Erie, Pa. Cash-register	506,472	Oct. 10	1187	294 295 296	65	239
Clark, William H., assignor to Erie Cash Register Company, Albion, Pa. Cash-register	496,341	Apr. 25	2891	722 723	63	585
Clark, William P., Elberton, Ga. Car-coupling	491,835	Feb. 14	1247	311	62	1014
Clark, William R. P., Newark, N. J. Advertising counter-guard for rails or bars	494,289	Mar. 28	2480	625	62	1881
Clarke, Albert, Wellesley, Mass. Garment-stretcher	510,405	Dec. 12	933	224	65	1602
Clarke, Alfred L. (See Clarke, Frank H., assignor.)						
Clarke, Alfred L., Springfield, Ohio. Car-fender	508,565	Nov. 14	963	236	65	953
Clarke, Alfred L., assignor of one-half to F. H. Clarke, Springfield, Ohio. Car-fender	489,848	Jan. 10	1320	344	62	289
Clarke, Angelina M., <i>et al.</i> (See McDonnell, Patrick E., assignor.)						
Clarke, Chapman & Co. (See Paterson, Buchanan S., assignor.)						
Clarke, Charles C., Scranton, Pa., assignor to L. C. Smith, Syracuse, N. Y. Type-writing machine	502,248	July 25	2753	696	64	548
Clarke, Charles M. (See Clark, David W., assignor.)						
Clarke, Charles W., Hanford, Cal. Windmill	503,652	Aug. 22	2354	588	64	1038
Clarke, Edward H., Lynn, assignor of one-half to S. Eaton, Boston, Mass. Cleat for insulated wires	502,614	Aug. 1	611	146	64	678
Clarke, Edward W., <i>et al.</i> (See Wolcott, Henry E., assignor.)						
Clarke, Frank H. (See Clarke, Alfred L., assignor.)						
Clarke, Frank H., assignor of one-half to A. L. Clarke, Springfield, Ohio. Electric signal	491,874	Feb. 14	1314	324 325 328	62	1026
Clarke, George, Jersey City, N. J. Ash-ejector for steamships	491,959	Feb. 14	1439	359	62	1052
Clarke, George H. (See Peck, Richard W., assignor.)						
Clarke, Greville E., Racine, Wis. Letter-press	505,093	Sept. 19	1303	335 336	64	1543
Clarke, Henry B., Chicago, Ill. Hot-water heater	492,538	Feb. 28	2363	586	62	1268
Clarke, Ira P., Alameda, assignor of one-third to J. H. Kostar, Oakland, Cal. Automatic safety-guard for cars	510,675	Dec. 12	1422	351	65	1690
Clarke, John L., Baltimore, Md. Board-punching machine	497,566	May 16	1915	482	63	994
Clarke, Joseph H., <i>et al.</i> (See Scales, William S., assignor.)						
Clarke, Robert, Gravesend, N. Y. Method of and machine for bending tubes	506,157	Oct. 3	565	146	65	109
Clarke, Thomas, Stockport, England. Apparatus for the manufacture of loom-picking bands, &c	510,500	Dec. 12	1088	262	65	1631
Clarke, Thomas C., New York, N. Y. Cantalver-bridge	504,559	Sept. 5	412	105	64	1346
Clarke, William B., Kansas City, Mo. Shears	491,078	Feb. 7	28	7	62	753
Clarke, William H., Brooklyn, assignor of one-half to G. Isaacs, New York, N. Y. Hydro-carbon-burner	499,968	June 20	2029	492	63	1773
Clarke, William T. (See Gronberg, Oscar, assignor.)						
Clarkin, John M., St. Paul, Minn. Refrigerator	489,247	Jan. 3	413	115	62	92
Clarkson, Edwin S. (See Tauberschmidt, George A., assignor.)						
Clarkson, Joseph T., Amesbury, Mass. Shifting-seat carriage	497,765	May 23	2234	559	63	1069
Clarkson, William, Cleburne, Tex. Pumping-engine	496,294	Apr. 25	2801	701	63	568
Clasen, John H., Philadelphia, Pa. Machine for twisting and winding chenille	489,370	Jan. 3	592	159 160	62	127
Class, John F., Pleasant Hill, Ohio. Car-brake	496,600	May 2	332	88	63	678
Classen, Mathias, Kalamazoo, Nebr. Window	498,382	May 30	3227	802	63	1258
Clatworthy, Thomas B., Waterbury, Conn. Machinery for the manufacture of hollow bodies from metal disks	492,571	Feb. 28	2411	601	62	1279

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Clatworthy, Thomas B., assignor to Randolph & Clowes, Waterbury, Conn. Safety-valve for kitchen-boilers.....	491,238	Feb. 7	288	72	62	803
Claus, Hubert, Thale, Germany. Marbling or enameling process and apparatus.....	506,389	Oct. 10	1027	256	65	208
Claus, Hubert, Thale, Germany. Enameling metal ware.....	506,390	Oct. 10	1029	256	65	208
Clause, John J., Chicago, Ill. Rotary web-printing machine.....	501,921	July 25	2228	556	64	449
Clausen, Anne M. (See Rock, Ferdinand, assignor.)						
Clausing, H. L. (See Young, Edward, assignor.)						
Claussen, Christian. (See Schlichting, William, assignor.)						
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Apparatus for making paper bags.....	496,860	May 9	759	{ 201 202	{ 63	774
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine.....	502,847	Aug. 8	1026	{ 251 252	{ 64	770
Claussen, Edward E., assignor of one-half to E. F. Linke and G. Mortson, Hartford, Conn. Screw-machine.....	502,923	Aug. 8	1160	{ 285 286	{ 64	795
Claussen, Edward E., assignor of one-half to E. F. Linke and G. Mortson, Hartford, Conn. Screw-machine.....	504,102	Aug. 29	3060	{ 765 766	{ 64	1191
Clawson, Charles H., Watkins, N. Y. Cyclometer.....	508,405	Nov. 14	707	{ 173 174	{ 65	903
Clawson, Charles H., Watkins, N. Y. Actuating device for cyclometers.....	508,406	Nov. 14	709	174	65	903
Clawson, Clement C., Newark, N. J. Coin-receiving apparatus.....	493,544	Mar. 14	1226	314	62	1612
Clawson, Leonard E., San Francisco, Cal. Chimney.....	502,901	Aug. 8	1117	275	64	787
Clawson, Leslie E., Battle Creek, Mich. Semaphore for street-railways.....	496,639	May 2	395	107	63	691
Clawson, Linus G., and E. G. Wheeler, assignors of one-tenth to G. T. Ware, Pleasant Hill, Mo. Portable wagon-scale.....	489,930	Jan. 17	1463	383	62	333
Claxton, James W., Barren Fork, Ark. Tanning hides.....	501,586	July 18	1671		64	337
Clay, Henry, assignor to Electric Pneumatic Transit Company, Philadelphia, Pa. Pneumatic dispatch or transit system.....	489,931	Jan. 17	1466	{ 383 384 385	{ 62	333
Clay, Henry, assignor to Electric Pneumatic Transit Company, Philadelphia, Pa. Pneumatic dispatch or transit system.....	489,932	Jan. 17	1475	{ 385 386	{ 62	335
Clay, John S., Farmington, and J. R. Rucker, Bismarck, Mo. Drag-saw.....	491,985	Feb. 21	1482	369	62	1075
Claybourne, Colin W. (See Harris and Claybourne.)						
Claybourne, Colin W., Indianapolis, Ind. Cleaning device for hydrocarbon-burners.....	508,369	Nov. 7	634	156	65	875
Claypool, Albert, Toledo, Ohio. Combined flush hinge and support for desks.....	497,533	May 16	1863	470	63	985
Clayton, Herbert, New York, N. Y. Gas-stove.....	492,712	Feb. 28	2632	652	62	1322
Clayton, Herbert, New York, N. Y. Sad-iron.....	500,854	July 4	508	132	64	93
Clayton, Herbert D., Hill City, Kans. Register for printing-presses.....	503,452	Aug. 15	2008	498	64	960
Clayton, James, Brooklyn, N. Y. Triple compound air or gas compressor.....	492,915	Mar. 7	234	58, 59	62	1404
Clayton, James, assignor to L. C. Clayton, Brooklyn, N. Y. Eccentric.....	510,118	Dec. 5	465	105	65	1497
Clayton, James W., El Paso, Tex. Pump.....	495,878	Apr. 18	2180	547	63	435
Clayton, John, Minneapolis, Minn. Colter-clamp.....	511,123	Dec. 19	2219	543	65	1850
Clayton, Louisa C. (See Clayton, James, assignor.)						
Clayton, Thomas A. (See Oliphant and Clayton.)						
Cleasby, Alice F., et al. (See Cleasby, William H., assignor.)						
Cleasby, William H., assignor to H. N. Hinckley and A. F. Cleasby, Hartford, Conn. Cash recorder and indicator.....	498,532	May 30	3471	860	63	1302
Cleaveland, Charles F. (See Greene, Thomas C., assignor.)						
Cleaver, Joseph B., Bound Brook, N. J. Antifriction composition.....	507,969	Oct. 31	3692		65	744
Cleaver, Joseph B., Bound Brook, N. J. Antifriction composition.....	507,970	Oct. 31	3692		65	744
Cleeland, William M., assignor of one-half to T. C. Moore and D. E. Randall, Great Falls, Mont. Curling-iron.....	507,108	Oct. 24	2216	547	65	456
Clegg, Charles T., Manchester, England. Apparatus for bleaching and dyeing.....	507,995	Nov. 7	25	8	65	763
Cleghorn, Frederick W., assignor to C. G. Brown, Salt Lake City, Utah Ter. Separating precious metals from ores.....	497,014	May 9	1012	259	63	819
Cleghorn, James, Port Chalmers, New Zealand. Steam-boiler furnace.....	505,094	Sept. 19	1305	336	64	1543
Cleland, John S., assignor to Binghamton Wagon Company, Binghamton, N. Y. Running-gear for vehicles.....	494,095	Mar. 21	2151	549	62	1806
Clemence, James, et al. (See Clark, Roselle, assignor.)						
Clemens, Eliza J. M., Metropolis, Ill. Folding bed.....	497,751	May 16	2194	549	63	1046
Clement, Arthur A. (See Noyes and Clement.)						
Clément, Ferdinand J. H., Cuarnens, Switzerland. Felted woolen net for undergarments.....	494,669	Apr. 4	232	55, 56	63	45
Clement, George, Deadwood, S. D. Door for cat or dog houses.....	499,656	June 13	1520	365	63	1669
Clement, Henry E., Winooski, Vt. Knockdown furniture.....	509,198	Nov. 21	1997	{ 485 486	{ 65	1166
Clement, Nathan S., Northampton, Mass. Lock-hinge.....	494,549	Apr. 4	21	5	63	6
Clement, Tomas J., New Orleans, La. Cooking utensil.....	492,271	Feb. 21	1927	481	62	1166
Clements, Charles J., Brooklyn, N. Y. Attachment for brooms.....	490,472	Jan. 24	2378	615	62	525
Clemes, William H. (See De Mooy and Clemes.)						
Clemes, William H., assignor to Taylor & Boggis Foundry Company, Cleveland, Ohio. Combined wick-tube and burner-plate for oil-stoves.....	495,022	Apr. 11	774	196	63	164
Clemes, William H., assignor to Taylor & Boggis Foundry Company, Cleveland, Ohio. Molasses-gate.....	507,527	Oct. 31	2957	724	65	607
Cleminshaw, Charles G., and W. H. Bradt, Troy, N. Y. Trolley-wire finder.....	495,692	Apr. 18	1882	{ 471 472	{ 63	381
Cleminson, John J. D., London, England. Railway-vehicle.....	511,624	Dec. 26	3157	771	65	2035
Cleminson, John J. D., London, England. Railway-vehicle.....	511,685	Dec. 26	3158	772	65	2035
Clemmer, Ambrose B., et al. (See Bisel, Joseph J., assignor.)						
Clérét, Jules, assignor to J. Clérét Pearl Button Manufacturing Company, Philadelphia, Pa. Mechanism for turning pearl buttons or other articles.....	501,922	July 25	2229	556	64	449
Cleveland, Arthur, assignor of one-half to C. L. Nesler, Newark, N. J. Saddle for bicycles.....	505,938	Oct. 3	207	52	65	41
Cleveland, Eugene W., Rounthwaite, Canada. Vehicle-brake.....	508,253	Nov. 7	500	121	65	851
Cleveland Faucet Company. (See Grossman, Lawrence S., assignor.)						
Cleveland, George D., Angola, Ind. Sand-band.....	511,124	Dec. 19	2220	544	65	1851
Cleveland, George N., Freelandville, Ind. Corn-harvester.....	500,055	June 20	2169	{ 527 528	{ 63	1797
Cleveland, Henry B., and W. E. Tuller, Prophetstown, Ill. Horse-blanket.....	502,508	Aug. 1	438	105	64	647
Cleveland Machine Screw Company. (See Clyne, James B., assignor.)						
Cleveland, Percy E. (See Stone, Charles M., assignor.)						
Cleveland Type Foundry. (See Bultman, Frederick H., assignor.)						
Cleveland, William J., et al. (See Reed, George J., assignor.)						
Clewley, William H., Providence, R. I. Electric-lighting device.....	500,192	June 27	2427	591	63	1853
Click, Joseph S. (See Click, Joseph and J. S.)						
Click, Joseph and J. S., Bridgewater, Va. Wire fence.....	508,087	Nov. 7	183	49	65	792

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Cliff, Edward, Newark, N. J. Spring-setting machine	496,722	May 2	522	139	63	714
Cliff, Edward, Newark, N. J. Elliptic spring	496,723	May 2	523	139	63	714
Clifford, Frank H., St. Louis, Mo. Telescoping cup	492,900	Mar. 7	204	50	62	1399
Clifford, Frank L., Brooklyn, N. Y. Type-writing machine	496,295	Apr. 25	2802	701	63	568
Clifford, Frank L., Brooklyn, N. Y. Type-writing machine	496,296	Apr. 25	2803	702	63	568
Clifford, John, assignor to L. Wolff Manufacturing Company, Chicago, Ill. Strainer or grate for basin-outlets, &c.	506,668	Oct. 17	1481	372	65	308
Clifford, John, assignor to L. Wolff Manufacturing Company, Chicago, Ill. Outlet connection and strainer for sinks	506,669	Oct. 17	1482	372	65	308
Clifford, Patrick, assignor of one-half to L. Fridet, Rhineland, Wis. Pipe-core	491,527	Feb. 14	765	{ 194 195 }	{ 62 62 }	916
Clifford, Robert H., et al. (See Armstrong, Alfred, assignor.)						
Clifton, John G., Fort Lawn, S. C. Garden-tool	510,406	Dec. 12	934	225	65	1602
Climer, Frank O., assignor of one-half to M. S. Touzey, Anderson, Ind. Flexible blade	505,189	Sept. 19	1449	373	64	1569
Climer, Henry J., Anna, Ill. Folding step	504,966	Sept. 12	1087	278	64	1489
Cline, George A., Toledo, Ohio. Roller seal-press	494,411	Mar. 28	2678	672	62	1919
Cline, George J., Goshen, Ind. Fence	490,946	Jan. 31	3163	810	62	693
Cline, George J., Goshen, Ind. Wire-tightener	505,029	Sept. 12	1189	305	64	1509
Clingfast, Francis. (See Harper, James, assignor.)						
Clinton, James, Earlsfield, assignor to James Clinton Combination Clarinet Company, Limited, London, England. Clarinet	510,119	Dec. 5	466	105	65	1497
Clinton Wire Cloth Company. (See Phillips, David E., assignor.)						
Clock, Jesse M., New York, N. Y. Grindstone attachment	492,623	May 30	3626	898	63	1329
Clopton, John B., Bastrop, Tex. Violin	496,397	May 2	15	4	63	621
Close, Nathaniel M. P., Tustin, Cal. Label-printing machine	498,843	June 6	164	39, 40	63	1421
Close, Walter R., assignor of one-half to C. E. Hill, Bangor, Me. Striker for fog-signals	497,534	May 16	1864	470	63	986
Closs, Lawrence M. (See Freeman, Wallace E., assignor.)						
Closz, Charles and J. St. Ansgar, Iowa. Grain-separating screen	494,290	Mar. 28	2481	625	62	1881
Closz, Jacob. (See Closz, Charles and J.)						
Cloud, Harry M., Cincinnati, Ohio. Tailor's inseam-gage	496,150	Apr. 25	2582	650	63	527
Cloud, John W., Chicago, Ill. Car-wheel	492,529	Feb. 28	2346	582	62	1263
Cloud, John W., Chicago, Ill. Exhaust for steam-engines	505,190	Sept. 19	1451	373	64	1569
Cloud, Joseph S., et al. (See Shepard, Walter R., assignor.)						
Cloudman, Josiah D., assignor of one-half to E. W. Thomas, Lowell, Mass. Cloth-napping machine	505,264	Sept. 19	1561	408	64	1591
Clough, Augustus A. (See Call and Clough.)						
Clough, Justin E., Tolland, Conn. Beam-calipers	492,783	Mar. 7	15	5	62	1362
Clough, Roger M., Tolland, Conn. Duplex gear-cutter	490,638	Jan. 31	2661	686	62	596
Clough, Thomas A., and T. J. Bigger, Philadelphia, Pa. Dyeing-machine	491,336	Feb. 7	459	{ 118 119 }	{ 62 62 }	835
Clouse, Joseph N. (See Cherot and Clouse.)						
Clouser, William, assignor of one-half to C. W. Price, Greenfield, Ohio. Casket-truck	495,474	Apr. 18	1539	386	63	322
Clousing, Louis, Chicago, Ill. Lawn-mower	498,533	May 30	3473	{ 860 861 }	{ 63 63 }	1302
Cloy, Daniel, Janesville, Wis. Transplanter	495,304	Apr. 11	1265	316	63	252
Clowes, Frank, Nottingham, and B. Redwood, assignor of part to S. Waters, London, England. Apparatus for estimating the quantity of combustible gas or vapor present in air	502,173	July 25	2621	601	64	461
Cloyd, Henry C., Union City, Ind. Excelsior-knife	495,879	Apr. 18	2182	548	63	435
Cloyd, Henry C., Union City, Ind. Excelsior-machine	505,732	Sept. 26	2424	612	64	1764
Cloyd, Samuel P., Trezevant, Tenn. Coop	505,459	Sept. 26	1860	{ 478 479 }	{ 64 64 }	1660
Clute, Nicholas J., Schenectady, N. Y. Electric car-brake	498,624	May 30	3628	898	63	1329
Cluthe, Charles, Toronto, Canada. Truss	495,305	Apr. 11	1266	316	63	252
Cluze, Georges M., Paris, France. Glove	499,096	June 6	600	144	63	1495
Clyne, James B., Cleveland, Ohio. Stopping and reversing mechanism	497,865	May 23	2395	598	63	1097
Clyne, James B., assignor to Cleveland Machine Screw Company, Cleveland, Ohio. Machine for manufacturing screws	497,766	May 23	2234	560	63	1069
Clyne, James B., assignor to Cleveland Machine Screw Company, Cleveland, Ohio. Die or tap holder for screw-machines	497,767	May 23	2237	560	63	1069
Clyne, W. K. (See Brown, Harvey, assignor.)						
Coad, Theophilus, London, England. Electric primary battery	505,392	Sept. 19	1776	460	64	1630
Coale, Joseph M., Baltimore, Md. Straightway-valve	511,510	Dec. 26	2874	697	65	1983
Cobb, Charles G., Chicago, Ill., assignor to J. W. Chisholm, New York, N. Y. Apparatus for obtaining residuum contained in water used in the manufacture of gas	506,670	Oct. 17	1483	373	65	308
Cobb, John W., Taunton, Mass., assignor to Cobb Stove and Machine Company. Grate	489,462	Jan. 10	750	198	62	173
Cobb Stove and Machine Company. (See Cobb, John W., assignor.)						
Cobb, Woodson D., Fort Worth, Tex. Thill-coupling	501,923	July 25	2231	557	64	450
Cobbs, Chapman, et al. (See Sennett and Arnett, assignors.)						
Cobham, Frederick P., Warren, Pa. Extension-table	500,533	June 27	2950	{ 724 725 }	{ 63 63 }	1947
Cobin, Israel J. (See Hitt, Adrian, assignor.)						
Cobin, Israel J., New York, N. Y., and A. Hitt, Jersey City, N. J. Apparatus for cooling bottled liquids	507,996	Nov. 7	27	8, 9	65	764
Coburn, George H., Laconia, N. H. Cam-guard for knitting-machines	493,909	Mar. 21	1827	465	62	1745
Coburn, George H., and A. W. Stone, Laconia, N. H. Thread-splicing mechanism for knitting-machines	498,205	Nov. 7	372	91	65	827
Coburn, John G., Carthage, assignor of one-half to A. P. Marsh, Dixfield, Me. Axle-lubricator	505,265	Sept. 19	1563	408	64	1591
Coburn, William T., Laramie, Wyo. Bridle-bit	498,106	May 23	2760	690	63	1161
Cochran, Edward A., Brooklyn, N. Y. Shearing-clippers	508,163	Nov. 7	303	75	65	814
Cochran, Edward A., Brooklyn, N. Y. Shearing-clippers	508,164	Nov. 7	304	75	65	814
Cochran, Edward A., Brooklyn, N. Y. Shearing-clippers	508,165	Nov. 7	306	76	65	815
Cochran, Edward A., Brooklyn, N. Y. Shearing-clippers	511,125	Dec. 19	2221	544	65	1851
Cochran, Edward J., Pittsburg, Pa., assignor to W. Garrett, Joliet, Ill. Manufacture of hoops	492,348	Feb. 21	2045	509	62	1190
Cochran, Frederic B., Brooklyn, N. Y. Apparatus for distributing advertisements	502,396	Aug. 1	245	58	64	610
Cochran Gold and Silver Releasing and Steam Generating Company. (See Cochran, Samuel H., assignor.)						
Cochran, Henry. (See Canfield, Charles E., assignor.)						
Cochran, Henry, Chester, Pa. Folding gate for car-platforms	492,139	Feb. 21	1713	426	62	1122
Cochran, Henry, Chester, Pa. Trussed trolley-board for electric cars	499,871	June 20	1889	459	63	1748
Cochran, Henry, Chester, Pa. End panel for car-seats	503,653	Aug. 22	2356	588	64	1039
Cochran, Isaac A. and W. L., Melrose, Mass. Brake for bicycles and similar vehicles	510,407	Dec. 12	935	225	65	1602

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Cochran, Samuel H., Everett, Mass., assignor to Cochran Gold and Silver Releasing and Steam Generating Company, of Maine. Process of and apparatus for obtaining metals from their ores.	491,638	Feb. 14	943	{ 237 238 }	62	953
Cochran, Samuel W., Lambertville, N. J. Extraction apparatus.	505,816	Oct. 3	22	11	65	7
Cochran, William F., Osborne, Kans. Cultivator.	507,309	Oct. 24	2587	636	65	523
Cochran, William L. (See Cochran, Isaac A. and W. L.)						
Cocken, William Y., Tiffin, Ohio. Bicycle.	505,753	Sept. 26	2426	613	64	1765
Cocker, Joseph N., West Devonport, Tasmania. Potato-harvester.	511,511	Dec. 26	2876	698	65	1984
Coddington, William C., assignor of one-half to W. W. Burdette, Washington, D. C. Grip for cable roads.	506,979	Oct. 17	1997	494	65	404
Codman & Shurtleff. (See Hesse, Frank K., assignor.)						
Codman & Shurtleff. (See Shurtleff, Asahel M., assignor.)						
Cody, Alfred E., Sweaborg, assignor of one-half to R. Cuddie, Woodstock, Ontario, Canada. Wire fence.	504,709	Sept. 12	652	165	64	1405
Cody, Frederick A., Meriden, Conn. Hydrocarbon-lighting device.	508,812	Nov. 14	1328	330	65	1023
Cody, William F. (See Graydon, James W., assignor.)						
Coe, A. S. (See Casey, David F., assignor.)						
Coe, Henry J., Cleveland, Ohio. Fertilizer-distributing attachment for land-rollers.	510,408	Dec. 12	936	225	65	1602
Coe, Isaac, Jersey City, assignor to F. H. La Pierre, East Orange, N. J. Clasp.	491,079	Feb. 7	29	8	62	754
Coe, John B., Boston, Mass. Culinary chopper.	489,647	Jan. 10	1017	265	62	227
Coe, Walter H., Providence, R. I. Roll for holding and applying decorative films.	508,869	Nov. 14	1428	354	65	1042
Coe, William J., Liverpool, England. Elastic tire.	495,218	Apr. 11	1118	279	63	225
Coe, John S., Newark, N. J. Sinkers for fish-nets.	508,681	Nov. 14	1139	281	65	988
Coe, John S., Newark, N. J. Sash-fastener.	510,776	Dec. 12	1588	395	65	1722
Coffeen, John W., Jr., Kent, Ohio. Lock-joint.	509,364	Nov. 28	2295	556	65	1232
Coffey, Abraham L., Le Roy, Ill. Combined hat and clothes rack.	494,269	Mar. 28	2447	617	62	1875
Coffield, Jesse M., assignor of one-half to J. H. Steele, Bellaire, Ohio. Latch.	495,624	Apr. 18	1774	446	63	363
Coffield, Jesse M., assignor of one-half to I. L. Fawcett, Bellaire, Ohio. Hand-truck.	499,212	June 13	784	186	63	1541
Coffin, Arthur W., San Francisco, Cal. Pen and pencil holder.	495,784	Apr. 18	2033	514	63	408
Coffin, C. A., et al., administrators. (See Van Depoele, Charles J.)						
Coffin, Charles A., et al., executors. (See Van Depoele, Charles J.)						
Coffin, Charles L., Detroit, Mich. Welding metals electrically.	492,713	Feb. 28	2635	653	62	1323
Coffin, Charles L., Detroit, Mich. Apparatus for electric welding.	495,393	Apr. 11	1399	{ 350 351 }	63	276
Coffin, Charles L., Detroit, Mich. Machine for electrically welding metals.	495,394	Apr. 11	1400	351	63	276
Coffin, Charles L., Detroit, Mich. Electrically welding metals.	499,518	June 13	1310	308	63	1633
Coffin, Charles L., Detroit, Mich. Apparatus for punching metal.	499,519	June 13	1311	309	63	1634
Coffin, Charles L., Detroit, Mich. Method of and apparatus for electrically welding sheet metal.	499,657	June 13	1520	366	63	1670
Coffin, Charles L., Detroit, Mich. Method of and apparatus for heating, welding, or working metals electrically.	501,825	July 18	2059	507	64	404
Coffin, Charles L., Detroit, Mich. Electric heating and welding apparatus.	507,419	Oct. 24	2767	678	65	558
Coffin, Charles L., Detroit, Mich. Apparatus for heating metals electrically.	510,777	Dec. 12	1589	396	65	1722
Coffin, Charles L., Detroit, Mich., assignor to American Electric Heating Company, of Maine. Electrically-heated soldering-iron.	508,284	Nov. 7	501	121	65	851
Coffin, George H., Minneapolis, Minn. Umbrella attachment for cycles.	497,068	May 9	1091	280	63	833
Coffin, George W. (See Sylvén and Coffin.)						
Coffin, John P. (See Mortimer and Coffin.)						
Coffin, Philip M., et al. (See Jasnowski, Philip, assignor.)						
Coffin, Walter H., New Bedford, Mass. Paper-box machine.	493,979	Mar. 21	1965	501	62	1770
Coffin, Zebulon E., Boston, Mass., assignor to J. Fox, New York, N. Y. Dump-cart.	494,670	Apr. 4	224	56	63	45
Coffman, John R., Detroit, Mich., assignor of one-half to Eureka Tempered Copper Company, North East, Pa. Brush-holder.	510,892	Dec. 19	1830	452	65	1777
Coffman, Martin. (See Coffman, Samuel M., assignor.)						
Coffman, Samuel M., Braymer, assignor of one-half to M. Coffman, Georgeville, Mo. Car-coupling.	489,894	Jan. 10	1382	{ 359 360 }	62	301
Cogley, Andrew J., assignor of three-fourths to H. Martin and G. R. Welchans, Lancaster, Pa. Hitching-strap.	509,652	Nov. 28	2799	673	65	1329
Cogswell, Thomas, San Diego, Cal. Fruit or vegetable basket or receptacle.	508,408	Nov. 14	711	175	65	903
Cogswell, Thomas, San Diego, Cal. Hoisting-bucket.	508,599	Nov. 14	1020	251	65	964
Cohen, Bernard, and D. W. Gaskill, Little Rock, Ark. Packing-box.	493,545	Mar. 14	1228	314	62	1613
Cohen, Emanuel G., assignor of one-half to C. M. Miller, Cleveland, Ohio. Stapling-machine.	489,730	Jan. 10	1141	295	62	252
Cohen, Henry, and J. W. Tharp, Memphis, Tenn. Nut-lock.	504,561	Sept. 5	416	106	64	1347
Cohen, Louis P., and E. Herrmann, Paris, France. Bagasse-furnace.	500,378	June 27	2718	668	63	1905
Cohen, Max, New York, N. Y. Head for fur scarfs.	498,928	June 6	319	75	63	1449
Cohn, Max, Milwaukee, Wis. Underskirt.	490,102	Jan. 17	1765	460	62	393
Cohon, Steward L., Battle Mountain, Nev. Hydrant-valve.	509,843	Nov. 28	3110	751	65	1387
Coignet, Alphonse, Lyons, France. Multitubular boiler.	498,239	May 30	2981	{ 742 743 }	63	1215
Coin, Ina C., Leadville, Colo. Sliding-door lock.	508,917	Nov. 21	1541	375	65	1076
Cokeley, John J. H., Long Island City, N. Y. Fluid-mixer.	501,182	July 11	1039	263	64	204
Coker, James R., Knoxville, assignor of one-half to S. A. Rogers, Gravelston, Tenn. Fire-escape.	489,463	Jan. 10	751	199	62	173
Col, Gabriel, Castel-Jaloux, France. Treating crude resins and their residues.	495,543	Apr. 18	1643	413	63	341
Colahan, Charles, Cleveland, Ohio. Grain-binder.	500,738	July 4	331	88	64	62
Colam, William N., London, England. Cable tramway.	510,469	Dec. 12	1041	249	65	1621
Colbath, Monroe D., Mars Hill, Me. Dish-cleaner.	505,191	Sept. 19	1452	373	64	1569
Colbran, Octavius S. (See Ghent and Colbran.)						
Colby, Branch H., St. Louis, Mo. Protractor.	507,216	Oct. 24	2432	600	65	494
Colby, C. W. (See Spencer, George, assignor.)						
Colby & Co. (See Levy, Abraham, assignor.)						
Colby, Edward A., Newark, N. J. Electric illuminating apparatus.	498,878	June 6	230	54	63	1433
Colby, Edward A., Newark, N. J. Electric illumination.	498,879	June 6	233	55	63	1434
Colby, Edward A., Newark, N. J. Electric glow-lamp.	498,929	June 6	320	75	63	1449
Colby, Edward A., Newark, N. J. Electric illuminating apparatus.	499,097	June 6	601	144	63	1495
Colby, Edward J., assignor to E. Y. Loomis, Chicago, Ill. Coffee-pot.	503,563	Aug. 15	2194	548	64	995
Colby, Edward J., assignor to Colby Specialty Supply Company, Chicago, Ill. Newspaper-lock-box.	508,870	Nov. 14	1428	{ 354 355 }	65	1042
Colby Specialty Supply Company. (See Colby, Edward J., assignor.)						
Coldren, William D. (See Sharpe and Coldren.)						
Coldren, William P., assignor of two-thirds to J. M. Shenk, Lebanon, and W. H. Conrad, Reading, Pa. Controlling device for electric railway-cars.	506,001	Oct. 3	312	81, 82	65	61
Coldwell, Thomas, Newburg, N. Y. Metal-turning lathe.	500,753	July 4	356	96	64	66

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Coldwell, Thomas, Newburg, N. Y. Clutch-operating mechanism for lawn-mowers	504,330	Sept. 5	30	9	64	1276
Coldwell, Thomas and W. H., Newburg, N. Y. Slicing-machine	508,206	Nov. 7	373	91, 92	65	827
Coldwell, William H. (See Coldwell, Thomas and W. H.)						
Cole, Andrew M., assignor of one-half to E. C. Rose, Highlandville, Mo. Doubletree-clevis.	506,769	Oct. 17	1656	415	65	340
Cole, Augustus H. Boston, Mass. Window frame and sash	511,409	Dec. 26	2717	658	65	1954
Cole, Charles S., Bridgeport, Conn. Corset or dress stay	500,471	June 27	2850	702	63	1929
Cole, Charles T. (See Hamill, Lentz, and Cole.)						
Cole, Daniel F., Wellsborough, Pa. Draft-equalizer	506,844	Oct. 17	1779	448	65	363
Cole, Francis B., O'Neil, Nebr. Hydraulic motor	504,331	Sept. 5	31	9	64	1277
Cole, Francis J. (See Hazlehurst and Cole.)						
Cole, Francis J., Baltimore, Md. Brake-beam for railway-cars	503,263	Aug. 15	1711	{ 421 422 }	64	908
Cole, Francis J., Baltimore, Md. Slack-adjuster for car-brakes	509,018	Nov. 21	1693	{ 417 418 }	65	1107
Cole, Francis J., and E. W. Grieves, Baltimore, Md. Railway-car structure	511,588	Dec. 26	3000	{ 730 731 }	65	2007
Cole, George W. (See Peaslee, Edwin J., assignor.)						
Cole, Henri B. (See Bellinger, Albert D., assignor.)						
Cole, Horatio E., Rochester, N. Y., assignor to Goodyear Shoe Machinery Company, Hartford, Conn. Sewing-machine	495,452	Apr. 11	1493	375	63	294
Cole, James W. (See Steen, James H., assignor.)						
Cole, John H., Tylertown, Miss. Double turning shovel and colter	503,123	Aug. 15	1489	366	64	867
Cole, John J., St. Louis, Mo. Lightning-rod ornament	510,837	Dec. 12	1690	420	65	1740
Cole, John M., Cleveland, Ohio. Joiner's plane	504,562	Sept. 5	417	106	64	1347
Cole, Leander S., Kingston, Mass. Fishing-reel	505,216	Sept. 19	1491	389	64	1577
Cole, Lloyd H., Pawtucket, R. I. Nut-tapping machine	494,367	Mar. 28	2607	655	62	1905
Cole, Roudy B., Lakewood, Ill. Sawmill	497,768	May 23	2238	561	63	1069
Cole, Stanton B. (See Moore, Harry S., assignor.)						
Cole, Thomas, assignor of two-thirds to J. R. Rozier and E. Schaaf, St. Mary's, Mo. Box-fastener	508,285	Nov. 7	502	122	65	851
Coleman, Clyde J., Chicago, Ill. Galvanic battery	495,306	Apr. 11	1267	316	63	252
Coleman, Frederick, Binghamton, N. Y. Kitchen-cabinet	509,653	Nov. 28	2800	674	65	1329
Coleman, George D., assignor of nine-twentieths to C. R. Guerin, Chicago, Ill. Electrode for secondary batteries	495,107	Apr. 11	926	234	63	192
Coleman, Isaiah B., Elmira, N. Y. Elevator hoisting apparatus	505,592	Sept. 26	2160	546	64	1716
Coleman, John A., Providence, R. I. Feeding mechanism for nail-blanks	506,206	Oct. 10	698	176	65	143
Coleman, John A., and A. E. Tenney, Providence, R. I.; said Tenney assignor to said Coleman. Trimming-die	507,260	Oct. 24	2497	615	65	505
Coler, Elijah J., Liberty, Ohio. Unloading-platform	493,980	Mar. 21	1966	502	62	1770
Coler, Peter P., Plano, assignor of one-half to Plano Manufacturing Company, Chicago, Ill. Grain-binder	489,219	Jan. 3	367	102	62	83
Coles, George A. (See Andrews, Edward N., assignor.)						
Coley, Joseph, assignor to W. J. Hogg, Worcester, Mass. Loom for weaving double-faced pile fabrics	489,731	Jan. 10	1143	296	62	252
Colgrove, James, Clear Water, Minn. Potato-harvester	490,596	Jan. 24	2560	{ 659 660 }	62	561
Colgrove, James, Clear Water, Minn. Seed-potato cutter	505,095	Sept. 19	1306	{ 336 337 }	64	1544
Colhower, Charles, and A. J. Grossmann, Dayton, Ohio. Attachment for eyebolt-machines.	498,766	June 6	22	5, 6	63	1393
Collar, Barzellea J., Detroit, Mich. Boiler	500,855	July 4	510	133	64	94
Colleret, Rodrigue, Montreal, Canada. Fire-ladder	489,628	Jan. 10	994	{ 259 260 }	62	222
Colley, George H., assignor to Weeks Colley Manufacturing Company, Jackson, Mich. Sewing-machine	508,600	Nov. 14	1022	252	65	964
Colley, Simeon, Springfield, Ohio. Combination-tool	506,416	Oct. 10	1081	265	65	218
Colley, Walter W., London, England. Registering ticket-punch	506,158	Oct. 3	567	147	65	109
Colling, Charles J., assignor to J. M. Robinson & Co., Cincinnati, Ohio. Machine for corrugating sheet-metal pipe	494,626	Apr. 4	160	38	63	33
Collins Automatic Pneumatic Switching Tubes Company. (See Collins, William G., assignor.)						
Collins, Byron H. (See Collins, Willie H. and B. H.)						
Collins, Caleb G., Woodsburg, assignor to C. A. Stevens, New York, N. Y. Dredging apparatus	496,342	Apr. 25	2893	{ 723 724 }	63	585
Collins, Caleb G., Woodsburg, assignor to C. A. Stevens, New York, N. Y. Dredging apparatus	496,343	Apr. 25	2895	{ 724 725 }	63	585
Collins, Caleb G., Woodsburg, assignor to C. A. Stevens, New York, N. Y. Dredging apparatus	496,344	Apr. 25	2897	{ 725 726 }	63	586
Collins, Caleb G., Woodsburg, assignor to C. A. Stevens, New York, N. Y. Dredging apparatus	501,870	July 18	2121	{ 524 525 526 }	64	415
Collins, Charles M., South Bend, Ind. Boring-machine	494,845	Apr. 4	514	129	63	100
Collins, Charles R., assignor to United Gas Improvement Company, Philadelphia, Pa. Carburetor	497,866	May 23	2396	598	63	1097
Collins, Charles S., et al. (See Adams and Lynam, assignors.)						
Collins, Charles W., Granite, Mont. Hitching device	495,961	Apr. 25	2298	580	63	473
Collins, Daniel W. (See Jones and Collins.)						
Collins, David W., Philadelphia, Pa. Apparatus for gumming and cutting strips, labels, &c.	508,682	Nov. 14	1139	281	65	988
Collins, Edmund R. (See Cornelius and Collins.)						
Collins, George, assignor of one-half to R. B. Wheeler, Detroit, Mich. Car-heating apparatus	489,524	Jan. 10	853	222	62	194
Collins, George A., Jr., New Bedford, Mass. Spinning-machine	496,083	Apr. 25	2489	628	63	508
Collins, George H., Boston, Mass., and M. A. Mills, Manchester, N. H. Agitator	499,712	June 20	1605	388	63	1699
Collins, Henry W., London, England. Spectacles	510,240	Dec. 5	673	160	65	1537
Collins, James R., Brooklyn, N. Y. Bag	490,103	Jan. 17	1766	460	62	393
Collins, Jamison F., Oak Park, Va. Raising or lowering device for buggy-tops	496,561	May 9	763	202	63	775
Collins, John A., Fall River, Mass. Spinning-machine	500,318	June 27	2629	643	63	1889
Collins, John R. (See O'Grady and Collins.)						
Collins, John T. (See Merrow and Collins.)						
Collins, John T., Yarmouth, Canada, assignor to Hopedale Machine Company, Hopedale, Mass. Thread-breaking device for spinning or twisting frames	506,159	Oct. 3	569	147	65	110
Collins, Joseph S., Colon, Nebr. Cornstalk gatherer and shocker	497,707	May 16	2132	{ 532 533 }	63	1034
Collins, Judith L., Monongahela City, Pa. Educational appliance	501,675	July 18	1823	454	64	362

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Collins, Mary E. (See Bates and Collins.)						
Collins Plow Company. (See Brown, John W., assignor.)						
Collins Plow Company. (See Brown and Gehrt, assignors.)						
Collins, Reuben G., Dollar Bay, Mich. Electro-mechanical steam-engine recording-indicator	495,148	Apr. 11	1014	{ 253 254 }	63	206
Collins, Thomas F. (See Mueller, Charles L., assignor.)						
Collins, Timothy J., Toledo, Ohio. Chair	511,195	Dec. 19	2337	{ 571 572 }	65	1872
Collins, Walter A., Tullytown, Pa. Sprinkling-machine	490,900	Jan. 31	3092	793	62	680
Collins, William A., Bayonne, N. J. Dredging-bucket	499,451	June 13	1199	285	63	1615
Collins, William B., Santa Rosa, Mo. Windmill	508,683	Nov. 14	1140	281	65	988
Collins, William G., New York, N. Y., assignor, by mesne assignments, to Collins Automatic Pneumatic Switching Tubes Company, of New Jersey. Pneumatic dispatch-tube	510,470	Dec. 12	1043	250	65	1622
Collins, Willie H. and B. H., East Richford, Vt. Wagon-nut	507,310	Oct. 24	2589	637	65	524
Collmann, Alfred, Vienna, Austria-Hungary. Steam-engine	494,412	Mar. 28	2680	672	62	1919
Collmann, Alfred, Vienna, Austria-Hungary. Valve-gear	502,615	Aug. 1	612	{ 146 147 }	64	678
Collord, Charles A., New York, N. Y. Metal-shaping machine	493,151	Mar. 7	590	148	62	1475
Collyer, Charles W., assignor of two-thirds to A. J. Hoitt and C. Healey, Lynn, Mass. Holdback for vehicles	510,327	Dec. 5	801	193	65	1562
Colnon, George A., Washington, D. C. Beam-calipers	493,683	Mar. 21	1469	374	62	1676
Colony, Charles W., Sandy Creek, N. Y. Press for shaping plates from veneers	506,417	Oct. 10	1083	269	65	219
Colorado Iron Works. (See Nesmith, John W., assignor.)						
Colson, David G., et al. (See Kaltenbeck, William H., assignor.)						
Colson, William H. (See Büttel and Colson.)						
Colt, James B., New York, N. Y. Lamp-burner	502,704	Aug. 8	802	193	64	727
Colton, Charles E. (See Nesdall, Colton, and Mara.)						
Colton, George A., assignor to Munger-Colton Manufacturing Company, Chicago, Ill. Door-hanger	502,705	Aug. 8	803	194	64	728
Columbia Cash Register Company. (See Aufuldish, John B., assignor.)						
Columbia Cash Register Company. (See Tyrrel and Aufuldish, assignors.)						
Columbia Drill Company. (See Fender, John M., assignor.)						
Columbian Lasting Machine Company. (See Preston, Albert F., assignor.)						
Columbian Register Company. (See Bersbach and Zietlow, assignors.)						
Columbus Buggy Company. (See Peters and Forbis, assignors.)						
Columbus Cane Company. (See Phillips, Elwood C., assignor.)						
Colvin, Frank R., New York, N. Y. System of telephonic intercommunication	502,091	July 25	2488	{ 625 626 }	64	498
Colvin, Frank R., New York, N. Y. System of telephonic intercommunication	504,103	Aug. 29	3064	767	64	1192
Colvin, Frank R., New York, N. Y. Telephone system	511,589	Dec. 26	3001	731	65	2007
Colvin, Russell L. (See O'Neill, John M., assignor.)						
Comas Machine Company. (See Bilgram, Hugo, assignor.)						
Combs, George W., Leavenworth, Kans. Method of and apparatus for bolting flour, meal, &c.	507,971	Oct. 31	3693	{ 917 918 }	65	744
Combs, Seth D., and R. A. Frates, Ione, Cal. Pinch-bar	491,986	Feb. 21	1483	369	62	1075
Combs, W. F. (See Bryden, Edward O., assignor.)						
Comeaux, Cyprien L., Bayou Goula, La. Sugar-cane cart	509,425	Nov. 28	2414	584	65	1254
Comfort, James F., Kendall Creek, Pa. Ice-creeper	492,272	Feb. 21	1928	481	62	1166
Comins, Frank B. (See Topfiff and Comins.)						
Comins, Thomas B., Boston, Mass. Umbrella-holder	494,123	Mar. 28	2217	564	62	1833
Comly, James I., Philadelphia, Pa. House. (Reissue)	11,304	Feb. 7	732	{ 185 186 }	62	889
Commander, Edward A. (See Miles and Commander.)						
Commears, William, Lily Chapel, Ohio. Fence	492,784	Mar. 7	17	5	62	1362
Commichau, Gotthard, Magdeburg-Sudenburg, Germany. Flexible tubing	499,713	June 20	1607	{ 388 389 }	63	1700
Common Sense Bicycle Manufacturing Company. (See Pettit and Congdon, assignors.)						
Commun, Alfred M., Rheims, France. Apparatus for loading or unloading cars	498,155	May 23	2826	{ 707 708 }	63	1173
Composing Machine Company. (See Lake and Risley, assignors.)						
Compound Spring Power Company. (See Pfautz, Daniel M., assignor.)						
Compress Wheel Company. (See Todd, Libanus M., assignor.)						
Compton, Curtis F., Davison, Mich. Potato-chopper	493,684	Mar. 21	1470	374	62	1676
Compton, J. W. (See Tilman, Joseph M., assignor.)						
Comstock, Clark S., Brooklyn, N. Y. Button	489,288	Jan. 3	471	130	62	103
Comstock, George S. (See Hanck and Comstock.)						
Comstock, Harry, Fulton, N. Y. Pipe-burr-removing implement	499,098	June 6	603	145	63	1496
Comstock, Harry, assignor of one-half to W. J. Watson, Fulton, N. Y. Pneumatic tire	491,010	Jan. 31	3262	833	62	712
Comstock, Thomas H., and J. E. Junk, Nashville, Tenn. Sawmill-dog	489,287	Jan. 3	469	130	62	103
Conant, Albert F., Boston, Mass. Bed	491,080	Feb. 7	30	8	62	754
Conant, Richard O. (See Smith, Frank W., assignor.)						
Conard, Daniel W., Waterloo, Iowa. Fly-brush	503,945	Aug. 29	2792	700	64	1141
Concannon, Thantus P., Winamac, Ind. Ditching-machine	503,036	Aug. 8	1338	330	64	827
Conchar, James W., Dubuque, Iowa. Door-hanger	491,081	Feb. 7	31	8	62	754
Condé, Samuel L., Rockford, Ill. Type-writer cabinet	491,239	Feb. 7	289	72	62	803
Condé, Samuel L., Rockford, Ill. Clamp for type-writers	497,015	May 9	1013	260	63	819
Condé, Sivits, Oswego, N. Y. Feed for knitting-machines	510,958	Dec. 19	1952	{ 477 478 479 }	65	1800
Condé, Sivits, Oswego, N. Y. Knitting	510,959	Dec. 19	1955	{ 477 478 479 }	65	1801
Condell, J. S., Jr. (See Webster, Augustus D., assignor.)						
Condict, Nathan W., Jr., Jersey City, N. J. Still	493,247	Mar. 14	745	191	62	1522
Condit, Charles L., Bonton, N. J., and S. B. Ladd, Washington, D. C. Book-rest	498,156	May 23	2828	704	63	1174
Condit, Emmett H., Outville, Ohio. Horse-power	491,528	Feb. 14	767	195	62	916
Condon, Lewis T., Stanwick, N. J. Coin purse or case	505,192	Sept. 19	1453	374	64	1570
Cone, Abraham M., Lee, Mass. Tailor's measure	497,165	May 9	1242	316	63	860
Congdon Brake Shoe Company. (See Barnes, David L., assignor.)						
Congdon Brake Shoe Company. (See Sargent, Fitz William, assignor.)						
Congdon, George R., Grand Rapids, Mich. Ladder	507,784	Oct. 31	3395	832	65	688
Congdon, John R. (See Pettit and Congdon.)						
Congdon, Stewart H., et al. (See Whalley, Nathan, assignor.)						
Corningsby, Alfred, assignor to Pneumatic Tire and Cycle Company, Brooklyn, N. Y. Device for securing tires to wheel-rims	510,382	Dec. 5	884	213	65	1578

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Conity, Hannah. (See Conity, James, assignor.)						
Conity, James, assignor to H. Conity, Brooklyn, N. Y. Cock or faucet.....	496,998	May 9	985	255	63	814
Conity, James, assignor to H. Conity, Brooklyn, N. Y. Cock or faucet.....	496,999	May 9	987	255	63	815
Conity, James, assignor to H. Conity, Brooklyn, N. Y. Cock or faucet.....	497,000	May 9	989	255	63	815
Conklin, Ezra F. (See Conklin, Oliver S. and E. F.)						
Conklin, Gilbert H., Riverhead, N. Y. Feed-water heater.....	493,981	Mar. 21	1967	502	62	1770
Conklin, Gilbert H., Riverhead, N. Y. Steam-engine.....	506,473	Oct. 10	1191	296	65	240
Conklin, James H., <i>et al.</i> (See Platt, Albert L., assignor.)						
Conklin, Joseph I., Brooklyn, N. Y. Electric conduit for railways.....	504,104	Aug. 29	3066	767	64	1192
Conklin, Joseph I., Brooklyn, N. Y. Electric locomotive.....	507,997	Nov. 7	29	9	65	764
Conklin, Oliver F., assignor to Dayton Fan and Motor Company, Dayton, Ohio. Electric motor.....	511,196	Dec. 19	2340	572	65	1872
Conklin, Oliver S. and E. F., Undercliff, N. J. Hat-stand.....	493,248	Mar. 14	746	191	62	1522
Conklin, Theodore F., assignor to N. S. Leppert, Chicago, Ill. Bridge-gate.....	492,387	Feb. 28	2109	526	62	1215
Conkling, Gurdon, Glens Falls, N. Y. Concentrating magnetic iron ores.....	504,300	Aug. 29	3226	804	64	1222
Conkling, Gurdon, Glens Falls, N. Y. Concentrating magnetic iron ore.....	504,301	Aug. 29	3228	804	64	1222
Conley, Edward P. (See Robinson and Conley.)						
Conley, Joseph, assignor of one-half to H. J. Bowen, St. Joseph, Mo. Brick-kiln.....	491,037	Jan. 31	3316	846	62	724
Conley, Joseph, assignor of one-half to H. J. Bowen, St. Joseph, Mo. Circular brick-kiln.....	491,038	Jan. 31	3318	846	62	724
Connell, Patrick J., <i>et al.</i> (See Curtis, Frederic A., assignor.)						
Connell, William H., and J. A. Patterson, Wilmington, Del. Check-perforator.....	507,674	Oct. 31	3220	788	65	656
Connely, James T., Milton, Pa. Lap-joint for steam-boilers.....	490,067	Jan. 17	1709	446	62	380
Connely, William, Toledo, Ohio. Apparatus for manufacturing boilers.....	496,640	May 2	396	107 108	63	691
Connelly, William A., Boston, Mass., assignor to Electro-Novelty Company, Portland, Me. Galvanic battery and electrical toy instrument.....	498,743	May 30	3852	949	63	1368
Conner, Abner, <i>et al.</i> (See Lassar, Zabby, assignor.)						
Conner, David, Groton, Conn. Firearm.....	493,352	Mar. 14	915	235	62	1553
Conner, Joshua H., Itasca, Tex. Washing-machine.....	493,685	Mar. 21	1471	375	62	1676
Conner, William A., assignor to Standard Underground Cable Company, Pittsburg, Pa. Covering electric conductors.....	508,370	Nov. 7	636	156	65	876
Conner, Yeates R. (See Swain and Conner.)						
Connett, Matthew F., Jr., Nashville, Tenn. Hand fence-machine.....	491,770	Feb. 14	1152	288	62	994
Connett, Matthew F., Atlanta, Ga. Picket-wiring fence-machine.....	494,537	Mar. 28	2883	723	62	1955
Connolly, Mary, Washington, D. C. Artist's palette.....	506,160	Oct. 3	570	147	65	110
Connolly, Peter. (See Price, Daniel, assignor.)						
Connor, John R., assignor of five-sixths to C. Stratton, Franklin, C. E. and H. Stratton, J. C. Osborne, Erie, and J. F. White, Meadville, Pa. Riveting-machine.....	508,371	Nov. 7	637	156 157	65	876
Connor, Thomas, Holyoke, Mass. Chute for ashes.....	491,960	Feb. 14	1443	359	62	1053
Conover, James F., New York, N. Y. Piano-action.....	508,813	Nov. 14	1330	330	65	1023
Conrad, George H., and A. Winter, Pittsburg, Pa. Car-coupling.....	498,825	May 30	3630	898	63	1330
Conrad, Henry A. (See Balderson, John, assignor.)						
Conrad, William H., <i>et al.</i> (See Coldren, William P., assignor.)						
Conrader, Rudolph, Erie, Pa. Reamer-grinding machine.....	498,240	May 30	2982	743 56	63	1215
Conradi, Henry, London, England. Rail-cleaner for railway and tramway rails.....	499,120	Jan. 3	215	57 58	62	50
Conradson, Conrad M., Madison, Wis. Chuck for screw-machines.....	489,933	Jan. 17	1480	387	62	335
Conradson, Conrad M., Madison, Wis. Chuck.....	489,934	Jan. 17	1482	387	62	335
Conradson, Conrad M., Madison, Wis. Rod-feeding device.....	489,935	Jan. 17	1484	387 388	62	336
Conradson, Conrad M., Madison, Wis. Rod-gripping device.....	489,936	Jan. 17	1485	388	62	336
Conradson, Conrad M., Madison, Wis. Automatic chuck and rod-feeder.....	490,863	Jan. 31	3006	771 772 773	62	664
Conradson, Conrad M., Madison, Wis. Lathe.....	490,864	Jan. 31	3009	772 773 774	62	665
Conradson, Conrad M., Madison, Wis. Head-stock for lathes.....	497,830	May 16	2010	501	63	1011
Conradson, Conrad M., Madison, Wis. Rod-feeding device for turning-lathes.....	497,631	May 16	2011	502	63	1011
Conradson, Conrad M., Madison, Wis. Automatic chuck.....	497,632	May 16	2013	502	63	1012
Conradson, Conrad M., Madison, Wis. Tool-support for lathes.....	497,769	May 23	2242	562	63	1070
Conradson, Conrad M., and B. V. Norberg, Milwaukee, Wis. Adjustable bearing for connecting-rods, &c.....	490,639	Jan. 31	2662	686	62	596
Conradt, Augustus, Middletown, Conn. Non-conducting handle for tableware, &c.....	494,627	Apr. 4	162	38	63	33
Conrady, Eugen, Morganton, N. C. Steam-engine governor.....	503,785	Aug. 22	2563	638	64	1080
Consolidated Brake Adjuster Company. (See Hix, Oliver P., assignor.)						
Consolidated Brake Adjuster Company. (See Holmes, William W., assignor.)						
Consolidated Brake Adjuster Company. (See Marshall, Waldo H., assignor.)						
Consolidated Car Heating Company. (See Boery, Samuel M., assignor.)						
Consolidated Car Heating Company. (See McElroy, James F., assignor.)						
Consolidated Fastener Company. (See Dowse, William B. H., assignor.)						
Consolidated Fastener Company. (See Hall, Frank E., assignor.)						
Consolidated Fastener Company. (See Kraetzer, Edwin J., assignor.)						
Consolidated Fastener Company. (See Raymond, Pierre A., assignor.)						
Consolidated Fastener Company. (See Smith, Joseph R., assignor.)						
Consolidated Hand Method Lasting Machine Company. (See Ladd, Sherman W., assignor.)						
Consolidated Railway Equipment Company of Toronto. (See Nunn, William C., assignor.)						
Consolidated Railway Supply Company. (See Graham, John H., assignor.)						
Consolidated Refrigerating Company. (See Fuller, J. Ensign, assignor.)						
Constantine, Thomas S. (See Howard, William C., assignor.)						
Constantine, Richard B. (See Doremus and Brooks, assignors.)						
Contant, Auguste C., Fort Wayne, Ind. Undried-brick protector.....	492,388	Feb. 28	2110	526 527	62	1215
Continental Gas Stove Company. (See Linberg, Charles J., assignor.)						
Conver, William H., Emlenton, assignor of two-thirds to A. C. and J. D. Bailey, Ford City, Pa. Pipe or nut wrench.....	503,124	Aug. 15	1489	366	64	867
Converse, Edmund. (See Percival, Herbert E., assignor.)						
Converse, Edmund. (See Turner, William A., assignor.)						
Converse, Frank B., assignor to H. S. Gordon, New York, N. Y. Banjo.....	494,059	Mar. 21	2088	533	62	1794
Converse, Lyman P., Chicago, Ill. Air-heating stove.....	496,460	May 30	3349	834	63	1281
Converse, Morton E., Winchendon, Mass. Toy bed or crib.....	510,893	Dec. 19	1832	452	65	1777
Converse, Morton E., Winchendon, Mass. Drum.....	511,126	Dec. 19	2222	544 545	65	1851
Conway, Harrison V., assignor of one-half to I. N. Throckmorton, Boone, Iowa. Axle-lubricator.....	503,074	Aug. 8	1391	343 344	64	836

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Cook, Adniram J., Troy, N. Y. Vehicle-gear	495,544	Apr. 18	1644	414	63	341
Cook, August D., Lawrenceburg, Ind. Plunger for pumps	493,249	Mar. 14	747	{ 191 192 }	62	1523
Cook, Charles H., Windsor, assignor, by mesne assignments, of one-half to E. E. Stalkner, Hartford, Conn. Antifriction-bearing	509,199	Nov. 21	1998	486	65	1166
Cook, Charles M., <i>et al.</i> (See Phillips, Charles W., assignor.)						
Cook, David N., Riverside, Colo. Amalgamating-machine	496,247	Apr. 25	2737	684	63	555
Cook, David N., Salem, Mass. Car-brake	508,409	Nov. 14	712	175	65	904
Cook, Edgar H., Brooklyn, N. Y. Coin-detector	498,767	June 6	23	6	63	1393
Cook, Edward S., Drake's Branch, Va. Plow	491,529	Feb. 14	768	195	62	916
Cook, Frank S., deceased; J. W. Cook, Springfield, Ohio, administrator. Machine for tapping screw-nuts	507,972	Oct. 31	3695	918	65	744
Cook, Frank S., deceased; J. W. Cook, Springfield, Ohio, administrator, and assignor to Capitol Manufacturing Company, Chicago, Ill. Bolt-threading machine	492,140	Feb. 21	1715	{ 427 428 429 }	62	1122
Cook, Frederic, Bay St. Louis, Miss. Bagasse-furnace	497,770	May 23	2243	{ 562 563 }	63	1070
Cook, George, Newark, N. J. Adjustable shade-roller bracket	510,894	Dec. 19	1832	452	65	1777
Cook, George, London, England, and C. K. Marr, Glasgow, Scotland. Apparatus for automatically displaying pictures	507,785	Oct. 31	3396	832	65	689
Cook, George D. (See Steele, James W., assignor.)						
Cook, Hugo, Dayton, Ohio. Cash register and indicator	503,946	Aug. 29	2793	{ 700 701 702 }	64	1142
Cook, Hugo, Dayton, Ohio. Cash register and recorder	503,947	Aug. 29	2808	{ 702 703 }	64	1144
Cook, Hugo, Dayton, Ohio. Autographic register	504,467	Sept. 5	250	65, 66	64	1316
Cook, Hugo, Dayton, Ohio. Cash register and indicator	511,070	Dec. 19	2120	524	65	1831
Cook, Irving J., Newark, N. J. Electric-railway conduit	501,676	July 18	1824	454	64	363
Cook, Jerome W., administrator. (See Cook, Frank S.)						
Cook, John, assignor of one-half to D. R. Brown, Trenton, N. J. Machine for shaping brush blocks or backs	492,660	Feb. 28	2559	634	62	1307
Cook, John, assignor of one-half to D. R. Brown, Trenton, N. J. Handle for brush-making machines	492,661	Feb. 28	2561	{ 634 635 }	62	1307
Cook, John A., Buffalo, N. Y. Broom	493,483	Mar. 14	1124	288	62	1593
Cook, John R., <i>et al.</i> (See Gentry, Edward S., assignor.)						
Cook, John W., Harrisburg, assignor of one-half to C. Scott, Woodburn, Oreg. Clothes-pin	506,980	Oct. 17	1998	494	65	404
Cook, John W. B., Camden, Ark. Nut-lock	490,740	Jan. 31	2825	{ 725 726 }	62	627
Cook, John W. B., Camden, Ark. Nut-lock	499,872	June 20	1890	459	63	1748
Cook, Leroy, Worcester, Mass. Rolling-mill plant	503,830	Aug. 22	2619	{ 654 655 }	64	1090
Cook, Lucian F., Tacoma, Wash. Elevated friction cable railway	496,188	Apr. 25	2636	663	63	537
Cook, Lucian F., Tacoma, Wash. Elevated-railway system	496,189	Apr. 25	2638	664	63	537
Cook, Marcus E., Wallingford, Conn. Wheeled excavator and carrier	489,707	Jan. 10	1108	286	62	245
Cook, Mary E., Amity, Oreg. Railway-car stove	495,880	Apr. 18	2183	548	63	435
Cook, Richard H., assignor to Kerr Thread Company, Fall River, Mass. Knot-catching and thread or yarn clearing device	497,633	May 16	2015	502	63	1012
Cook, Samuel M., assignor to American Electric Heating Company, Boston, Mass. Electric heater	497,771	May 23	2246	563	63	1071
Cook, Stephen S., assignor to Branson Machine Company, Philadelphia, Pa. Sinker or web-holder for knitting-machines	504,967	Sept. 12	1088	278	64	1490
Cook, Theodore A., Callicoon Depot, assignor to J. and W. Mathison, Brooklyn, N. Y. Shaft and bearing	501,611	July 18	1714	427	64	345
Cook, Thomas P., New York, N. Y. Permutation-lock	489,411	Jan. 3	647	175	62	139
Cook, Waddington L., <i>et al.</i> (See Gentry, Edward S., assignor.)						
Cook, William H., Montclair, N. J. Folding paper box	504,824	Sept. 12	852	218	64	1443
Cook, William H., assignor of one-half to E. C. Love, Riverside, Cal. Tree-support	499,520	June 13	1312	309	63	1634
Cook, William H., and J. Harrison, assignors to S. H. Brooks and R. A. Doxey, Manchester, England. Apparatus for imparting variable motion to the traverse-rods in machines for preparing and spinning fibrous materials	500,113	June 27	2260	550	63	1824
Cook, William N., assignor of one-half to D. L. Rogers, Grand Rapids, Mich. Mop-head	497,292	May 9	1464	369	63	898
Cooke, Albert D., Philadelphia, Pa. Bedstead	503,196	Aug. 15	1606	394	64	889
Cooke, Albert D., and E. D. Shaw, Philadelphia, Pa.; said Shaw assignor to said Cooke. Bedstead	498,968	June 6	384	92	63	1459
Cooke, David B., <i>et al.</i> (See Bunn, John, assignor.)						
Cooke, Euclid M., and W. P. Phillips, Swepsonville, N. C. Reversible can	509,568	Nov. 28	2673	647	65	1305
Cooke, James S., and J. W. Brook, Liversedge, England. Ingrain carpet fabric	497,708	May 16	2134	533	63	1034
Cooke, Pitt, Washington, D. C. Coin-controlled lock for telephones	497,907	May 23	2461	615	63	1108
Cookson, Thomas, assignor to J. Wilson, Merrittton, and C. Riordon, Toronto, Canada. Wire-rope machine	495,085	Apr. 11	868	222	63	181
Cool, Charles H., assignor of one-half to J. B. Kinny, Ridgeville, Ind. Tire-upsetter	508,372	Nov. 7	640	157	65	876
Coombes, Joseph A., London, England. Concentrator	493,070	Mar. 7	461	{ 116 117 }	62	1451
Coombs, Charles L., assignor of two-thirds to E. Renaud and A. B. Hayward, Washington, D. C. Electric heater	507,217	Oct. 24	2433	600	65	494
Coombs, Pierre L. B. (See Finck, Nicholas, assignor.)						
Coomer, Cicero, <i>et al.</i> (See McCain, Benjamin H., assignor.)						
Coon, Benjamin F., Jamaica, Iowa. Cultivator	493,398	Mar. 14	984	251	62	1568
Coon, Emmett, Ann Arbor, Mich. Floor-drainer	496,862	May 9	764	203	63	775
Coon, Emmett, Ann Arbor, Mich. Ash-sifter	499,2-2	June 13	867	215	63	1559
Coon, Frank J., and M. C. Walla Walla, Wash. Washing-machine	495,307	Apr. 11	1268	317	63	253
Coon, Frank S., assignor to A. and E. Bourlier, Louisville, Ky. Disinfecting apparatus	492,662	Feb. 28	2562	635	62	1307
Coon, Mead C. (See Coon, Frank J. and M. C.)						
Coons, James P., Scottsville, Ill. Fire-escape	501,990	July 25	2322	580	64	497
Coons, Samuel F., <i>et al.</i> (See Tatro, Charles P., assignor.)						
Cooper, Augustus S., Santa Barbara, Cal. Apparatus for purifying asphalt	507,885	Oct. 31	3556	876	65	719
Cooper, Charles. (See Sibbald, Charles J., assignor.)						
Cooper, Christopher C., Havana, Ill. Steam-medicator	497,232	May 9	1336	340	63	878
Cooper, David M. (See Genet, William K., assignor.)						
Cooper, Frederick. (See Keen, Marriott, and Cooper.)						
Cooper-Hampton Electric Company. (See Cooper and Hampton, assignors.)						
Cooper, Harry, Toronto, assignor of two-thirds to T. M. Boal and J. Robertson, Steubenville, Ohio. Wrench	496,190	Apr. 25	2639	664	63	537

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Cooper, John, and T. Pattinson, Sheffield, England. Piston.....	501,560	July 18	1635	409	64	330
Cooper, John H., Philadelphia, Pa. Bearing and its support.....	499,012	June 6	478	111	63	1475
Cooper, John H., Philadelphia, Pa. Spindle-bearing.....	499,158	June 6	696	167	63	1511
Cooper, John M., New Orleans, La. Hollow-roll comminuter.....	495,665	Apr. 18	1842	461	63	375
Cooper, John W., Salem, Ind. Trousers-guard.....	498,047	May 23	2674	669	63	1145
Cooper, John W., Matawan, N. J. Car-brake.....	500,250	June 27	2511	614	63	1869
Cooper, John W., Matawan, N. J. Car-truck.....	503,831	Aug. 22	2621	655	64	1091
Cooper, Joseph, Racine, Wis. Cow-tail holder.....	499,213	June 13	786	187	63	1541
Cooper, Louis, assignor of one-half to J. A. Reid, Bolling, Ala. Cotton-harvester.....	504,019	Aug. 29	2927	733	64	1165
Cooper, Lyman, Patoka, Ind. Sawing-machine.....	501,826	July 18	2060	508	64	404
Cooper, William, Minneapolis, Minn. Pneumatic hydraulic locomotive.....	504,668	Sept. 5	570	145	64	1377
Cooper, William, Minneapolis, Minn. Pneumatic hydraulic locomotive.....	504,669	Sept. 5	575	145	64	1378
Cooper, William, Minneapolis, Minn. Hydropneumatic motor.....	504,670	Sept. 5	577	145 146 147 148 149	64	1379
Cooper, William, and G. P. Hampton, assignors to Cooper-Hampton Electric Company, Minneapolis, Minn. Rotary reciprocating pump.....	511,044	Dec. 19	2080	515 516	65	1823
Cooper, William, and G. P. Hampton, assignors, by mesne assignments, to Cooper-Hampton Electric Company, Minneapolis, Minn. Power-transmitting and speed-regulating mechanism.....	511,289	Dec. 19	2496	609	65	1901
Coover, George C. (See Heiges and Coover.)						
Cope, George W., assignor to Art Stove Company, Detroit, Mich. Oil heating-stove.....	504,020	Aug. 29	2929	734	64	1166
Cope, Marshall M., Noyo, Cal. Saw-handle.....	498,626	May 30	3631	899	63	1330
Cope, Thomas J., Philadelphia, Pa. Automatic railway-signal.....	495,308	Apr. 11	1269	317	63	253
Copeland, David W., Syracuse, N. Y. Journal-box.....	496,345	Apr. 25	2900	726	63	586
Copeland, David W., Syracuse, N. Y. Axle-bearing.....	496,346	Apr. 25	2903	726	63	587
Copeland, David W., Syracuse, N. Y. Journal-bearing.....	496,347	Apr. 25	2905	726	63	587
Copeland, David W., Syracuse, N. Y. Roller-bearing.....	496,348	Apr. 25	2907	727	63	588
Copeland, George W. (See Crisp and Copeland.)						
Copeland, George W. (See Crisp, Copeland, and Barrett.)						
Copeland, James S., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Wheel-hub.....	491,937	Feb. 14	1410	352	62	1046
Copeland, James S., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Type-writing machine.....	492,141	Feb. 21	1718	429 430	62	1123
Copeland, James S., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Gun-clip for bicycles.....	492,740	Feb. 28	2672	663	62	1330
Copeland Rapid Laster Manufacturing Company. (See Crisp, Joseph E., assignor.)						
Copeland Rapid Laster Manufacturing Company. (See Crisp and Copeland, assignors.)						
Copeland Rapid Laster Manufacturing Company. (See Crisp and Junkins, assignors.)						
Coppinger, Martin, 2d, Milford, assignor to Hopedale Machine Company, Hopedale, Mass. Annealing.....	495,930	Apr. 18	2251	.....	63	449
Coquy, Francois, Lyons, France. Respirator.....	492,980	Mar. 7	329	83	62	1424
Corbett, Edwin R. (See Corbett, Joseph and E. R.)						
Corbett, Edwin R., New York, N. Y. Bicycle.....	501,056	July 11	825	214	64	166
Corbett, Joseph and E. R., assignors to T. F. Shaw, New York, N. Y. Plunger for creasing or creasing and folding machines.....	497,949	May 23	2522	629	63	1118
Corbin Cabinet Lock Company. (See Horne, Henry, assignor.)						
Corbin, Jay S., Prescott, Canada. Hardening harrow-disks.....	506,671	Oct. 17	1485	373	65	308
Corbit, Andrew M., Bethlehem, Iowa. Hay-stacker.....	493,576	Mar. 14	1222	230	62	1626
Corbitt, Charles A., assignor to Corbitt Press Company, Racine, Wis. Printing-press.....	507,486	Oct. 24	2863	702	65	577
Corbitt, Daniel E. (See Geiger, Harry M., assignor.)						
Corbitt Press Company. (See Corbitt, Charles A., assignor.)						
Corcoran, Patrick W., Seneca, Ill. Hame.....	497,772	May 23	2247	563	63	1071
Corcoran, Thomas J. (See Nell and Corcoran.)						
Corcoran, Thomas J., Peru, Ind. Pattern mechanism for looms.....	495,453	Apr. 11	1494	376	63	294
Cordenons, Federico, Padua, Italy. Gas-engine.....	500,754	July 4	358	93	64	66
Cording, Albert. (See Steuervald and Cording.)						
Cordley, William J., Richmond, Va., assignor of one-half to W. D. Moses. Piano-case.....	496,553	May 2	255	68	63	666
Corey, Elias, Omaha, Nebr. Car-coupling.....	508,088	Nov. 7	184	49	65	792
Corey, John A., Hope Valley, R. I. Wagon-jack.....	492,389	Feb. 28	2113	257	62	1216
Corker, John F., Salt Lake City, Utah Ter. Hygienic device.....	496,816	May 2	682	180	63	740
Corker, John F., Salt Lake City, Utah Ter. Gravity-helmet.....	500,686	July 4	248	67	64	47
Corkhill, Henry R., Jr. (See McBean, McLanghin, Corkhill, and Baxter.)						
Corkhill, Henry R., Jr., Rochester, N. Y. Ellipsograph.....	492,142	Feb. 21	1724	430	62	1123
Corkhill, Henry R., Jr., and F. J. Shields, Rochester, N. Y. Tuck-marker for sewing-machines.....	497,950	May 23	2524	630	63	1119
Corleis, Ehrenfried, and H. Renisch, assignors to Firm of F. Krupp, Essen, Germany. Manufacture of carbon rods for electric-arc lamps.....	504,105	Aug. 29	3067	.....	64	1192
Corley, Daniel B., Abilene, Tex. Holder for ink-bottles.....	492,143	Feb. 21	1727	431	62	1124
Corliss, Charles P., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Stem winding and setting watch.....	503,527	Aug. 15	2130	535	64	923
Corliss, Herbert A., St. Helen, Oreg. Self-hoisting flood-gate.....	490,137	Jan. 17	1827	477	62	406
Corliss, William, Providence, R. I. Fireproof safe.....	508,207	Nov. 7	375	92	65	828
Cornack, W. A., et al. (See Rodecker, Charles W., assignor.)						
Corn, John T. (See Seitz, John, assignor.)						
Cornand, Albert F. M., Brussels, Belgium, assignor of one-half to W. T. Barnard, New York, N. Y. Morse transmitter.....	511,234	Dec. 19	2398	584	65	1883
Cornelson, John H., assignor to Hoko Engraving Plate Company, St. Louis, Mo. Apparatus for casting.....	511,265	Dec. 19	2452	598	65	1893
Cornelius, James, and E. R. Collins, Brooklyn, N. Y. Stone-separator.....	490,947	Jan. 31	3164	811	62	693
Cornelius, James, and E. R. Collins, Brooklyn, N. Y. Brick or tile cutter.....	492,663	Feb. 28	2563	635	62	1307
Cornelius, John. (See Boman and Cornelius.)						
Cornelius, John, Oakland, Md., assignor of one-half to R. S. Kayler, Alliance, Ohio. Truck.....	492,273	Feb. 21	1929	481	62	1167
Cornelius, John C. F., El Dorado, Kans. Baling-machine.....	498,953	June 6	358	86	63	1455
Cornell, Elijah B., assignor of four-fifths to S. Harper, W. B. Sollday, A. H. R. Guiley, and F. Asbury, Philadelphia, Pa. Punch.....	500,534	June 27	2952	725	63	1948
Cornell, Frank H., New York, N. Y. Oil-injector.....	506,418	Oct. 10	1085	269	65	219
Cornell, John M., New York, N. Y. Girder-bracing tie-bar.....	495,785	Apr. 18	2034	515	63	409
Cornell, Lewis T., assignor to S. I. and B. S. Smith, Chicago, Ill. Cigar-bunching machine.....	507,487	Oct. 24	2864	703 701	65	577
Cornell, Stephen A., Grand Rapids, Mich. Work-table.....	490,473	Jan. 24	2378	615	62	525
Cornely, Emile and R., Paris, France. Embroidering-machine.....	493,374	Mar. 14	954	246	62	1562

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Cornely, Emile and R., Paris, France. Embroidering-machine.....	500,251	June 27	2512	614	63	1870
Cornely, Emile and R., Paris, France. Overseaming sewing-machine.....	501,057	July 11	827	215	64	166
Cornely, Emile and R., Paris, France. Embroidering-machine.....	501,704	July 18	1870	465	64	371
Cornely, Emile and R., Paris, France. Embroidering-machine.....	504,332	Sept. 5	33	10	64	1277
Cornely, Robert. (See Cornely, Emile and R.)						
Cornely, Robert, Paris, France. Embroidering-machine.....	503,229	Aug. 15	1660	408	64	901
Cornforth, Joseph T., Denver, Colo. Fruit-case.....	496,817	May 2	623	180	63	740
Cornforth, Joseph T., Denver, Colo. Fruit-case.....	496,818	May 2	624	181	63	741
Corning, Arthur M., Batavia, assignor to E. S. Howland, Aurora, Ill. Grinding-ring.....	499,714	June 20	1608	389	63	1700
Corning, Frederick G., New York, N. Y. Means for storing and supplying electrical energy by natural force.....	499,720	June 20	1730	418	63	1720
Corning, Lucy A., Rockford, Ill. Baling-press.....	497,090	May 9	1127	288	63	839
Corning, Lucy A., Rockford, Ill. Baling-press.....	497,091	May 9	1128	289	63	840
Corning Manufacturing Company. (See Stasch, Emil R., assignor.)						
Cornish, Harry B., Hampton, Iowa. Carburetor.....	505,700	Sept. 26	2346	594	64	1750
Cornman, Charles F. (See Wilson, Robert, assignor.)						
Cornog, William B., Philadelphia, Pa. Hydrant and faucet.....	502,349	Aug. 1	167	39	64	597
Cornwall, John B., Moline, Ill. Grading and excavating machine.....	504,300	Aug. 29	3383	46	64	1252
Cornwell, Phillip W., Brockton, Mass. Draft-regulator.....	491,082	Feb. 7	32	9	62	754
Cörrell, Friedrich, Frankfort-on-the-Main, Germany. Flume-screen.....	495,023	Apr. 11	774	197	63	164
Corrigan, Hamlet, and H. E. Fulkerson, Smith's Mills, Pa. Mining-car.....	500,114	June 27	2261	550	63	1824
Corrington, Murray, New York, N. Y. Electro-mechanical block-signaling apparatus.....	496,041	Apr. 25	2416	611	63	495
Corry, Robert, London, England. Aneroid barometer.....	506,672	Oct. 17	1487	373	65	309
Corry, William, Cincinnati, Ohio. Safe.....	491,875	Feb. 14	1316	325	62	1027
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Shelf-bracket.....	493,454	Mar. 14	1125	288	62	1593
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Shelf-bracket.....	511,590	Dec. 26	3003	731	65	2008
Corscaden, Thomas, and F. Holland, assignors to Stanley Works, New Britain, Conn. Hinge.....	502,706	Aug. 8	804	194	64	728
Corser, Lorenzo D., assignor of one-half to V. S. Barker, Ebensburg, Pa. Harrow-tooth.....	504,444	Sept. 5	212	56	64	1310
Corsini, Michele, Denver, Colo. Display case or cabinet.....	506,474	Oct. 10	1193	296	65	240
Corticine Floor Covering Company. (See Beard, William J., assignor.)						
Corwin, Edwin S., et al. (See Lane, Levi E., assignor.)						
Corwin, George C., Hornellsville, N. Y. Commode.....	506,905	Oct. 17	1879	468	65	381
Cory, Albert J. (See Hunt, Preston R., assignor.)						
Corv, David U., Englewood, N. J. Damper.....	500,261	June 27	2529	618	63	1872
Cosby, Anderson B., Richmond, Va. Tobacco-wringing machine.....	501,328	July 11	1266	317	64	243
Cosby, Anderson B., Richmond, Va. Tobacco-cutter.....	510,895	Dec. 19	1833	453	65	1777
Cosby, Anderson B., assignor of two-thirds to M. M. Strause and S. Proskauer, Richmond, Va. Steam-boiler furnace.....	502,616	Aug. 1	613	147	64	679
Cosby, Anderson B., assignor of two-thirds to M. M. Strause and S. Proskauer, Richmond, Va. Steam-boiler furnace.....	502,617	Aug. 1	615	147	64	679
Cosmic Alloy and Metal Depositing Company. (See Lugo, Orazio, assignor.)						
Cossitt, Franklin M., Bloomfield, assignor to F. A. Anthony, Hackensack, N. J. Machine for coating paper, &c.....	510,564	Dec. 12	1921	297	65	1654
Coté, Alphonse, Brooklyn, N. Y. Apparatus for treating sprung legs in horses.....	502,849	Aug. 8	1029	253	64	771
Coté, Alphonse, Brooklyn, N. Y., assignor to Coté Company, Matawan, N. J. Apparatus for treating sprung legs in horses.....	495,181	Apr. 11	1065	265	63	215
Coté Company. (See Coté, Alphonse, assignor.)						
Coté, Louis J. (See Frost, Walter E., assignor.)						
Cotes, David W., Guthrie Centre, Iowa. Wagon.....	510,241	Dec. 5	673	161	65	1538
Cotner, David R., Bardwell, Ky. Kitchen-cabinet.....	494,124	Mar. 28	2218	565	62	1833
Cottam, John W., Milford, Mass. Shoe stiffener and fastener.....	495,309	Apr. 11	1270	317	63	253
Cotter, Charles A. (See Dever and Cotter.)						
Cotter, Charles A., assignor to Randolph & Clowes, Waterbury, Conn. Plumber's ferrule.....	494,413	Mar. 28	2681	673	62	1919
Cotter, John F., St. Louis, Mo. Blow-off basin for steam-boilers.....	489,602	Jan. 10	964	251	62	215
Cotter, Thomas R., et al. (See Crackel, William H., assignor.)						
Cottis, Crispus, Epping, England. Horse-hoe.....	505,349	Sept. 19	1700	438	64	1616
Cotton, Hattie, Evanston, Ill. Toy derrick.....	495,625	Apr. 18	1776	447	63	364
Cotton, James M., Ashland, N. H. Hat holder and coat-hook.....	501,329	July 11	1268	318	64	243
Cotton, Scott R. (See Scurr and Cotton.)						
Cottrell, Calvert B., Westerly, R. I. Sheet delivery and folding apparatus.....	494,846	Apr. 4	516	130	63	100
Couch, Edwin A., Plainfield, N. J. Wheel-cultivator.....	500,799	July 4	427	112	64	79
Couch, Edwin A., Plainfield, N. J. Fire-escape.....	508,684	Nov. 14	1142	281	65	989
Couch, Joel, Clayton, N. Y. Centerboard.....	492,755	Mar. 7	19	5	62	1363
Couch, Joel, Clayton, N. Y. Extension-table.....	495,723	Apr. 18	1941	488	63	391
Couch, Joel, Clayton, N. Y. Extension-table.....	506,161	Oct. 3	571	148	65	110
Couch, Levi J., Boston, Mass. Safety device for cars.....	504,078	Aug. 29	3011	752	64	1181
Couchois, Garrett J., Chicago, Ill. Agraffe for pianos.....	500,562	July 4	41	12, 13	64	9
Couler, Meuri, Charles, Chaux-de-Fonds, Switzerland. Adjustable cyclometer.....	510,328	Dec. 5	802	194	65	1562
Coulson, William H., Jersey City, N. J., assignor to T. W. Weathered's Sons, New York, N. Y. Trellis-wire support and stretcher.....	491,771	Feb. 14	1154	288	62	995
Coultas, James W., Havana, Ill. Spring-hinge.....	505,193	Sept. 19	1454	374	64	1570
Coulter, Clifford C. (See Brunson, Horace, assignor.)						
Coulter, James. (See Coulter, Thomas and J.)						
Coulter, Thomas and J., Bridgeport, Conn. Machine for tapering and shaping metal bars.....	493,982	Mar. 21	1969	502	62	1771
Coulter, Will am B., Waterbury, Conn. Holder for sending coins by mail.....	500,800	July 4	428	112	64	79
Coulter, William S., Stockwell, Ind. Fence-building device.....	489,154	Jan. 3	261	72	62	61
Coulthard, Christopher, Emmett, Cal. Buck-rake.....	507,998	Nov. 7	29	9	65	764
Council, Clifford, Sherman, Ill. Marker for corn-planters.....	505,266	Sept. 19	1564	408	64	1591
Council, Julius C. (See Turnbull and Council.)						
Coupal, Peter A. (See Cummings and Coupal.)						
Coupland, Benjamin C., and F. T. Hough, Rusk, Tex. Cart-scale.....	502,810	Aug. 8	961	234	64	758
Coupland, Lemuel B. (See Laporte, George S., assignor.)						
Coursolle, Joseph. (See Laporte, Saül, assignor.)						
Courtenay, Israel. (See Monroe and Courtenay.)						
Courtet, Jean B., Romans, France. Riveting-machine.....	500,755	July 4	360	94	64	67
Courtin, Louis E., Paris, France. Clock striking mechanism.....	503,310	Aug. 15	1800	447	64	922

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Courtney, William P., assignor of one-half to A. Brown, Oakland, Cal. Automatic grip-opener.....	497,166	May 9	1242	316	63	860
Courtney, William P., assignor of one-half to A. Brown, Oakland, Cal. Grip-opener.....	501,764	July 18	1976	488	64	389
Couse, Charles, Belleville, N. J. Automatic sight-feed lubricator.....	508,566	Nov. 14	964	237	65	953
Cousens, Alfred C., Boston, Mass. Variable resistance for microphones and manufacturing same.....	506,627	Oct. 10	1409	.....	65	283
Cousens, Alfred C., Boston, assignor, by mesne assignments, to C. A. Stone, Newton, Mass. Insulating-support for metallic circuits.....	506,002	Oct. 3	314	82	65	61
Cousins, Robert J. (See Flower and Cousins.)						
Cousy, Constant, New York, N. Y. Car-coupling.....	501,871	July 18	2126	526	64	415
Coutant, Chauncey M., Crawfordsville, Ind. Buggy-body.....	501,924	July 25	2232	557	64	450
Covel, James L., Naples, N. Y. Material for covering pipes, &c.....	491,836	Feb. 14	1249	311	62	1014
Covell, Edward T., New Bedford, Mass. Fastening for horseshoes.....	490,270	Jan. 24	2057	538	62	461
Covenry, William M., Longton, Kans. Washing-machine.....	493,820	Mar. 21	1697	432	62	1720
Covert, Enoch, Farmer, N. Y. Snap-hook.....	509,200	Nov. 21	1999	486	65	1166
Covert, George J., G. W. and I. L. Price, Penn Yan, N. Y. Machine for grinding spokes.....	502,174	July 25	2622	661	64	462
Covert, James C. (See Cramer, John W., assignor.)						
Covert, James C., West Troy, N. Y. Halter.....	506,475	Oct. 10	1194	296	65	240
Coville, Orson, <i>et al.</i> (See June, Marcus M., assignor.)						
Covington, John I., Brooklyn, N. Y. Pocket-box.....	494,249	Mar. 28	2414	609	62	1869
Covo, Joseph T., Fall River, assignor to G. Draper & Sons, Hopedale, Mass. Sleeve-whirl spindle.....	502,325	July 25	2704	682	64	540
Coveyou, George A., Bay City, Mich. Steam-engine.....	493,250	Mar. 14	748	192	62	1523
Cowan, Charles H., assignor to J. E. and E. Atwood, Stonington, Conn. Thread-unwinder.....	508,166	Nov. 7	307	76	65	815
Cowan, James C., Chicago, Ill. Type-writing machine.....	494,977	Apr. 4	703	179	63	134
Cowan, Robert J. (See Moon, Richard D., assignor.)						
Cowan, William G., <i>et al.</i> (See Crackel, William H., assignor.)						
Cowden, Henderson D. (See Pitts and Cowden.)						
Cowdery, Jabez F., San Francisco, Cal. Fire-extinguisher for railway-car heaters and lights.....	496,682	May 2	462	{ 124 125 }	{ 63 65 }	703
Cowdery, Jabez F., San Francisco, Cal. Stamp-canceler.....	511,410	Dec. 26	2718	659	65	1954
Cowen, Esek. (See Fogarty, Thomas B., assignor.)						
Cowen, Robert. (See Cummings and Cowen.)						
Cowen, Robert, Cambridge, Mass. Repairing pneumatic tires.....	497,634	May 16	2016	502	63	1012
Cowen, Robert, and E. F. Bragg, Cambridge, Mass., assignors to Automatic Rubber Mixer Company, Kennebunk, Me. Roll for india-rubber mixing and calendering machines.....	508,286	Nov. 7	503	122	65	851
Cowing, William J., <i>et al.</i> (See Todd, Matthew, assignor.)						
Cowl, Robert R., South Melbourne, Victoria. Sash-balance.....	500,756	July 4	362	94	64	67
Cowles, George B., New Britain, Conn. Manufacture of key-blanks.....	505,440	Sept. 26	1862	479	64	1660
Cowles, William, Brooklyn, N. Y., assignor to J. I. Eastman, Philadelphia, Pa. Water-tube boiler.....	508,410	Nov. 14	713	175	65	904
Cowles, Willis H., Detroit, Mich. Eyeglass-frame.....	497,773	May 23	2247	563	63	1071
Cowley, James T., Lowell, Mass., assignor to Lamson Consolidated Store Service Company, Boston, Mass. Store-service apparatus.....	502,279	Aug. 1	25	6	64	571
Cowley, James T., Lowell, Mass., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash-register.....	505,194	Sept. 19	1456	{ 375 376 377 }	{ 64 65 }	1570
Cowperthwait, John W., assignor of one-half to H. Martini, St. Louis, Mo. Parlor gas-furnace.....	502,658	Aug. 1	689	165	64	692
Cox, Albert W., Hastings, Nebr. Checkrein.....	493,353	Mar. 14	916	235	62	1553
Cox, Alice J. (See Cox, Arthur W., assignor.)						
Cox, Arthur W., assignor to A. J. Cox, Ballard Vale, Mass. Table-cutlery.....	498,627	May 30	3632	599	63	1330
Cox, Benjamin F., and J. Fahey, St. Joseph, Mo. Screw-jack.....	500,757	July 4	364	94	64	68
Cox, Cary S., Spottiswood, Cal. Pump.....	500,856	July 4	511	133	64	93
Cox, Charles H., Brockton, assignor of one-half to E. H. Hoyt, Bradford, Mass. Platform-gate for cars.....	508,815	Nov. 14	1334	330	65	1024
Cox, Edward C., Scranton, Pa. Baker's paddle.....	508,411	Nov. 14	714	176	65	904
Cox, Edwin B., <i>et al.</i> (See Passmore, Edwin, assignor.)						
Cox, Eliza A., Rutledge, Mo. Cultivator.....	489,708	Jan. 10	1110	286	62	246
Cox, Francis M., Haynes, Ark. Car-coupling.....	493,251	Mar. 14	750	192	62	1523
Cox, Frederick J. (See Messer and Cox.)						
Cox, George S., Philadelphia, Pa. Loom.....	492,144	Feb. 21	1728	431	62	1124
Cox, Israel W., assignor of one-half to C. N. Lambert, Gold Hill, Oreg. Tongs.....	507,973	Oct. 31	3700	919	65	745
Cox, J. Otis, <i>et al.</i> (See Campbell, John S., assignor.) (Reissue.)						
Cox, James B., Brooklyn, assignor of two-thirds to G. B. and F. B. Hurd, New York, N. Y. Thaumatrope.....	503,927	Aug. 22	2762	692	64	1119
Cox, James D., Bridgeton, N. J. Machine for scalding tomatoes.....	494,463	Mar. 28	2752	{ 690 691 }	{ 62 64 }	1931
Cox, John B., Fayetteville, Ark. Barber's cabinet.....	505,030	Sept. 12	1190	306	64	1509
Cox, John H., Howard, Kans. Horse hay-rake.....	492,145	Feb. 21	1731	{ 431 432 }	{ 62 65 }	1125
Cox, John M. (See Tullis and Cox.)						
Cox, Joseph J. (See Turner, James, assignor.)						
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Inking apparatus for printing-presses.....	494,096	Mar. 21	2152	550	62	1806
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Web-looping mechanism for printing-presses.....	501,456	July 11	1472	369	64	283
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Inking apparatus for printing-presses.....	502,618	Aug. 1	617	148	64	679
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Web-feeding device for printing-presses.....	508,814	Nov. 14	1333	330	65	1024
Cox, Louis, Birmingham, England. Glove.....	491,471	Feb. 7	677	170	62	878
Cox, Peter L., Boston, Mass. Sewing-machine.....	504,911	Sept. 12	992	{ 255 256 }	{ 64 65 }	1472
Cox, Peter L., Boston, Mass. Feed-adjusting device for sewing-machines.....	507,786	Oct. 31	3397	833	65	689
Cox, Samuel E., Cleveland, Ohio. Drum.....	504,910	Sept. 12	991	255	64	1472
Cox, Thomas J. (See Peoples and Cox.)						
Cox, William, Hamilton, Canada. Safety apparatus for electric or other street-railway cars.....	508,089	Nov. 7	186	49, 50	65	792
Coxe, Eckley B. (See Richards, Francis H., assignor.)						
Coxe, Eckley B., Drifton, Pa. Burning fuel.....	499,715	June 20	1609	{ 389 390 }	{ 63 65 }	1700
Coxe, Eckley B., Drifton, Pa. Furnace.....	499,716	June 20	1612	390	63	1701
Coxe, Eckley B., Drifton, Pa. Traveling-grate furnace.....	510,565	Dec. 12	1224	297	65	1654

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Coxe, Eckley B., Drifton, Pa. Traveling-grate furnace	510,566	Dec. 12	1226	{ 297 298	{ 65	1655
Coxe, Eckley B., Drifton, Pa. Burning fuel	510,567	Dec. 12	1230	298	65	1655
Coxe, Eckley B., Drifton, Pa. Traveling-grate furnace	510,568	Dec. 12	1232	{ 298 299	{ 65	1655
Coxe, Eckley B., Drifton, Pa. Traveling-grate furnace	510,569	Dec. 12	1234	{ 299 300	{ 65	1656
Coxe, Eckley B., Drifton, Pa. Heating plant	510,570	Dec. 12	1240	300	65	1657
Coxe, Eckley B., Drifton, Pa. Furnace-floor	510,571	Dec. 12	1242	301	65	1657
Coxe, Eckley B., Drifton, Pa. Furnace	510,572	Dec. 12	1244	{ 301 302	{ 65	1658
Coxe, Eckley B., Drifton, Pa. Furnace	510,574	Dec. 12	1247	302	65	1658
Coxe, Eckley B., Drifton, Pa. Traveling-grate furnace	510,575	Dec. 12	1249	303	65	1658
Coxe, Eckley B., Drifton, Pa. Floor-plate for furnaces	510,576	Dec. 12	1251	303	65	1659
Coxe, Eckley B., Drifton, Pa. Furnace	510,577	Dec. 12	1252	303	65	1659
Coxe, Eckley B., Drifton, Pa. Burning fuel	510,578	Dec. 12	1253	304	65	1659
Coxe, Eckley B., Drifton, Pa. Grate-bar	510,579	Dec. 12	1255	304	65	1659
Coxe, Eckley B., Drifton, Pa. Floor-plate for furnaces	510,580	Dec. 12	1256	304	65	1660
Coxe, Eckley B., Drifton, Pa. Furnace	510,581	Dec. 12	1257	305	65	1660
Coxe, Eckley B., Drifton, Pa. Steam plant	510,582	Dec. 12	1259	306	65	1660
Coxe, Eckley B., Drifton, Pa. Steam plant	510,583	Dec. 12	1261	306	65	1660
Coxe, Eckley B., Drifton, Pa. Furnace	510,584	Dec. 12	1263	307	65	1661
Coxe, Eckley B., Drifton, Pa. Steam plant	510,585	Dec. 12	1265	{ 307 308	{ 65	1661
Coxe, Eckley B., Drifton, Pa. Utilizing carbonaceous minerals	510,586	Dec. 12	1266	308	65	1661
Coxe, Eckley B., Drifton, Pa. Furnace	510,587	Dec. 12	1268	308	65	1661
Coxe, Eckley B., Drifton, Pa. Furnace	510,588	Dec. 12	1269	309	65	1662
Coxe, Eckley B., Drifton, Pa. Furnace plant	510,589	Dec. 12	1271	309	65	1662
Coxe, Eckley B., Drifton, Pa., and F. H. Richards, Hartford, Conn.; said Richards assignor to said Coxe. Traveling grate	510,573	Dec. 12	1245	302	65	1658
Coxon, George, Toronto, Canada. Seat-spring	510,838	Dec. 12	1691	420	65	1741
Coyle, Andrew M., assignor to Standard Screw Elevator Manufacturing Company, Baltimore, Md. Automatic electric switch	492,786	Mar. 7	20	6	62	1363
Coyle, Andrew M., assignor to Standard Screw Elevator Manufacturing Company, Baltimore, Md. Electric switch	493,485	Mar. 14	1126	{ 288 289	{ 62	1593
Coyle, Hugh, Washington, D. C. Fire-escape	510,383	Dec. 5	885	{ 213 214	{ 65	1578
Coyle, Thomas J., et al. (See Dobbins and McKenney, assignors.)						
Coze, André, Paris, France, assignor to S. Newman and J. Green, St. Louis, Mo. Apparatus for charging gas-retorts	508,090	Nov. 7	187	50	65	793
Crabbs, Cyrus, Delphos, Ohio. Fence	492,901	Mar. 7	205	50	62	1399
Crabbs, John C. (See Milburn, Byrkit, and Crabbs.)						
Crabtree, Henry A. (See Capellen and Crabtree.)						
Crabtree, Leonard T., New London, Wis. Railway-train order and signaling device	491,837	Feb. 14	1249	312	62	1014
Crabtree, Leonard T., New London, Wis. Railway-train order and signaling device	509,201	Nov. 21	2006	486	65	1166
Crabtree, Richard, and E. Gillow, Bolton, England. Spinning and doubling spindle	500,857	July 4	512	{ 133 134	{ 64	93
Crackel, William H., Saginaw, Mich., assignor of five-sixths to W. G. Cowan, T. R. Cotter, W. G. Van Auken, and A. P. Bliss. Car-coupling	504,021	Aug. 29	2930	734	64	1166
Craemer, John F., Ogden, Utah Ter. Perforating-machine	493,753	Mar. 21	1589	404	62	1700
Craft, Frank X., Corning, Iowa. Corn-planter	509,792	Nov. 28	3025	731	65	1371
Craft, John A. (See Dailey, George W., assignor.)						
Crafts, Francis H., Buffalo, N. Y. Driving mechanism for lathes	499,159	June 6	697	167	63	1512
Crafts, George E. (See Huestis, Frederick W., assignor.)						
Crafts, George H., et al. (See Kennedy, Robert J., assignor.)						
Craig, David, Macleay, Oreg. Hop-trellis	501,991	July 25	2323	580	64	467
Craig, Hiram L., Wayne, Ind. Sash-balance	491,639	Feb. 14	947	238	62	953
Craig, Isaac E., Troy, Ohio. Manufacturing sheet metal	501,705	July 18	1872	.....	64	371
Craig, James D., Rogers Park, assignor to Keyless Lock Company, Chicago, Ill. Combination-lock	491,158	Feb. 7	153	40	62	778
Craig, James D., Rogers Park, assignor to Keyless Lock Company, Chicago, Ill. Combination-lock	491,159	Feb. 7	158	40, 41	62	779
Craig, John E., Gainesville, Ga. Clothes-wringer	497,635	May 16	2017	503	63	1013
Craig, Lee D. (See Hall, James T., assignor.)						
Craig, Lee D., San Francisco, Cal. Removable side wall for cars	501,677	July 18	1825	454	64	363
Craig, Lee D., San Francisco, Cal. Ladder	508,816	Nov. 14	1336	331	65	1025
Craig, William, Brooklyn, N. Y. Double-acting pump	505,441	Sept. 26	1862	479	64	1660
Craig, William, Brooklyn, N. Y. Valve-gear for direct-acting engines	506,359	Oct. 10	971	241	65	196
Craig, William, Brooklyn, N. Y. Automatic three-way valve	509,118	Nov. 21	1869	458	65	1141
Craig, William, Brooklyn, N. Y. Steering-engine	509,511	Nov. 28	2584	625	65	1287
Craige, William, Paducah, Ky. Pipe-wrench	498,048	May 23	2675	669	63	1145
Craigie, Hugh H., assignor to J. A. Craigie, Stamford, Conn. Window	490,244	Jan. 17	2003	524	62	439
Craigie, J. Agnes. (See Craigie, Hugh H., assignor.)						
Craigsmiles, Edwin L., Chattanooga, Tenn. Stenographic type-writing machine	496,297	Apr. 25	2804	{ 702 703 704	{ 63	563
Crain, John L., Maysville, Ark. Wire-stretcher	511,591	Dec. 26	3005	732	65	2008
Crain, William O., Baltimore, Md. Head-rest	493,486	Mar. 14	1128	289	62	1593
Crain, William O., assignor of two-thirds to Wise Bros., Baltimore, Md. Stop-motion for rotary machine parts	489,849	Jan. 10	1321	344	62	229
Cram, Alonzo W., Haverhill, Mass. Drain-pipe	492,191	Feb. 21	1800	449	62	1140
Cram, Alonzo W., Haverhill, Mass. Soil-pipe collar	499,658	June 13	1522	366	63	1670
Cram, George H., Beloit, Wis. Antifriction attachment for bicycle step-ladders	510,471	Dec. 12	1045	250	65	1622
Cram, William H., Penawawa, Wash. Spring-gun	501,765	July 18	1977	489	64	389
Cramer, Cyrus P. (See Chipman, Robert J., assignor.)						
Cramer, Howard, Newberry, Pa. Match-box	493,983	Mar. 21	1970	503	62	1771
Cramer, John W., assignor to J. C. Covert, West Troy, N. Y. Machine for rolling soldering-irons	502,240	Aug. 1	27	6	64	571
Cramer, W. J. C. Putnam. (See Stevens, Truman E., assignor.)						
Crandall, David A. (See Davis, Charles B., assignor.)						
Crandall & Godley Company. (See Thurston, George A., assignor.)						
Crandall, Hosea B., Brockton, N. Y. Bed-bottom	501,827	July 18	2061	508	64	404
Crandall, Lucien S., Parish, assignor to W. A. Sweet, Syracuse, N. Y. Type-writing machine	509,720	Nov. 28	2907	{ 703 704	{ 65	1348

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Crandall, Lucien S., Parish, assignor to W. A. Sweet, Syracuse, N. Y. Type-writing machine	509,793	Nov. 28	3030	{ 731 732 }	65	1372
Crandall, Lucien S., Parish, assignor to W. A. Sweet, Syracuse, N. Y. Type-writing machine	509,794	Nov. 28	3031	732	65	1373
Crandall, Lucien S., Parish, assignor to W. A. Sweet, Syracuse, N. Y. Type-writing machine	509,795	Nov. 28	3034	733	65	1373
Crandall Packing Company. (See North, Charles H., assignor.)						
Crandell, Lusanah A., et al. (See Miles, George B., assignor.)						
Crane, Charles E. (See Rowe, Joshua N., assignor.)						
Crane Company. (See Doolittle, William W., assignor.)						
Crane Company. (See Doolittle, William W., assignor.) (Reissue.)						
Crane Company. (See Hayden, James T., assignor.)						
Crane Company. (See Synnestvedt, Paul, assignor.)						
Crane, David G. (See Dow and Crane.)						
Crane, Edwin F., Batavia, N. Y. Tray-board	501,204	July 11	1071	272	64	211
Crane Elevator Company. (See Heermans, Thaddeus W., assignor.)						
Crane, George A., Cleveland, Ohio. Steam-boiler	492,936	Mar. 7	260	66	62	1410
Crane, George C., Stony Creek, assignor of one-half to R. G. Barnes, Ypsilanti, Mich. Harrow	493,071	Mar. 7	463	117	62	1451
Crane, George W., and J. W. Bloomfield, Topeka, Kans. Book-back protector	491,530	Feb. 14	770	432	63	959
Crane, John H., Auburn, N. Y. Grinding-machine	491,530	Feb. 14	770	196	62	917
Crane Manufacturing Company. (See Ricard, Joseph A., assignor.)						
Crane, Richard T., Chicago, Ill. Elevator-door	504,864	Sept. 12	917	237	64	1457
Crane, Stephen. (See Mild, William, assignor.)						
Crane, Thomas S., East Orange, N. J. Copper-coating the hulls of vessels	498,707	May 30	3775	{ 931 932 933 }	63	1355
Crane, Wade O., Sykeston, N. D. Copy-holder	504,414	Sept. 5	165	44	64	1301
Crane, William S., Detroit, Mich. Spring-hinge	510,896	Dec. 19	1838	453	65	1778
Craney, Thomas, Bay City, Mich. Apparatus for electrolysis of salt	496,863	May 9	765	203	63	775
Craney, Thomas, Bay City, Mich. Electrolytic apparatus	496,864	May 9	766	{ 203 204 }	63	776
Craney, Thomas, Bay City, Mich. Electrolytic apparatus	496,865	May 9	768	204	63	776
Craney, Thomas, Bay City, Mich. Apparatus for washing salt	496,866	May 9	769	204	63	776
Craney, Thomas, Bay City, Mich. Electrolytic apparatus	498,768	June 6	25	6	63	1393
Craney, Thomas, Bay City, Mich. Electrolyzing salts	498,769	June 6	26	7	63	1393
Craney, Thomas, Bay City, Mich. Electrolytic apparatus	498,770	June 6	28	7	63	1393
Craney, Thomas, Bay City, Mich. Electrolytic cell	498,771	June 6	29	7	63	1393
Craney, Thomas, Bay City, Mich. Electrolytic cell	504,774	Sept. 12	771	194	64	1428
Craney, Thomas, Bay City, Mich. Electrolytic apparatus	507,886	Oct. 31	3558	876	65	719
Cranford, Charles E., assignor of one-half to S. Williamson, Moscos, Miss. Sawmill	492,787	Mar. 7	23	6, 7	62	1363
Cranford, George C., et al. (See Rothchild, Joseph, assignor.)						
Cranford, Robert L., et al. (See Rothchild, Joseph, assignor.)						
Cranell, Charles W., assignor of one-half to D. E. Grobe, Oberlin, Kans. Nailless horse-shoe	492,460	Feb. 28	2227	557	62	1240
Cranell, Charles W., assignor of one-half to D. E. Grobe, Oberlin, Kans. Nailless horse-shoe	492,481	Feb. 28	2258	564	62	1245
Cranston, Giles S., Jonesville, Mich. Truss-pad	499,823	June 20	1808	440	63	1733
Cranston, George E. (See Fairbanks, Crawford M., assignor.)						
Cranston, James F., Springfield, Mass. Tire-inflating device	499,659	June 13	1522	366	63	1670
Cranston, James F., assignor of one-half to M. Craven, Springfield, Mass. Elevated railway	506,770	Oct. 17	1656	{ 415 416 }	65	340
Crapsey, George B., Merrill, Wis., assignor of one-half to C. Cristadoro, St. Paul, Minn. Segment-saw	490,384	Jan. 24	2243	583	62	469
Crary, Joseph M., Jersey City, N. J. Type-writing machine	493,016	Mar. 7	388	97, 98	62	1435
Crass, Frederick L., assignor to Ithaca Gun Co., Ithaca, N. Y. Type-writing machine	499,717	June 20	1615	391	63	1701
Craven, Charles M. (See Kortright and Craven.)						
Craver, Michael. (See Cranston, James F., assignor.)						
Craver, Charles F. (See Peck, Ezra A., assignor.)						
Craw, Joseph T., Jersey City, N. J. Paper box	502,457	Aug. 1	349	83, 84	64	630
Craw, Joseph T., Jersey City, N. J., assignor of one-half to Brown & Bailey, Philadelphia, Pa. Double telescope box	502,952	Aug. 8	1207	297	64	802
Crawford, Andrew L., Columbus, Ga. Cash register and till	491,876	Feb. 14	1318	326	62	1027
Crawford, Andrew L., Columbus, Ga. Cash register and till	503,579	Aug. 22	2925	558	64	1016
Crawford, Benjamin, Louisville, Ky. Lever attachment for brake-wheels	490,543	Jan. 24	2493	642	62	548
Crawford, George W., assignor of one-half to E. C. Graves, Stillwater, Oklahoma Ter. Combined crate and fruit-drier	496,819	May 2	685	181	63	741
Crawford, Frank, North Urbana, N. Y. Safe	502,953	Aug. 8	1209	298	64	803
Crawford, Frank, assignor of one-half to A. March, New Brunswick, N. J. Stop mechanism for knitting-machines	510,839	Dec. 12	1692	{ 420 421 }	65	1741
Crawford, James G., Boston, Mass. Ironing-machine	495,310	Apr. 11	1271	{ 317 318 }	63	253
Crawford, John R., Hewitt, Ala. Fish-trap	503,197	Aug. 15	1607	395	64	890
Crawford, Samuel A., Franklin, Pa. Sash-fastener	494,734	Apr. 4	328	83	63	64
Crawford, William A., St. Charles, Minn. Wagon end-gate	505,566	Sept. 26	2113	535	64	1708
Crawley, James E., Milwaukee, Wis. Water heater and condenser	498,534	May 30	3475	861	63	1303
Crea, Hugh. (See Beall, Frank, assignor.)						
Creager, Jonathan, Cincinnati, Ohio. Brick-machine cut-off	492,390	Feb. 28	2114	527	62	1216
Creamer, Albert J., assignor to Creamer Scientific Penmanship Company, Washington Court-House, Ohio. Penmanship copy-book	498,628	May 30	3633	899	63	1330
Creamer, Henry, New York, N. Y. Steam-trap	509,202	Nov. 21	2004	487	65	1167
Creamer Scientific Penmanship Company. (See Creamer, Albert J., assignor.)						
Creamery Package Manufacturing Company. (See Ames, Charles D., assignor.)						
Creelius, Louis J., assignor of one-half to C. E. Pearce, St. Louis, Mo. Wheel. (Reissue.)	11,342	May 30	3865	953	63	1371
Credlebaugh, Henry S., assignor of one-half to J. V. Perrine, New Carlisle, Ohio. Farm-roller	496,349	Apr. 25	2910	727	63	588
Creed, John M., et al. (See Hodgkinson, Thomas C., assignor.)						
Creed, Robert F., Cleveland, Ohio. Lawn-sprinkler	494,847	Apr. 4	520	131	63	101
Creek, Thomas W. (See Monroe and Creek.)						
Crehan, Hubert, assignor to Oliver Iron and Steel Company, Pittsburg, Pa. Bolt-threading machine	490,901	Jan. 31	3093	{ 793 794 }	62	680
Crehan, Hubert, assignor to Oliver Iron and Steel Company, Pittsburg, Pa. Bolt-pointing machine	495,395	Apr. 11	1402	352	63	277
Crepeau, Henry T., Portland, Me. Tether or halter-strap	502,954	Aug. 8	1211	298	64	803

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Creque, Allen P., New York, N. Y. Ceramic boiler.....	491,083	Feb. 7	33	9	62	754
Creque, Allen P., New York, N. Y. Washbowl.....	492,192	Feb. 21	1801	{ 449 450 }	62	1140
Cress, William S., Portland, Oreg. Type-writing machine.....	510,409	Dec. 12	937	225	65	1602
Cressonnières, Anatole and E. des, Brussels, Belgium. Process of and apparatus for the manufacture of kneaded or agglomerated soaps.....	500,535	June 27	2953	{ 725 726 }	63	1948
Cressonnières, Ernest des. (See Cressonnières, Anatole and E. des.)						
Creteau, Stephen M., Providence, R. I., assignor of one-half to G. H. Williamson, New York, N. Y. Sewing-machine needle.....	493,399	Mar. 14	986	254	62	1568
Cretors, Charles, Chicago, Ill. Peanut-roaster or corn-popper.....	506,207	Oct. 10	700	177	65	143
Cretsinger, John J., Davison, Mich. Road-cart.....	502,281	Aug. 1	28	7	64	571
Crews, Dayton H., assignor of one-half to J. I. Faison, Iowa Park, Texas. Extension-brace for ladders.....	495,108	Apr. 11	927	234	63	192
Crews, James M., Arlington, Tenn. Fastening device.....	492,193	Feb. 21	1805	450	62	1141
Crews, James M., Arlington, Tenn. Tree-protector.....	503,948	Aug. 29	2817	703	61	1145
Cribbs, John R., Verona, Pa. Car-brake.....	507,311	Oct. 24	2590	637	65	524
Crickler, Charles D. and H. F., assignors of one-third to C. W. Shoemaker, Bridgeton, N. J. Apparatus for molding bottles.....	493,984	Mar. 21	1971	{ 503 504 }	62	1771
Crickler, Harry F. (See Crickler, Charles D. and H. F.)						
Criggal, John, Newark, N. J. Filament for incandescent electric lamps.....	500,279	June 27	2556	624	63	1877
Crigler, Aaron J. (See Elliott and Crigler.)						
Crim, John T., Eureka Springs, Ark. Automatic sliding or rolling gate.....	492,863	Mar. 7	142	35	62	1386
Cripe, Jacob M., Sandusky, Ohio. Cash-register.....	490,640	Jan. 31	2663	{ 666 667 }	62	597
Crippen, Henry M., Athens, Ohio. Combined end-gate and wagon-jack.....	501,330	July 11	1239	318	64	243
Crippen, Henry M. and J. M., Athens, Ohio. Running-gear for vehicles.....	494,628	Apr. 4	163	38, 39	63	33
Crippen, John M. (See Crippen, Henry M. and J. M.)						
Crippin, William. (See Young and Crippin.)						
Crislip, William A., Nero, W. Va. Washing-machine.....	506,476	Oct. 10	1195	297	65	240
Crisp, Joseph E., Somerville, Mass., assignor to Copeland Rapid Laster Manufacturing Company, Portland, Me. Tack-driving machine.....	500,319	June 27	2630	{ 643 644 }	63	1890
Crisp, Joseph E., Somerville, Mass., assignor, by mesne assignments, to Copeland Rapid Laster Manufacturing Company, of Maine. Tack-setting machine.....	501,872	July 18	2127	{ 526 527 528 }	64	416
Crisp, Joseph E., and L. D. Jenkins, Somerville, Mass., assignors to Copeland Rapid Laster Manufacturing Company. Tack-driving machine.....	500,225	June 27	2478	{ 604 605 }	63	1863
Crisp, Joseph E., Somerville, and G. W. Copeland, Malden, Mass., assignors to Copeland Rapid Laster Manufacturing Company, of Maine. Lasting-machine.....	501,873	July 18	2132	{ 528 529 }	64	416
Crisp, Joseph E., Somerville, G. W. Copeland, Malden, and T. Barrett, Boston, Mass., assignors, by mesne assignments, to Boston Lasting Machine Company, Portland, Me. Tack-driving machine.....	505,031	Sept. 12	1192	306	64	1509
Criss, Julia A., Grand Rapids, Mich. Folding chair.....	502,175	July 25	2625	662	64	525
Crisson, George A., Tarrytown, N. Y., assignor of one-half to J. N. Dickey, Philadelphia, Pa. Curtain-fixture.....	503,037	Aug. 8	1339	330	64	827
Crist, John J., Wichita, Kans. Store-service apparatus.....	505,875	Oct. 3	114	29	65	23
Crist, John J., Wichita, Kans. Mower.....	506,162	Oct. 3	572	{ 148 149 }	65	110
Crist, Marvin B., Indianapolis, Ind. Wood-embossing machine.....	510,162	Dec. 5	538	124	65	1512
Cristadoro, Charles. (See Crapsey, George B., assignor.)						
Critchley, John, et al. (See Whalley, Nathan, assignor.)						
Crites, John W., Sacramento, assignor to C. Wubben, Auburn, Cal. Vending-machine.....	493,617	Mar. 14	1360	345	62	1639
Crittenden, Louis S., Hornellsville, N. Y. Wagon running-gear.....	502,282	Aug. 1	29	7	64	572
Crittenden, Louis S., assignor of one-half to C. W. Stevens, Hornellsville, N. Y. Wood-working-tool.....	508,412	Nov. 14	715	176	65	904
Crittenden, Mason H., and F. V. Emery, Minneapolis, Minn. Metallic lathing.....	489,850	Jan. 10	1323	345	62	290
Crittenden, Mason H., and F. V. Emery, Minneapolis, Minn. Fireproof construction.....	508,501	Nov. 14	855	211	65	932
Crittenden, Mason H., and F. V. Emery, Minneapolis, Minn. Fireproof construction.....	508,502	Nov. 14	855	211	65	932
Crittenden, Mason H., and F. V. Emery, Minneapolis, Minn. Fireproof construction.....	508,503	Nov. 14	856	211	65	932
Crittenden, Parker, and H. W. Pease, Chicago, Ill., assignors to Pacific Labeling Company, San Francisco, Cal. Can-labeling machine.....	497,368	May 16	1596	{ 403 404 }	63	938
Crittenden, W. B. (See Hayward, Jacob L., assignor.)						
Crittenden, William B., et al. (See Wanner, Martin, assignor.)						
Critzer, John A., Waynesborough, Va. Bolster-standard for wagons.....	489,895	Jan. 10	1386	360	62	301
Croasdale, Edgar, assignor to Electro-Dynamic Company, Philadelphia, Pa. Speed-varying device.....	490,104	Jan. 17	1768	460	62	393
Crocker, Francis B., and S. S. Wheeler, assignors to Crocker-Wheeler Electric Company, New York, N. Y. Electric motor.....	494,978	Apr. 4	705	180	63	135
Crocker, John H., Shelburne, Canada. Cornice-brake.....	504,710	Sept. 12	654	165	64	1405
Crocker-Wheeler Electric Company. (See Crocker and Wheeler, assignors.)						
Crocker-Wheeler Electric Company. (See Dunn, Gano S., assignor.)						
Crocker-Wheeler Electric Company. (See Kintzing, Ralston C., assignor.)						
Crocker-Wheeler Electric Company. (See Wheeler, Schuyler S., assignor.)						
Crocker, William A., Emmerton, Va. Machine for separating peanuts from the vine and for stemming, cleaning, and grading same.....	502,619	Aug. 1	619	{ 148 149 }	64	680
Crockett, Charles H., and C. C. Allen, Boston, Mass. Electric connector and cut-out.....	493,754	Mar. 21	1590	404	62	1700
Crockett, Charles H., and C. C. Allen, Boston, Mass. Electric cut-out.....	493,755	Mar. 21	1592	405	62	1700
Crockett, Robert. (See Tiffany, John N., assignor.)						
Crockett, William E., and R. E. McAdams, Laws, Tex. Animal-trap.....	501,599	July 18	1695	422	64	341
Croes, Louise, E. R. Mergaert, and J. Lapin, Roulers, Belgium. Attachment for spinning-machines.....	500,758	July 4	365	95	64	68
Crofford, Warren K., New York, N. Y., and W. Bardsley, Kearney, N. J. Hatchway-door mechanism.....	494,550	Apr. 4	22	5, 6	63	6
Crompton, George, Cranston, R. I. Doctor-blade for fabric-printing machines.....	491,240	Feb. 7	290	72	62	804
Crompton Loom Works. (See Wyman, Horace, assignor.)						
Crompton Loom Works. (See Wyman and Clark, assignors.)						
Crompton, Rookes E. B., Chelmsford, England. Making conductors for armatures.....	497,001	May 9	991	256	63	815
Crompton, Thomas, Midland, Canada. Tea-blending machine.....	502,283	Aug. 1	31	7	64	572
Cronan, James W., St. Louis, Mo. Trace-carrier.....	497,167	May 9	1244	316	63	860
Cronan, James W., St. Louis, Mo. Sash-holder.....	497,168	May 9	1245	316	63	861
Crone, James T., Springtown, Ark. Stirrup.....	499,283	June 13	888	215	63	1559
Crone, John, et al. (See Shaw, Harry C., assignor.)						
Cronin, Cornelius, Kingston, and G. Edwards, Edwardsville, Pa. Fuel.....	498,629	May 30	3634	.....	63	1330
Cronin, John P., Paterson, N. J. Swift.....	497,016	May 9	1014	260	63	819
Cronk, William, Havana, N. Y. Hand-rake.....	509,999	Dec. 5	261	61	65	1458

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Cronk, William, Havana, N. Y. Door-hanger	510,000	Dec. 5	262	61	65	1459
Crook, James A., Augusta, assignor of one-half to A. Ashbrook, Canton, Ohio. Hay rake and loader	508,817	Nov. 14	1337	331	65	1025
Crook, James E., and J. J. Davis, Lincoln, Nebr. Lawn-mower	491,039	Jan. 31	3319	846	62	725
Crook, John W., Columbus, Ohio. Ticket holding device	489,069	Jan. 3	132	36	62	33
Crook, William G., Nelsonville, Ohio. Watchmaker's tool	510,897	Dec. 19	1840	454	65	1778
Crooke, John J., New York, N. Y. Separating metals	491,084	Feb. 7	35		62	755
Crooks, William, assignor to Rembert Roller Compress Company, Galveston, Tex. Flue for cotton-condensers	490,271	Jan. 24	2059	538	62	461
Cropp, Charles W., Chicago, Ill. Combined lighting and heating apparatus	497,867	May 23	2397	598	63	1097
Cropsey, Charles H., assignor of one-half to T. T. Hayden, Brooklyn, N. Y. Switch clearing, salting, and operating device	507,261	Oct. 24	2499	615	65	506
Crosbie, Robert. (See Hill, Ira M., assignor.)						
Crosby, Darwin E., Philadelphia, Pa. Elevator	503,786	Aug. 22	2565	638	64	1080
Crosby, Frank P., Chicago, Ill. Velocipede	501,493	July 18	1526	383	64	308
Crosby, Frank P., Chicago, Ill. Sprocket-wheel fastening for velocipedes	510,242	Dec. 5	674	161	65	1538
Crosby, Frank P., assignor of two-thirds to F. J. Lamberson and F. H. Webster, Chicago, Ill. Crank-and-sprocket fastening for velocipedes	506,673	Oct. 17	1488	373	65	309
Crosby, Frank P., assignor of two-thirds to F. J. Lamberson and F. H. Webster, Chicago, Ill. Brazing	507,974	Oct. 31	3701	919	65	746
Crosby, George G., New York, N. Y., assignor to Magnetic Ore Milling Company, of West Virginia. Magnetic ore-separator	495,608	Apr. 18	1744	440	63	339
Crosby, George G., assignor to Electric Disinfectant Company, New York, N. Y. Disinfecting device	509,426	Nov. 23	2414	585	65	1254
Crosby, George G., New York, N. Y., assignor to Magnetic Iron Milling Company, of Tennessee. Machine for separating magnetic from non-magnetic substances	511,512	Dec. 26	2878	698 699 700	65	1984
Crosby, George S. (See Anderson, Frank, assignor.)						
Crosby, James H., Somerville, Mass., assignor to Gamewell Fire Alarm Telegraph Company, New York, N. Y. Electro-steam-valve attachment	489,464	Jan. 10	753	199	62	174
Crosby, Joseph H., St. Albans, Vt. Rail-joint	504,711	Sept. 12	655	166	64	1406
Crosby Steam Gage and Valve Company. (See Gassett, Oscar, assignor.)						
Crosby Steam Gage and Valve Company. (See Ludlow, Charles G., assignor.)						
Crosby Steam Gage and Valve Company. (See Meady, Albert C., assignor.)						
Cross, Andrew J., New York, N. Y. Chiffonier Turkish bath	500,858	July 4	514	134	64	94
Cross, Anson K., Boston, Mass. Testing and correcting free-hand drawing	491,160	Feb. 7	160	41	62	779
Cross, Anson K., Boston, Mass. Drawing-slate	508,468	Nov. 14	796	197	65	920
Cross, Anson K., Boston, Mass. Crayon or pencil	508,469	Nov. 14	798		65	920
Cross, Anson K., Boston, Mass. Easel	511,324	Dec. 26	2554	623	65	1925
Cross, Bradford. (See Poole and Cross.)						
Cross, Edward S., Elvria, Ohio. Saddle	500,472	June 27	2851	702	63	1929
Cross, Frank W., Baltimore, Md., assignor of one-fourth to J. Schladt, Washington, D. C. Machine for delinting cotton-seed	499,873	June 20	1891	460	63	1748
Cross, Henry B., Syracuse, N. Y. Equalizing device for vehicles	497,309	May 16	1504	379	63	921
Cross, Henry B., Syracuse, N. Y. Equalizing device for vehicles	510,676	Dec. 12	1423	351	65	1691
Cross, Isaac T., assignor of one-half to V. F. Thomas, Watertown, N. Y. Extension-ladder	494,270	Mar. 23	2149	617	62	1876
Cross, Liberty, assignor of one-half to E. E. Hinkson, Poyette, Wis. Wire-stretcher	493,686	Mar. 21	1471	375	62	1676
Cross, Milton L., Philadelphia, Pa. Wire bed-bottom	505,267	Sept. 19	1564	408	64	1591
Cross, William B., et al. (See White, Wendell P., assignor.)						
Crossley, Arthur W., et al. (See Farnham, Charles H., assignor.)						
Crossley, Atkinson, Pontypool, and J. W. Jones, Whalley Range, England. Apparatus for producing ferroferic and ferric oxides	491,085	Feb. 7	36	9, 10	62	755
Crossley, Azro T., Duluth, Minn. Advertising device for glass vessels	489,553	Jan. 10	890	233	62	201
Crossley, Harry A., Cleveland, Ohio. Brake for street-cars	499,465	Jan. 10	755	200	62	174
Crossley, Harry A., Cleveland, Ohio. Car-brake	494,672	Apr. 4	226	56	63	46
Crossley, William, New Haven, Conn. Machine for making beam-stirrups	499,355	June 13	1026	247 248	63	1584
Crosson, William H. (See Purcell, James J., assignor.)						
Crosta, Lorenzo W., West Bridgford, England. Locking-nut for screw-bolts	510,120	Dec. 5	467	105	65	1498
Crothers, W. D., et al. (See James, Will S., assignor.)						
Crouch, George, New York, N. Y. Hat or bonnet holder	503,949	Aug. 29	2217	703	64	1145
Crowder, Albert B., St. Louis, Mo. Smokeless boiler-furnace	490,544	Jan. 24	2493	643	62	518
Crowder, George W., Goldthwaite, Tex. Spring bed-bottom	511,513	Dec. 26	2880	700	65	1985
Crowell, Charles F., et al., trustees. (See Ohmart, Eli C., assignor.)						
Crowell, Charles F., et al., trustees. (See Severy, Melvin L., assignor.)						
Crowell, Helen C., Dunkirk, N. Y. Friction-clutch	501,925	July 25	2232	537	64	450
Crowell, John P. (See Moon, Hiram, assignor.) (Reissue.)						
Crowell, Luther C., Brooklyn, N. Y. Newspaper-wrapping machine	500,536	June 27	2957	726 727	63	1948
Crowell, Luther C., Brooklyn, N. Y. Paper-bag machine	510,410	Dec. 12	910	226	65	1603
Crowell, Luther C., Brooklyn, assignor to R. Hoe, T. H. Mead, and C. W. Carpenter, New York, N. Y. Sheet collecting and delivery mechanism	505,442	Sept. 26	1863	479 480	64	1660
Crowell, Luther C., Brooklyn, assignor to R. Hoe, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding mechanism	505,817	Oct. 3	23	7	65	7
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Inking mechanism for printing-machines	492,759	Feb. 28	2702	671	62	1335
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding mechanism	492,760	Feb. 28	2705	672 673	62	1336
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper-wrapping machine	500,115	June 27	2262	551 552	63	1824
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper-wrapping machine	500,116	June 27	2272	552 553 554	63	1826
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper-wrapping machine	500,117	June 27	2281	554 555	63	1827
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper-wrapping machine	508,567	Nov. 14	966	237 238	65	953
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Web-printing machine	508,918	Nov. 21	1542	376 377	65	1077
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Printing and folding mechanism	509,877	Dec. 5	46	10 11 12 13	65	1419
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding-machine	510,527	Dec. 12	1128	273 274	65	1638

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Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper folding and staple-binding machine	510,528	Dec. 12	1133	<div>274</div> <div>275</div> <div>276</div> <div>277</div> <div>278</div> <div>279</div> <div>280</div> <div>281</div>	65	1638
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding and staple-binding delivery mechanism for printing-machines	510,840	Dec. 12	1694	<div>421</div> <div>422</div>	65	1741
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Staple-binding delivery mechanism for printing-machines	510,841	Dec. 12	1704	<div>422</div> <div>423</div> <div>424</div>	65	1743
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Staple-binding delivery mechanism for printing-machines	510,842	Dec. 12	1712	<div>424</div> <div>425</div> <div>426</div>	65	1744
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Staple-binding delivery mechanism for printing-machines	510,843	Dec. 12	1722	<div>426</div> <div>427</div>	65	1746
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Staple-binding delivery mechanism for printing-machines	510,844	Dec. 12	1729	<div>427</div> <div>428</div>	65	1747
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Staple-binding delivery mechanism for printing-machines	510,845	Dec. 12	1733	428	65	1748
Crowley, George G., assignor to Johnston Harvester Company, Batavia, N. Y. Disk harrow	489,146	Jan. 3	251	70	62	58
Crowley, George G., assignor to Johnston Harvester Company, Batavia, N. Y. Beet-cultivator	498,241	May 30	2986	744	63	1216
Crowley, George H., Youngstown, Ohio. Car-coupling	428,987	Jan. 3	17	5	62	6
Crowley, John J., New York, N. Y. Car-coupling	505,287	Sept. 19	1607	417	64	1599
Crowley, Joseph L., assignor of two-thirds to J. R. Cushman and E. C. Barksdale, Fort Worth, Tex. Hitching device	505,894	Oct. 3	148	39	65	29
Crown Electric Manufacturing Company. (See Foster, George C. H., assignor.)						
Crown Manufacturing Company. (See Mead, Edwin D., assignor.)						
Crowther, David, Huddersfield, England. Vehicle-wheel	501,992	July 25	2324	580	64	467
Crowther, Ernest and W. H., Pudsey, England. Carding-engine	504,968	Sept. 12	1090	278	64	1490
Crowther, William H. (See Crowther, Ernest and W. H.)						
Croy, Charles. (See Zweig, David D., assignor.)						
Croy, Simon W. (See Pugh, Oliver C., assignor.)						
Cruikshank, Arthur B., San Francisco, Cal., assignor of one-half to Kampfe Brothers, New York, N. Y. Vaginal syringe	493,208	Mar. 7	674	172	62	1490
Crull, Solomon F., Dublin, Ind. Propelling attachment for garden-plows	504,712	Sept. 12	655	166	64	1406
Crum, Samuel. (See Currier, Hesp. and Crum.)						
Crump, Walter H., et al. (See Williams, Samuel, assignor.)						
Crump, William E., Sealy, Tex. Clothes-pin	494,414	Mar. 28	2682	673	62	1919
Crumrine, Benton V., Corning, Cal. Automatic wind-deflector	504,563	Sept. 5	419	106	64	1347
Cruiser, Van Dyke, Flatbush, N. Y. Railway-switch	508,413	Nov. 14	716	176	65	904
Cryder, Peter E., Pittsburg, Pa. Safety-gate for elevators	493,329	Mar. 7	710	182	62	1498
Cuddie, Robert. (See Cody, Alfred E., assignor.)						
Cuendet, Emile L., Brooklyn, N. Y. Music-box	501,766	July 18	1979	489	64	390
Cuendet, Emile L., Brooklyn, N. Y. Musical attachment for clocks	506,101	Oct. 3	467	122	65	91
Culbertson, Andrew J., San Andreas, Cal. Train-table	500,537	June 27	2963	727	63	1950
Culbertson, Joseph C., et al. (See Austin, William G., assignor.)						
Culbreath, Walter W., Sellers, assignor of one-half to C. S. McCall, Bennettsville, S. C. Car-coupling	493,072	Mar. 7	461	117	62	1451
Cullen, Frank A., Jackson, Mich. Gate-hanger	505,195	Sept. 19	1461	377	64	1571
Cullen, Patrick F., and P. F. Mulchrone, Scranton, Pa. Hame-fastener	502,176	July 25	2626	662	64	525
Cullen, Richard H. (See Sarsfield, Michael J., assignor.)						
Cullen, William A., Paterson, N. J., assignor to Johnston Safe Automatic Electric Company, Richmond, Va. Automatic disconnecter	497,310	May 16	1507	379	63	922
Cullingworth, Albert M., New York, N. Y. Regulator for dynamo-electric machines	508,208	Nov. 7	377	92, 93	65	828
Cullis, John M. (See Wetmore, William C., assignor.)						
Cullis, John M., et al. (See Ellis, John T., assignor.)						
Cullmann, Otto, Chicago, Ill. Velocipede	504,079	Aug. 29	3012	753	64	1182
Cullmann, Otto, Chicago, Ill. Wheel	504,080	Aug. 29	3013	753	64	1182
Culp, Benjamin F., assignor of one-half to J. A. Wahl, Columbus, Ohio. Semaphore	497,265	May 9	1397	353	63	887
Culter & Proctor Stove Company. (See Hunter, John E., assignor.)						
Culver, Frank S., Washington, D. C., assignor of two-thirds to C. B. Hoffman, Baltimore, Md., and N. H. Culver, Detroit, Mich. Fireproofing composition for wall-coverings	493,152	Mar. 7	591	148	62	1475
Culver, Frank S., Washington, D. C., assignor of two-thirds to N. H. Culver, Detroit, Mich., and C. B. Hoffman, Baltimore, Md. Fireproofing composition	495,149	Apr. 11	1018	.....	63	207
Culver, Frank S., Washington, D. C., assignor of two-thirds to N. H. Culver, Detroit, Mich., and C. B. Hoffman, Baltimore, Md. Fireproofing composition	495,166	Apr. 11	1044	.....	63	212
Culver, George A., and J. P., and W. D. Otis, Blue Springs, Nebr. Purifier and separator	493,756	Mar. 21	1593	405	62	1700
Culver, Ira, Cleveland, Ohio. Vapor-burner	499,969	June 20	2032	492	63	1773
Culver, John P. (See Culver and Otis.)						
Culver, Newton H., et al. (See Culver, Frank S., assignor.)						
Culver, Reuben D., Veedersburg, Ind. Railway sleeper-block	495,396	Apr. 11	1403	353	63	277
Culver, Walter L., St. Louis, Mo. Cooking range or stove	497,709	May 16	2134	533	63	1014
Culver, William F., Detroit, Mich. Coat-collar supporter	491,837	Feb. 7	460	119	62	835
Culwell, William D., Auburn, Nebr. Gate	499,970	June 20	2033	493	63	1773
Cumfer, Harry A., Mishawaka, Ind. Revolving die-head	494,415	Mar. 28	2673	673	62	1919
Cummer, George A. (See Williams and Cummer.)						
Cummer, Robert J. (See Williams and Cummer, assignors.)						
Cumming, Henry L., Castile, N. Y. Side-hill plow	496,398	May 2	16	4	63	622
Cumming, James, and J. H. Magee, Jr., assignors of one-third to A. Vail, Buffalo, N. Y. Flue-cutter	501,269	July 11	1169	297	64	227
Cumming, James G., Edinburgh, Scotland. Coin-freed machine	493,821	Mar. 21	1698	432	62	1720
Cummings, Adelbert W., Dunkirk, N. Y. Machine for squeezing the starch out of collars	509,512	Nov. 28	2585	625	65	1288
Cummings, Adelbert W., Dunkirk, N. Y. Machine for ironing collar-tips	509,513	Nov. 28	2586	625	65	1288
Cummings, Adelbert W., Dunkirk, N. Y. Machine for forming turn-down linen collars	509,514	Nov. 28	2587	626	65	1288
Cummings, Clarence P. (See Lunbeck and Cummings.)						
Cummings, Henry H., Malden, Mass. Securing buttons to fabrics	502,034	July 25	2397	603	64	480
Cummings, Henry H., Malden, Mass. Stop-motion	510,677	Dec. 12	1426	352	65	1691
Cummings, Henry H., Malden, Mass., assignor to Reversible Rivet Company, Portland, Me. Rivet-setting machine	498,423	May 30	3282	<div>818</div> <div>819</div>	63	1269

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Cummings, Henry H., Malden, and R. Cowen, Cambridge, Mass. Device for mending pneumatic tires.	495,454	Apr. 11	1497	376	63	295
Cummings, Henry H., Malden, and P. A. Coupal, Boston, assignors to S. Moore, trustee, Newton, Mass. Pegging-machine.	493,910	Mar. 21	1829	466 467 468	62	1745
Cummings, James F., Detroit, Mich. Manufacturing electric-conduit sections.	497,535	May 16	1865	470	63	986
Cummings, James F., Detroit, Mich. Underground conduit for electrical conductors.	497,536	May 16	1866	471	63	986
Cummings, James K., Ladonia, Tex. Coffee-pot.	495,693	Apr. 18	1884	472	63	381
Cummings, John W., Gold Hill, Nev. Electric belt.	490,948	Jan. 31	3165	811	62	694
Cummings, Uriah, New Haven, Conn. Ore-crusher.	498,424	May 30	3286	820 821	63	1269
Cummings, William H., <i>et al.</i> (See Beecher, Edwin N., assignor.)						
Cummins, George L., Philadelphia, assignor to Standard Guard Rail Fastener Company, Lancaster, Pa. Guard-rail fastener.	509,203	Nov. 21	2007	487	65	1167
Cummins, J. K. (See Bascom, Austin T., assignor.)						
Cummins, Lawson C., Montpelier, Vt. Duplex telescope rifle-sight.	499,160	June 6	698	168	63	1512
Cummins, Theodore, Dover, assignor of one-half to J. C. Van Horn, Marksborough, N. J. Bicycle attachment.	491,040	Jan. 31	3321	847	62	725
Cumnock, Alexander G. (See Falls, Alonzo, assignor.)						
Cundell, Edward D. (See Healy and Cundell.)						
Cundiff, Middleton, assignor of two-thirds to R. W. Stevens and D. C. McCoy, Centreville, Tex. Car-coupling.	498,242	May 30	2987	744	63	1216
Cunningham, Albert, Milwaukee, Wis. Offsetting mechanism for sawmill-carriages.	494,735	Apr. 4	328	83, 84	63	65
Cunningham, Alonzo, <i>et al.</i> (See Preston, Leonard Z., assignor.)						
Cunningham, Charles E., and F. W. Dankmeyer, Baltimore, Md. Combined stool and table.	510,411	Dec. 12	942	227	65	1603
Cunningham, Christopher, Brooklyn, N. Y. Metal-bending machine.	498,930	June 6	321	76	63	1449
Cunningham, Edgar W., Jersey City, N. J. Glass structure.	508,287	Nov. 7	505	132	65	852
Cunningham, James, Dushore, Pa. Harness-tool.	491,086	Feb. 7	38	10	62	755
Cunningham, James, Dushore, Pa. Culinary vessel.	504,022	Aug. 29	2933	734	64	1166
Cunningham, Levi G., Greensburg, Ind. Pump.	504,122	Aug. 29	3089	773	64	1196
Cunningham, Martin J., assignor of one-half to A. F. Leonhardt, Springfield, Mo. Vegetable-cutter.	494,416	Mar. 28	2684	673 674	62	1920
Cunningham, Patrick, New Bedford, Mass., assignor to Applegate Boot and Shoe Lasting Company, Portland, Me. Preparing uppers for lasting.	495,455	Apr. 11	1498	376	63	293
Cunningham, Patrick M., Stamford, Conn., assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Billiard-table.	498,049	May 23	2676	669	63	1146
Cunningham, Richard B., assignor of two-thirds to P. J. Geyler and O. S. Price, Hillsborough, Ohio. Bicycle driving gear.	501,874	July 18	2136	530	64	417
Cunningham, William B. (See McCoy, John H., assignor.)						
Cuno, Charles, Wauwatosa, Wis. Automatic cut-out for electric-light circuits.	497,491	May 16	1798	451	63	973
Cupler, John A., Kendall Creek, Pa. Necktie-fastener.	490,138	Jan. 17	1829	478	62	406
Cuplin, Pascal F., West Bend, Iowa. Grand stand.	491,087	Feb. 7	39	10	62	755
Curby, Clarence E. (See Gross, Charles V., assignor.)						
Curd, William H., Chicago, Ill. Music-rest and leaf-holder.	509,612	Nov. 28	2743	662	65	1318
Curell, Daniel, Brooklyn, N. Y. Cash-recorder and check-printer.	499,060	June 13	1524	387	63	1670
Curell, Daniel, Hamilton, Canada, assignor to G. H. Downing, New York, N. Y. Nozzle for fire-extinguishers.	504,564	Sept. 5	420	106	64	1348
Curfman, Amon A. (See Hayworth, Oliver R., assignor.)						
Curley, Edwin A., Omaha, Nebr., assignor of one-half to S. V. Lowell, Brooklyn, N. Y. Postal-note.	502,601	Nov. 14	1024	252 253	65	964
Curley, Joseph H., <i>et al.</i> (See Fay, Alpheus, assignor.)						
Curlin, Seth, Union City, Tenn. Waterproofing and airproofing inflatable textile fabrics.	508,818	Nov. 14	1338	331 332	65	1025
Curlin, Seth, Union City, Tenn. Inflatable air bed or mattress.	511,686	Dec. 26	3160	772	65	2035
Curran, Daniel E. (See Faville, George C., assignor.)						
Curriden, Samuel W. (See McClelland, David H., assignor.)						
Currie, Daniel, Montreal, Canada. Taper attachment for lathes.	504,565	Sept. 5	421	107	64	1348
Currie, George S., Elgin, Ill. Machine for winding textiles.	507,528	Oct. 31	2958	725	65	607
Currie, James A., Springfield, Ohio. Street-car motor.	492,274	Feb. 21	1930	482	62	1167
Currier, Edward, assignor of one-half to A. Barré, Fall River, Mass. Railway-gate.	493,577	Mar. 14	1294	330 331	62	1627
Currier, Jacob B., Lowell, Mass., assignor to Currier Telephone Bell Company, of Massachusetts. Electrical signaling apparatus.	491,531	Feb. 14	771	196	62	917
Currier, Jacob B., and D. H. Rice, Lowell, Mass. Electric governor for signaling-circuits.	491,532	Feb. 14	772	196	62	917
Currier, John, Amesbury, Mass. Carriage.	499,452	June 13	1820	285	63	1615
Currier, John, and F. Ellis, Amesbury, Mass. Carriage.	492,461	Feb. 22	2228	557	62	1240
Currier, John, and F. Ellis, Amesbury, Mass. Carriage.	508,919	Nov. 21	1545	378	65	1077
Currier, John H., Jr., W. S. Hesp, and S. Crum, Garnett, Kans. Latch to prevent sagging.	489,220	Jan. 3	369	102	62	83
Currier Telephone Bell Company. (See Currier, Jacob B., assignor.)						
Curry, James H., assignor of eighty-three one-hundred-and-twenty-eighths to F. B. Tomb, Wilksburg, S. J. Graham, A. H. Childs, and R. A. Gillespie, Pittsburg, Pa. Automatic safety-joint for electric conductors.	505,032	Sept. 12	1196	307	64	1510
Curry, Samuel G., Toronto, Canada. Ventilation of cars.	510,001	Dec. 5	263	61, 62	65	1459
Curtice, Jesse M., Louisville, Ky. Kitchen-cabinet.	510,678	Dec. 12	1428	352 353	65	1691
Curtice, William H., Eminence, Ky. Churn.	511,404	Dec. 26	2710	657	65	1953
Curtin, John, Elk Falls, Kans. Horseshoe.	494,250	Mar. 28	2415	609	62	1869
Curtis, Andrew J., East Williamson, and W. H. Curtis, Sodus, assignors of one-third to G. A. Scullen, East Williamson, N. Y. Machine for slicing fruit.	503,903	Aug. 22	2723	684	64	1111
Curtis, Ashley B., <i>et al.</i> (See Curtis, Frederic A., assignor.)						
Curtis, Charles G., New York, N. Y. Controlling device for electric motors.	505,594	Sept. 26	2162	547	64	1717
Curtis, Charles G., assignor of one-half to G. W. Horton, Troy, N. Y. Hand-truck.	501,706	July 18	1873	466	64	371
Curtis & Curtis. (See Curtis, Lewis B., assignor.)						
Curtis & Curtis. (See Curtis, Roderick P., assignor.)						
Curtis & Curtis. (See Reilly, James H., assignor.)						
Curtis & Curtis. (See Smith, Friend W., Jr., assignor.)						
Curtis, David W., Fort Atkinson, Wis. Milk-vat.	494,916	Apr. 4	617	157	63	119
Curtis, David W., Fort Atkinson, Wis. Butter-worker.	501,993	July 25	2325	581	64	468
Curtis, Frank G., New York, N. Y. Electrical connector.	510,898	Dec. 19	1842	454	65	1779
Curtis, Frank G., Philadelphia, Pa. Process of and composition for the manufacture of porous cups for electrical batteries.	511,514	Dec. 26	2880	700	65	1985
Curtis, Frederic A., assignor of two-thirds to P. J. Connell, S. O'Day, J. D. Sheridan, F. X. Vevia, Muskegon, Mich., and A. B. Curtis, Iron River, Wis. Automatic railway-gate.	491,472	Feb. 7	677	170	62	878
Curtis, George A., Malden, assignor to C. F. Baker, Boston, Mass. Heel-nail.	502,550	Aug. 1	511	122	64	660

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Curtis, Irvine E. (See Graham and Curtis.)						
Curtis, John D., Worcester, Mass. Manufacture of barbed wire	491,304	Feb. 7	405	104	62	824
Curtis, John D., Worcester, Mass. Barbed wire	494,325	Mar. 28	2530	637	62	1892
Curtis, John D., Worcester, Mass. Barbed wire	494,326	Mar. 28	2532	638	62	1-92
Curtis, John D., Worcester, Mass. Fence-strip	494,551	Apr. 4	25	6	63	7
Curtis, John D., Worcester, Mass. Electric welder for wire-fence machines	495,626	Apr. 18	1777	447	63	364
Curtis, Lewis B. (See Curtis, Roderick P. and L. B.)						
Curtis, Lewis B., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	509,878	Dec. 5	56	13, 14	65	1420
Curtis, Nelson, Boston, Mass. Pressure-regulator	500,994	July 4	723	190	64	132
Curtis, Roderick P., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	497,002	May 9	993	256	63	815
Curtis, Roderick P., and L. B., Southport, Conn. Pipe-threading machine	505,593	Sept. 26	2160	546	64	1717
Curtis, Ruby Z., Minneapolis, Minn. Clothes-drier	491,987	Feb. 21	1484	370	62	1075
Curtis, Samuel P., Boston, Mass. Sweater	501,244	July 11	1131	287	64	221
Curtis, Warner H. (See Curtis, Andrew J. and W. H.)						
Curtis, William A., <i>et al.</i> (See Weaver, William, assignor.)						
Cusack, Christopher, <i>et al.</i> (See Thomas, Henry O., assignor.)						
Cusack, Michael, <i>et al.</i> (See Taylor, Alfred, assignor.)						
Cushing, Alfred D., and A. Mitchell, Wheeling, W. Va., assignors to Postal Improvement Company, Norristown, Pa. Letter-box	491,533	Feb. 14	774	197	62	917
Cushing, Alfred D., and A. Mitchell, Wheeling, W. Va., assignors to Postal Improvement Company, Norristown, Pa. House-door letter-box	491,534	Feb. 14	775	197 198	62	918
Cushing, Alvin M., <i>et al.</i> (See Holly, Edgar P., assignor.)						
Cushing, John P. (See Storey, Andrews, Cushing, and Eaton.)						
Cushman, Amos A., and J. N. Parcell, Shreve, Ohio. Fence-machine	505,876	Oct. 3	116	29	65	23
Cushman, Cephas H., Auburn, Me. Steam-vaporizer	499,190	June 6	749	178	63	1521
Cushman, Charles A. (See Guthrie, James F., Jr., assignor.)						
Cushman, George F. (See Parker, Cushman, and Fairbanks.)						
Cushman, John R., <i>et al.</i> (See Crowley, Joseph L., assignor.)						
Cushman Paper Box Machine Company. (See Harper, Fred D., assignor.)						
Cuthbertson, James W., Bothwell, assignor to A. J. Green, Essex, Canada. Tire-tightener	494,507	Mar. 28	2826	709	62	1946
Cutler, Fred H., Buffalo, N. Y. Desk	505,595	Sept. 26	2163	547	64	1717
Cutler, Henry, Toronto, Canada. Saddle for velocipedes	499,718	June 20	1616	391	63	1701
Cutler, Henry H., Waltham, Mass. Call-box	504,488	Sept. 5	289	74, 75	64	1321
Cutler, James L., Piketon, Ohio. Churn	500,859	July 4	516	134	64	94
Cutler, James L., Piketon, Ohio. Automatic fire-lighter	500,995	July 4	724	190	64	132
Cutler, Richard H., assignor of one-half to C. McKinnis, Lancaster, Iowa. Weather-strip	504,504	Nov. 14	857	212	65	933
Cutten, Elisha B., New York, N. Y. Preparing liquid chlorine	491,699	Feb. 14	1039	263	62	973
Cutten, Elisha B., New York, N. Y. Electrolytically producing soda and chlorine	491,700	Feb. 14	1041	263	62	973
Cutten, Elisha B., New York, N. Y. Electrolytically producing potassium chlorate	491,701	Feb. 14	1044		62	974
Cutten, Elisha B., New York, N. Y. Apparatus for the electrolytic production of soda and chlorine	505,895	Oct. 3	150	39	65	30
Cutten, Elisha B., New York, N. Y. Carbon for voltaic cells	508,091	Nov. 7	188	50	65	793
Cutten, Elisha B., New York, N. Y. Adjusting the joints of carbon electrodes	510,899	Dec. 19	1843	454	65	1779
Cutten, Elisha B., New York, N. Y. Apparatus for electrolytically producing soda and chlorine	510,900	Dec. 19	1844	454	65	1779
Cutten, Elisha B., New York, N. Y. Electrode for voltaic cells	510,901	Dec. 19	1845	455	65	1779
Cutten, Elisha B., New York, N. Y. Electrode for voltaic cells	510,902	Dec. 19	1846	455	65	1780
Cutter, Charles W., Broomfield, Colo. Snap-hook	501,875	July 18	2138	530	64	417
Cutter Electrical and Manufacturing Company. (See Stanley, Lucius T., assignor.)						
Cutter, Gershom. (See Oliver, George S., assignor.)						
Cutter, John M., assignor to Elgin National Watch Company, Chicago, Ill. Envelope	500,996	July 4	726	190 191	64	132
Cutting, Charles A., Middletown, Va. Tool	495,311	Apr. 11	1273	318	63	254
Cutting, George H., Worcester, Mass. Implement for dismantling builders' stagings, &c.	494,417	Mar. 28	2686	674	62	1920
Cutting, Walter P. (See Hodge, Harmon S., assignor.)						
Cuttriss, Charles, New York, N. Y. Telegraphy	500,226	June 27	2480	605 606	63	1864
Cyr, Félix and J. W., Aurora, Ill. Car-brake adjuster	491,535	Feb. 14	776	198	62	918
Cyr, Joseph W. (See Cyr, Félix and J. W.)						
D. E. Whiton Machine Company. (See Whiton, David E. and L. E., assignors.)						
D'Andria, Joseph N., and E. Slicer, Bradford, England. Weft stop-motion for looms	499,196	June 13	762	182	63	1537
D'Anvers, Roland, Hastings, New Zealand. Nailless horseshoe	507,420	Oct. 24	2768	678	65	558
D'Auria, Luigi, Philadelphia, Pa. Non-rotative pumping-engine	493,153	Mar. 7	592	149	62	1475
D'Entremont, Henry T. (See Niehoff, Ernest, assignor.)						
D'Entremont, John B. J., East Pubnico, Canada. Trawl-roller	490,139	Jan. 17	1829	478	62	406
D'Ivernois, Charles L., Brooklyn, N. Y. Fish-hook	497,962	May 23	2540	634	63	1121
Dabney, Owen P., assignor of one-half to E. H. Jackson, Salem, Oreg. Cane-stool	499,719	June 20	1618	391	63	1701
Dacey, John J. (See Anderson, Alfred, assignor.)						
Daddow, Esther A. (See Beadle, Jesse, assignor.)						
Daehler, John, Blackburn, Mo. Shade exhibitor and depository	510,960	Dec. 19	1957	479	65	1801
Daelen, Bernard V., deceased, O. Knight, sub-administrator, Washington, D. C. Machine for rolling and condensing bars of metal	499,677	June 13	1549	373	63	1675
Daemicke, Paul J. (See Tobin, John, assignor.)						
Daemicke, Paul J., Chicago, Ill. Cooling-room	496,867	May 9	771	205	63	776
Daft, Leo, Seattle, Wash. Means for cutting ice	508,819	Nov. 14	1340	332	65	1025
Dages, John, Navarre, Ohio. Horse-power	491,267	Feb. 7	325	83	62	811
Dages, John, Navarre, Ohio, and W. F. Wagner, Rockville, Md. Tilling-machine	503,696	Aug. 22	2425	604	64	1052
Daggett, William F., Chicago, Ill. Steam-cooker	500,118	June 27	2286	555	63	1828
Dahill, Thomas H., assignor of two-thirds to W. C. Dunham and W. B. White, Alfred Centre, N. Y. Device for preventing rails from spreading	501,678	July 18	1826	455	64	363
Dahl, Alfred, assignor of one-half to E. J. Terwilliger and J. Johns, Minneapolis, Minn. Car-unloader	500,997	July 4	727	191	64	132
Dahl, Charles A., Lynn, Mass., assignor to Globe Buttonhole Machine Company, Kittery, Me., and Boston, Mass. Clutch for sewing-machines	503,311	Aug. 15	1801	447	64	922
Dahl Electric Company. (See Dahl, Olof, assignor.)						
Dahl, Magnus. (See Low and Dahl.)						
Dahl, Olof, Paterson, N. J., assignor to Dahl Electric Company, of New Jersey. Electrodynamic machine	499,099	June 6	603	145	63	1496
Dahl, Olof, Paterson, N. J., assignor to Dahl Electric Company, of New Jersey. Friction-clutch for electric motors	499,183	June 6	739	176	63	1519
Dahlman, Henry, Cambridge, Minn. Capo tasto	429,525	Jan. 10	855	223	62	194
Dahlstrom, Leopold, Santa Clara, Cal. Pipe-wrench	508,920	Nov. 21	1546	378	65	1078

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Dahly, Harry, <i>et al.</i> (See Hansen, Jens, assignor.)						
Dahly, John, <i>et al.</i> (See Hansen, Jens, assignor.)						
Dahmer, August G., Alameda, assignor of one-third to F. Eichenhofer, Los Angeles, Cal. Roof-framing rule	499,521	June 13	1313	309	63	1634
Dalley, Basil, San Marcos, Tex. Automatic drop-lid for bins or boxes	502,509	Aug. 1	440	106	64	648
Dalley, George W., assignor of one-half to J. A. Craft, Charlottesville, Ind. Mail-bag catcher or discharger	506,102	Oct. 3	468	122	65	91
Dalley, Henry F., Omaha, and J. Poffenberger, Fort Calhoun, Nebr. Car-coupling	499,661	June 13	1527	368	63	1671
Dalley, James A. (See Blakeley and Bowser, assignors.)						
Daily, Ethan W., Kansas City, Kans. Hay-loader	507,109	Oct. 24	2317	547 548 549	65	456
Dain, Joseph, Jr., Carrollton, Mo. Mowing-machine	495,475	Apr. 18	1540	386 387	63	323
Dake, James R., Medford, Wis. Photographic retoucher	509,721	Nov. 28	2909	704	65	1349
Dale, Charles H., New York, N. Y. Car-coupling	494,125	Mar. 28	2219	565	62	1834
Dale, Charles H., and F. A. Fox, New York, N. Y.; said Fox assignor to Empire Car Coupler Company, Weehawken, N. J. Car-coupling	494,736	Apr. 4	332	84	63	66
Dale & Davis. (See Smith, William, assignor.)						
Dale, Elmer E. (See Beinke, George, assignor.)						
Dale, John H., assignor to Universal Electric Company of the City of New York, New York, N. Y. Electric railway	509,072	Nov. 21	1782	439	65	1124
Dale, John L., Whaleyville, Md. Latch	505,033	Sept. 12	1197	307	64	1510
Dales, John H., Leeds, England. Spring	508,288	Nov. 7	506	122	65	852
Daley, Walter A., Charles City, Iowa. Cleaner for disk harrows	507,312	Oct. 24	2591	637	65	524
Dalin, Charles. (See Lindquist, August, assignor.)						
Dalisch, Oscar, Neisse, Germany. Velocipede	488,988	Jan. 3	20	5	62	7
Dalisch, Oscar, Neisse, Germany. Hydraulic air compressing or exhausting pump	508,921	Nov. 21	1548	378 379	65	1078
Dalke, Abraham, and G. Wiens, Henderson, Nebr. Wheel-plow	495,312	Apr. 11	1274	318	63	254
Dallas, Alexander. (See Poor, Messenger, and Dallas.)						
Dallas, Alexander, New York, N. Y. Hernial instrument	505,818	Oct. 3	27	7	65	8
Dalphin, Robert G., Malone, N. Y. Fire-escape	501,767	July 18	1981	490	64	390
Dalton, Daniel F., Waterbury, assignor to Hammond Buckle Company, Rockville, Conn. Shoe-buckle	494,464	Mar. 28	2755	691	62	1932
Dalton, Levi C., and G. C. Myatt, Ponder, Mo. Adding-machine	509,722	Nov. 28	2911	704	65	1349
Dalton, Milton A., Cincinnati, Ohio. Method of and apparatus for controlling and utilizing concussion and applying it to safe-locks	508,902	Nov. 14	1468	363 364 365 366 367 368	65	1048
Dalton, Thomas C., Philadelphia, Pa. Compression stop and waste cock	504,865	Sept. 12	918	237	64	1457
Dalton, William, Cork, Ireland. Oven	507,110	Oct. 24	2221	548	65	457
Daly, Daniel, Maysville, Ky., assignor of one-half to H. L. Payne, Cleveland, Ohio. Gas-burner	496,350	Apr. 25	2912	727	63	529
Daly, Dennis J., Philadelphia, Pa. Fare-register for street-cars	506,845	Oct. 17	1780	448	65	363
Daly, James W. (See Abel and Daly.)						
Daly, John F. (See Barrett and Daly.)						
Daly, John J. (See Chase and Daly.)						
Dalysson, Louis N. (See Henry and Dalysson.)						
Dalzell, Gilmore & Leighton Company. (See Steimer, Theodore C., assignor.)						
Daman, Oscar, assignor to Northwestern Stove Works, Minneapolis, Minn. Chill-core for molding sockets for stoves	493,911	Mar. 21	1838	468	62	1747
Dambach, Edward, Evans City, Pa. Guide-strip for inside blinds	489,937	Jan. 17	1426	328	62	336
Dame, Paul C., and L. Prud'hon, Paris, France. Making artificial whalebone	501,232	July 11	1098		64	216
Dameron, John H., Rufin, N. C. Churn-motor	493,822	Mar. 21	1700	433	62	1720
Damm, Frederick C., Findlay, Ohio, assignor to C. H. Raynor, Adrian, Mich. Machine for molding plastic material	496,399	May 2	18	5	63	622
Damon, Edwin S. (See Hamblin, Stephen M., assignor.)						
Dan Rylands. (See Walker, Walter, assignor.)						
Dana, Alpheus T., Warren, Vt. Game tally-board for roquet	507,111	Oct. 24	2222	548	65	457
Dana, William H., assignor to Chicago Clamp Company, Chicago, Ill. Clamp	503,125	Aug. 15	1491	366	64	868
Danby, William, Mount Orab, Ohio. Potato-digger	497,069	May 9	1092	280 281	63	834
Dancel, Christian. (See Briggs and Dancel.)						
Dancyger, Simon, Dayton, Ohio. Paper-fastener	506,674	Oct. 17	1490	374	65	309
Danehy, Patrick J., Cambridge, Mass. Cracker-stacking machine	508,092	Nov. 7	189	50, 51	65	793
Danforth, Charles O. (See Wallin, Joseph, assignor.)						
Dangler Stove and Manufacturing Company. (See Ruppel, Henry, assignor.)						
Daniel Pratt Gin Company. (See Beckwith, William G., assignor.)						
Daniels, Addison L. (See Jackson and Daniels.)						
Daniels, Carol T., Naperville, Ill. Check-register	493,985	Mar. 21	1977	504	62	1773
Daniels, Charles A., Waterville, N. Y. Folding shipping-crate	502,429	Aug. 1	302	72	64	621
Daniels, Charles J., Buffalo, N. Y. Garment-supporter	507,787	Oct. 31	3369	833	65	689
Daniels, Cornelius F., Macon, Ga. Armature for electric motors or dynamos	489,070	Jan. 3	134	36, 37	62	33
Daniels, Cornelius F., Macon, Ga. Field-magnet for electric motors or dynamos	489,071	Jan. 3	136	37, 38	62	33
Daniels, Frank M., Traverse City, Mich. Computing scale-beam	494,552	Apr. 4	26	6	63	7
Daniels, Henry H., Cincinnati, Ohio. Combination-lock	503,157	Sept. 19	1401	359	64	1560
Daniels, Howard, Atlanta, Ga., assignor of one-half to J. H. Simonson, Fort Wayne, Ind. Lumber-truck	500,860	July 4	518	135	64	94
Daniels, Howard, Atlanta, Ga., assignor of one-half to J. H. Simonson, Fort Wayne, Ind. Lumber-piling machine	500,861	July 4	520	135	64	94
Daniels, Howard, Atlanta, Ga., assignor of one-half to J. H. Simonson, Fort Wayne, Ind. Lumber-truck	500,862	July 4	522	136	64	95
Daniels, Lonnie A. (See Jones, William J., assignor.)						
Daniels, Thomas, Toledo, Ohio. Process of and apparatus for the manufacture of tablets	495,962	Apr. 25	2229	580	63	473
Daniels, William H., assignor, by mesne assignments, to St. Louis Car Axle Lubricator Company, St. Louis, Mo. Car-axle lubricator	498,772	June 6	30	7	63	1394
Daniels, Wolcott O., assignor of one-half to A. L. Bush, Westfield, Mass. Whip	500,096	June 20	2226	512	63	1807
Danielson, Carl M., Rockford, Ill. Pipe-lifter	496,641	May 2	398	108	63	691
Dankmeyer, Frederick W. (See Cunningham and Dankmeyer.)						
Danner, Adam, and G. Rothenbücher, New York, N. Y. Carbonic-acid or other gas engine	502,430	Aug. 1	303	73	64	621
Danner, Carl M., Vienna, Austria Hungary. Perforating stamp	504,106	Aug. 29	3067	767 768	64	1192

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Danner, Eli, Willoughby, Canada. Churn	507,788	Oct. 31	3400	834	65	690
Danner, John, Canton, Ohio. Umbrella-stand	508,602	Nov. 14	1027	253	65	965
Danner, John, Canton, Ohio. Combined table and writing-cabinet	508,603	Nov. 14	1028	253	65	965
Dansereau, Pierre, Montreal, Canada. Vehicle-axle box	492,146	Feb. 21	1733	432	62	1126
Dansereau, Pierre, Montreal, Canada. Ball-bearing	494,190	Mar. 28	2321	587	62	1853
Dante, Frank B., assignor to F. G. Norris, Washington, D. C. Device for reducing distorted finger-tips	500,056	June 20	2171	528	63	1797
Danz, William, Detroit, Mich. Truss	500,739	July 4	332	88	64	62
Darby, Benjamin F., Clay's Prairie, Ill. Cultivator-blade	504,969	Sept. 12	1090	279	64	1490
Darby, Elijah F. (See Darby, Joseph, assignor.)						
Darby, Henry H. (See Hodgdon, Oscar O., assignor.)						
Darby, James B., Batesville, Miss. Adjustable double plow	491,675	Feb. 14	1000	252	62	964
Darby, Joseph, assignor of one-fourth to E. F. Darby, Springfield, Ohio. Hydrocarbon-burner	499,720	June 20	1619	391	63	1701
Darby, Robert J., assignor of two-thirds to T. P. Williams and J. W. Gaston, Troup, Tex. Sand-band for vehicles	510,629	Dec. 12	1340	329	65	1675
Dare, Clifton B., and J. D. Hall, El Cajon, Cal. Barrel or crate	504,445	Sept. 5	213	56	64	1310
Dark, Francis P., Barry, assignor of one-half to P. H. Kistner, Fairweather, Ill. Car-coupling	506,583	Oct. 10	1351	339	65	271
Dark, Thomas, Sr., Buffalo, N. Y. Garbage-cart	502,350	Aug. 1	169	39, 40	64	598
Darley, John W., Jr. (See Parrshall and Darley.)						
Darley, John W., Jr., Schenectady, N. Y., assignor of one-half to D. E. Evans, P. Hamburger, M. Holzman, and L. Hamburger, Baltimore, Md. Sheet lifting and counting device	500,379	June 27	2719	668	63	1906
Darley, John W., Jr., Schenectady, N. Y., assignor of one-half to D. E. Evans, P. Hamburger, M. Holzman, and L. Hamburger, Baltimore, Md. Music-leaf turner	500,380	June 27	2721	669	63	1806
Darling, Charles E., Auburn, assignor of one-half to J. F. Boothby, Lewiston, Me. Cooking-range	509,654	Nov. 28	2801	674	65	1329
Darling, Cornelius B. (See Darling, Rolla R. and C. B.)						
Darling, D. H. (See Harrington, George W., assignor.)						
Darling, D. Harry, et al. (See Osteman, Carl G., assignor.)						
Darling, Rolla R. and C. B., Cleveland, Ohio. Fresh-water filter	499,284	June 13	889	215	63	1559
Darlington, John H. (See Maxfield and Darlington.)						
Darnell, Calvin F., assignor of one-half to E. F. Harris and C. A. Bookwalter, Indianapolis, Ind. Wooden lathing	502,551	Aug. 1	512	122	64	660
Darr, Isaac N., Monticello, Ill. Harness	500,263	July 4	524	136	64	95
Darragh, Albert C., Allegheny, Pa. Oil-filter	493,073	Mar. 7	465	117	62	1451
Darragh, Albert C., Allegheny, Pa. Well-drilling machinery	505,443	Sept. 26	1867	481	64	1661
Darragh, Fred D., and F. G. King, Denver, Colo. Ore-concentrator	506,035	Oct. 3	356	94, 95	65	69
Darrow, Irving R. (See Campbell, William H. H., assignor.)						
Darrow, Nicholas, and J. A. Roosevelt, Austin, Tex. Car-coupling	509,365	Nov. 28	2296	557	65	1232
Daru, Leon, Philadelphia, Pa. Gas-burner	496,298	Apr. 25	2815	704	63	570
Daschbach, Edward J., Pittsburg, Pa. Stove	507,219	Oct. 24	2434	600	65	494
Dasha, John F. (See Haub and Dasha.)						
Dasher, Biram D., Middletown, assignor of one-half to S. P. Fowler, Jenkintown, Pa. Rail-way-tie	491,041	Jan. 31	3324	848	62	725
Dasbiell, Robert B., U. S. Navy. Cartridge-case extractor	494,917	Apr. 4	618	158	63	120
Dasbiell, William W. (See Barclay, John J., assignor.)						
Dauber, August, Bochum, Germany. Making iron	502,482	Aug. 1	390	93	64	638
Daudeteau, Louis M. R., Vannes, France. Magazine-gun	491,772	Feb. 14	1155	289, 290	62	995
Daugherty, George L. (See Anderson and Daugherty.)						
Daugherty, Le Roy, Muncie, Ind. Butter-pail	491,406	Feb. 7	574	144	62	858
Daugherty, R. P. (See Anderson and Daugherty, assignors.)						
Daus, Felix F., New York, N. Y. Duplicating apparatus	493,757	Mar. 21	1596	406	62	1701
Davenport, Frank W., Providence, R. I. Electric-light fixture	504,866	Sept. 12	919	237	64	1457
Davenport, Herbert, Paterson, N. J. Lease-forming mechanism for warping-mills	500,097	June 20	2227	543	63	1807
Davenport, Joseph P., Downer's Grove, Ill. Potato-planter	498,773	June 6	32	8	63	1394
Daves, William, Jersey City, N. J., assignor to Hall Signal Company, of Maine. Electric signaling-circuit	501,183	July 11	1041	264	64	204
Daves, William, Jersey City, and W. H. Peddle, Roselle, N. J. Automatic railway-signal	496,473	May 2	130	35	63	642
Davey, Charles E., Detroit, Mich. Flue-scraper	493,235	Mar. 7	723	185	62	1501
Davey, Edward J. (See Fortin, Benjamin P., assignor.)						
Davey, John F., Marlborough, Mass. Pegging-machine	504,311	Aug. 29	3401	852, 853	64	1255
David, Edmund A., and J. Rath, assignors of one-third to J. P. Merrill, Columbus, Ohio. Barrel or keg	503,580	Aug. 22	2227	558	64	1017
David, Isaac, Harvard, Nebr. Car-coupling	491,924	Feb. 14	1329	347	62	1041
David, Jacob, Brooklyn, N. Y. Folding bed	495,109	Apr. 11	928	234	63	193
David, Joseph M., assignor of one-half to W. A. McEvilly, Wilmington, Del. Door-check	510,163	Dec. 5	539	125	65	1512
David, William K., Philadelphia, Pa. Calendar	502,483	Aug. 1	391	93, 94	64	638
Davids, E. M. Chisholm. (See Davids, John B., assignor.)						
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game-board	489,851	Jan. 10	1324	345	62	290
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game-board	489,852	Jan. 10	1325	345	62	290
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game-board	489,853	Jan. 10	1325	345	62	290
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game apparatus	489,854	Jan. 10	1326	346	62	290
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game apparatus	489,855	Jan. 10	1327	346	62	291
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game apparatus	489,856	Jan. 10	1327	346	62	291
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game apparatus	489,857	Jan. 10	1328	346	62	291
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game-board	497,908	May 23	2464	615	63	1109
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game-board	497,909	May 23	2465	616	63	1109
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Game-board	497,910	May 23	2465	616	63	1109
Davids, John B., assignor to E. M. C. Davids, North Dartmouth, Mass. Marine vessel	509,463	Nov. 28	2507	605	65	1273
Davids Machine Works. (See Balzer, Stephen M., assignor.)						
Davidsohn, Joseph. (See Weber and Hampel, assignors.)						
Davidsohn, Joseph, Berlin, Germany. Screw-cutting machine	510,329	Dec. 5	803	194	65	1562
Davidson, Alexander, Bridgeport, Conn., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	493,252	Mar. 14	750	192, 193	62	1523
Davidson, David J., Brockway, Mich. Machine for re-dressing mill-rolls	489,412	Jan. 3	649	176	62	140
Davidson, David J., assignor of two-thirds to A. A. Haskell, Brockway, and A. S. Martin, Port Huron, Mich. Machine for truing rolls	504,566	Sept. 5	423	107	64	1348
Davidson, David J., Brockway, assignor of two-thirds to A. S. and S. G. Martin, Port Huron, Mich. Gravity and cut-off grain cleaner and grader	507,488	Oct. 24	2871	704	65	578
Davidson, Francis P., assignor to Fox Solid Pressed Steel Company, Joliet, Ill. Buffer-plate	500,227	June 27	2483	606	63	1864

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Davidson, Francis P., assignor to Fox Solid Pressed Steel Company, Joliet, Ill. Center plate for vehicles	506,419	Oct. 10	1086	{ 269 270 }	{ 65 }	219
Davidson, Frank B. (See Howe and Davidson.)						
Davidson, Frank C., et al. (See Platt, Albert L., assignor.)						
Davidson, George. (See Finney and Davidson.)						
Davidson, James L., Pittsburg, Pa. Attachment for telephones	489,603	Jan. 10	965	251	62	216
Davidson, John C. (See Johnston and Davidson.)						
Davidson, John C. (See Johnston, Browne, and Davidson.)						
Davidson, John C., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Regulator for electric motors	503,453	Aug. 15	2009	498	64	961
Davidson, John C., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Electric-motor apparatus	508,000	Nov. 7	32	10	65	764
Davidson, John F., Edgerly, La. Car-coupling	502,068	July 25	2450	615	64	490
Davidson, John M., assignor to Marlin & Co., Allegheny, Pa. Coupling for eaves-troughs	497,466	May 16	1750	441	63	965
Davidson, Joseph A., Polo, assignor to Aladdin Camera Company, Chicago, Ill. Photographic camera	494,097	Mar. 21	2154	550	62	1807
Davidson, Marshall T. (See Drewett, William A., assignor.)						
Davidson, Marshall T., Brooklyn, N. Y. Valve for direct-acting engines	497,442	May 16	1713	433	63	959
Davidson, Oscar J., Kingsburg, Cal. Keyhole-guard	511,592	Dec. 26	3007	732	65	2008
Davidson, Samuel C., Belfast, Ireland. Staple-driving tool	493,758	Mar. 21	1597	406	62	1701
Davidson, Samuel C., Belfast, Ireland. Machine for the manufacture of staples	503,264	Aug. 15	1713	{ 422 43 }	{ 64 }	909
Davidson, Thomas, Montreal, Canada. Damper	509,019	Nov. 21	1695	418	65	1107
Davidson Ventilating Fan Company. (See Davidson, William H. A., assignor.)						
Davidson, William H. A., assignor to Davidson Ventilating Fan Company, Boston, Mass. Ventilator	489,466	Jan. 10	756	200	62	174
Davidson Writing Machine Company. (See Yost, George W. N., assignor.)						
Davies, Charles H., Chenoa, Ill. Ventilated hat	488,989	Jan. 3	21	6	62	7
Davies, David D., Wilkes-Barré, Pa. Cover for frying-pans, pots, or other cooking utensils	496,820	May 2	687	181	63	741
Davies, Edwin L., and J. N. White, Salt Lake City, Utah Ter. Windmill	504,301	Aug. 29	3385	{ 846 847 }	{ 64 }	1252
Davies, John. (See Evans and Davies.)						
Davies, John P. (See Dean, John, assignor.)						
Davies, Joseph, Bridgeport, Pa. Furnace	503,407	Aug. 15	1943	483	64	949
Davies, Martin, Jersey City, N. J. Propeller	509,204	Nov. 21	2007	488	65	1168
Davies, Preston, London, England. Means for carrying headlights on velocipedes	506,477	Oct. 10	1196	297	65	241
Davies, Thomas. (See Wood and Davies.)						
Davies, Thomas W., St. Louis, Mo., assignor to E. L. Carlton, Selma, Ohio. Shaft-tug	503,564	Aug. 15	2195	548	64	995
Davin, John. (See Moran, O'Brien, and Davin.)						
Davis, Abbott A., Cincinnati, Ohio, assignor of one-half to J. H. Rust, Covington, Ky. Appliance for raising dough	495,024	Apr. 11	777	198	63	164
Davis, Alexander C., Kokomo, Ind. Plant-protector	508,209	Nov. 7	3-1	93	65	829
Davis, Appleton R., Valley, Nebr. Cultivator	492,509	Feb. 28	2319	575	62	1257
Davis, Arthur W., Birmingham, Ala. Bread or cake warmer	499,285	June 13	891	216	63	1559
Davis, Augustus G., Baltimore, Md. Telephone-switch	498,243	May 30	2938	{ 744 745 }	{ 63 }	1216
Davis, Benjamin A., assignor to G. Davis, Petersburg, Va. Two-wheeled vehicle	507,789	Oct. 31	3401	834	65	690
Davis, Charles A., Concord, N. H. Tower-wagon	497,952	May 23	2527	631	63	1119
Davis, Charles B., assignor to himself and D. A. Crandall, Savona, N. Y. Culvert	491,408	Feb. 7	576	144	62	858
Davis, Charles S., Wellfleet, Mass. Folding bed or cot	504,202	Aug. 29	3229	{ 804 805 }	{ 64 }	1222
Davis, Charles W., Montreal, Canada. Sewing-machine	504,061	Aug. 29	2990	747	64	1177
Davis, E. W. (See Hawkes, Edward B., assignor.)						
Davis, Emory, New York, N. Y. Inkstand	491,640	Feb. 14	948	238	62	954
Davis, Ernest A., Albion, Mich. Cover for tobacco-pails	494,465	Mar. 28	2756	691	62	1932
Davis, Etna H., Elmira, N. Y. Coin-controlled game apparatus	508,922	Nov. 21	1549	379	65	1078
Davis, Francis G., assignor to H. H. Babcock Company, Watertown, N. Y. Shifting seat for vehicles	511,515	Dec. 26	2881	701	65	1985
Davis, Frank M., Oskaloosa, Iowa. Steam-engine	502,707	Aug. 8	805	{ 194 195 }	{ 64 }	728
Davis, Frank P. (See Babendreier and Davis.)						
Davis, Frederick G. (See Davis, Samuel and F. G.)						
Davis & Furber Machine Company. (See Wadlin, Melville T., assignor.)						
Davis & Furber Machine Company. (See Wickers, George O., assignor.)						
Davis, George. (See Davis, Benjamin A., assignor.)						
Davis, George A., Waltham, assignor to himself, C. H. Taylor, G. W. Williams, Boston, and W. B. Chase, Somerville, Mass. Machine for drying matrices	492,147	Feb. 21	1734	432	62	1126
Davis, George A., Waltham, assignor to himself, C. H. Taylor, G. W. Williams, Boston, and W. B. Chase, Somerville, Mass. Combined chase-frame and table	506,873	Oct. 17	1822	456	65	370
Davis, George H. (See Piper and Davis.)						
Davis, George M., Chicago, Ill. Air-valve	507,650	Oct. 31	3188	740	65	650
Davis, George P., Buffalo, N. Y. Type-writing machine	509,427	Nov. 28	2415	{ 585 586 }	{ 65 }	1254
Davis, George T. (See Powell, Williamson, and Havner, assignors.)						
Davis, George W., Hot Springs, Ark. Paint or varnish cup	491,257	Feb. 7	312	79	62	808
Davis, Greenfield T. (See Gordon and Davis.)						
Davis, Harry P., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Controlling switch for electrically-propelled vehicles	503,279	Aug. 15	1737	429	64	913
Davis, Harry T., et al. (See Stamp, John G., assignor.)						
Davis, Henry, et al. (See Wise, Morris, assignor.)						
Davis, Henry A., assignor to Kitson Machine Company, Lowell, Mass. Evening mechanism for machines for opening, carding, and drawing fibrous substances	495,609	Apr. 18	1745	440	63	359
Davis, Henry C., et al. (See Simoneau, Joseph M., assignor.)						
Davis, Henry G., Everett, Mass. Metallic railway-sleeper	500,473	June 27	2851	702	63	1929
Davis, Henry J., J. Rice, and J. C. McDaniel, Iron City, Ala. Saw cotton-gin	504,023	Aug. 29	2934	{ 734 735 }	{ 64 }	1166
Davis, Homer C., Normalville, Pa. Rein-holder	498,107	May 23	2760	690	63	1161
Davis, Isaac, Catasauqua, Pa. Sliding-door lock	489,221	Jan. 3	370	103	62	84
Davis, Isaac H., South Butte, Mont. Electric-car attachment	508,373	Nov. 7	641	157	65	877
Davis, James E., Chicago, Ill. Combined lock and support for bicycles	499,876	June 20	1899	461	63	1750
Davis, James H., and A. Dick, Drexel, Fla. Fish-plate	499,874	June 20	1895	460	63	1749
Davis, Job A., and R. A. Fowden, Philadelphia, Pa., assignors to International Printing Telegraph Company, Camden, N. J. Electric motor	506,208	Oct. 10	702	{ 177 178 }	{ 65 }	144

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Davis, Job A., and R. A. Fowden, Philadelphia, Pa., assignors to International Printing Telegraph Company, Camden, N. J. Electric motor	506,209	Oct. 10	704	178	65	145
Davis, Joel, and R. M. Huntington, Denver, Colo. Electric-railway conduit and contact	493,618	Mar. 14	1362	345	62	1639
Davis, John, Laramie, Wyo. Precipitating apparatus	497,169	May 9	1246	317	63	861
Davis, John, Allegheny, Pa. Apparatus for tanning	497,051	May 23	2526	630	63	1119
Davis, John H., Detroit, Mich. Electric battery	489,938	Jan. 17	1458	3-9	62	337
Davis, John H., Cincinnati, Ohio. Slot-machine for delivering liquids	509,119	Nov. 21	1871	458	65	1141
Davis, John J. (See Crook and Davis.)						
Davis, John L., Arkadelphia, Ark. Washing-machine	495,963	Apr. 25	2300	581	63	473
Davis, John P. T., Elk City, Kans. Drive-wheel for harvesters or binders	508,167	Nov. 7	308	76	65	815
Davis, John T., assignor of one-half to C. J. Moffett, St. Louis, Mo. Combined type-writing machine and duplicator	494,060	Mar. 21	2089	533	62	1794
Davis, John T., assignor to Brazilian Manufacturing Company, San Francisco, Cal. Treating coconut-husks	497,911	May 23	2466	298	63	1101
Davis, John W., New York, N. Y. Kite	490,949	Jan. 31	3166	811	62	694
Davis, John W., New York, N. Y. Apparatus for lighting buildings	507,999	Nov. 7	30	10	65	764
Davis, Joseph H., Sewickley, Pa. Flue-brush	497,616	May 16	2018	503	63	1013
Davis, Leonard L., Springfield, Mass. Hack-saw	492,937	Mar. 7	262	66	62	1410
Davis, Levi, Jr., Alton, Ill. Car-coupling	492,275	Feb. 21	1932	482	62	1167
Davis, Micajah R., Bell's, Tex. Cotton-distributor for gin-feeders	506,771	Oct. 17	1659	416	65	341
Davis, Nathan H., Philadelphia, Pa. Draft-spring	503,408	Aug. 15	1943	483	64	950
Davis, Nathan H., Philadelphia, Pa. Die for making car-stake pockets	504,520	Sept. 5	349	89	64	1335
Davis, Orion L., Rochester, N. Y. Elevator-guard	502,955	Aug. 8	1212	299	64	803
Davis, Owen W., Jr., Middlesborough, Ky. Ore-roasting kiln	501,494	July 18	1528	343	64	309
Davis, Riley L., assignor of one-half to J. R. Cauble, Asheville, N. C. Wagon-top	510,330	Dec. 5	805	195	65	1563
Davis, Robert, Jersey City, and A. Gartner, West Hoboken, N. J. Blind-stop	499,373	June 13	1052	255	63	1589
Davis, Robert, Jersey City, and A. Gartner, Hoboken, N. J. Shutter-fastener	510,164	Dec. 5	540	125	65	1512
Davis, Robert E., East Lake, Ala. Keyhole guard and alarm	496,299	Apr. 25	2816	704	63	570
Davis, Robert H. (See Davis, William F., assignor.)						
Davis, Rogerie, and W. Butler, Washington, D. C. Portable hand-punch	503,109	Aug. 8	1454	358	64	848
Davis, Samuel and F. G., Las Vegas, N. Mex. Ter. Clothes-pounder	503,832	Aug. 22	2622	636	64	1091
Davis, Spencer L., Brooklyn, N. Y. Machine for embossing wood	500,998	July 4	729	191	64	133
Davis, Spencer L., Brooklyn, N. Y. Means for embossing wood	492,850	Aug. 8	1031	253	64	771
Davis, Theodore F., Marshalltown, Iowa. Fan	491,407	Feb. 7	575	144	62	858
Davis, W. P., et al. (See Smith, George, assignor.)						
Davis, Walter S., La Crosse, Wis. Blotter	497,492	May 16	1801	452	63	974
Davis, Walter W. (See Palmer and Davis.)						
Davis, Weston L., Lewiston, Me. Grooving-machine	496,868	May 9	774	205	63	777
Davis, William F., Kansas City, Kans., assignor of one-fourth to R. H. Davis, Raymond, Nebr. Compression-pump	497,092	May 9	1130	289	63	840
Davis, William J., Charlotte, N. C. Trunk-lock	499,071	June 20	2034	493	63	1774
Davis, William L. (See Young and Davis.)						
Davis, William T., Battle Creek, Mich. Engine-governor	499,875	June 20	1896	461	63	1749
Davis, William W., assignor to himself, W. and F. B. Lander, California, Mo. Telephone system	505,308	Sept. 19	1640	424	64	1606
Davison, Charles C., Moncton, Canada. Car-coupling	497,868	May 23	2398	599	63	1097
Davison, Charles C., assignor of three-fourths to J. A. Harris, Moncton, Canada. Car-coupling	509,299	Nov. 21	2176	523	65	1199
Davison, Ferdinand, assignor of two-thirds to A. G. Spratley and G. J. Davison, Richmond, Va. Machine for making sole and heel plates	494,972	June 20	2036	493	63	1774
Davison, George J., et al. (See Davison, Ferdinand, assignor.)						
Davy, Ernest J., Kenosha, Wis. Scraper	508,685	Nov. 14	1143	282	65	989
Davy, Thomas W. (See Dear, James W., assignor.)						
Dawdy, James, and F. M. Catterm, Denver, Colo. Electro-medical air-injector	505,393	Sept. 19	1777	460	64	1630
Dawdy, Warren D., and A. Herren, Adair county, Mo. Invalid-bed	504,333	Sept. 5	33	10	64	1277
Dawkins, Thomas. (See Mann and Dawkins.)						
Dawley, C. W., et al. (See De Voe, William R., assignor.)						
Dawson, Clarence E., Joplin, Mo. Lead-packer	494,979	Apr. 4	707	180	63	135
Dawson, George E., et al. (See Thorp, Thomas J., assignor.)						
Dawson, Henry G., Chicago, Ill. Fireplace-frame	500,687	July 4	248	67	64	47
Dawson, John W., et al. (See Jenne and Willey, assignors.)						
Dawson, Thomas, Lynn, C. R. and G. F. Schumacher, Boston, Mass. Machine for dressing leather	497,003	May 9	993	256	63	815
Dawson, William. (See Mutter and Dawson.)						
Dawson, William R., Chicago, Ill. Fireplace	495,786	Apr. 18	2036	515	63	409
Day, Arthur W., New Britain, Conn. Bed-bottom	500,865	July 4	526	136	64	96
Day, Clarence M., New York, N. Y. Veil-clasp	500,864	July 4	525	136	64	95
Day, Cornelius R., Blackstone, Mass. Ice-splitter	499,286	June 13	892	216	63	1559
Day, Florence M., assignor to Sawyer Spindle Company, Hopedale, Mass. Spindle	490,245	Jan. 17	2005	524	62	439
Day, George W., Haverhill, Mass., assignor to Boston Footwear Machine Company, of Maine. Making boots or shoes	491,258	Feb. 7	313	79	62	808
Day, Henry B., Elgin, Ill. Snap	505,158	Sept. 19	1405	360	64	1561
Day, Henry H., Newton, Mass. Safety device for elevators	493,759	Mar. 21	1598	406	62	1701
Day, Henry H., Newton, Mass. Safety elevator device	493,760	Mar. 21	1599	406	62	1702
Day, Henry L., Minneapolis, Minn. Relief-valve for suction or blast pipes	503,126	Aug. 15	1492	367	64	868
Day, James P., Anniston, Ala. Method of and apparatus for dispensing liquids	494,061	Mar. 21	2096	535	62	1796
Day, John, New York, N. Y., assignor of one-half to Turner & Seymour Manufacturing Company, Torrington, Conn. Curtain-rod and bracket	502,659	Aug. 1	691	165	64	693
Day, Wilbur F., Sr. (See Lagvigne, Joseph P., assignor.)						
Day, William H. (See Eriksen and Day.)						
Dayton Autographic Register Company. (See Grimes and Harter, assignors.)						
Dayton, Curtis I., Menominee, Mich. Puzzle	495,724	Apr. 18	1942	489	63	392
Dayton Fan and Motor Company. (See Conklin, Oliver F., assignor.)						
Dayton Manufacturing Company. (See Kirby, John, Jr., assignor.)						
Dayton Paper Novelty Company. (See Schmidt, Theodore F. W., assignor.)						
Dayton, William H., Torrington, Conn. Horseshoe-nail machine	497,493	May 16	1802	452	63	974
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Wire-swaging machine	492,572	Feb. 28	2413	601	62	1279

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Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Wire-swaging machine	492,573	Feb. 28	2414	602	62	1279
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Machine for swaging rods	492,574	Feb. 28	2415	602	62	1279
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Machine for swaging rods, &c.	492,575	Feb. 28	2416	603	62	1280
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Machine for swaging wire, &c.	492,576	Feb. 28	2419	603	62	1281
De Arden, Charles F., New York, N. Y. Device for operating gates to elevator-wells	506,163	Oct. 3	575	149	65	1110
Dé Arden, Charles F., assignor of one-half to C. B. Parker, New York, N. Y. Device for operating gates to elevator-wells	494,126	Mar. 28	2220	565	62	1834
De Barril, Robert J., New York, assignor of two-fifths to H. J., M. J., and J. V. Lamarche, Brooklyn, N. Y. Roll-holder camera	506,210	Oct. 10	708	178	65	145
De Ben, Francisco V., Gloucester, Mass. Device for cutting ships' cables	504,203	Aug. 29	3230	805	64	1222
De Cailly, Louis, Fort Madison, Iowa. Buggy-shafts	506,211	Oct. 10	710	178	65	145
De Camp, Eliphalet, Newark, N. J. Hinge for folding squares	510,529	Dec. 12	1169	282	65	1614
De Camp, Lee. (See Brown and De Camp.)						
De Celles, Joseph H. E., Southbridge, Mass., assignor to H. E. Kirstein, Rochester, N. Y. Frame for eyeglasses or spectacles	506,164	Oct. 3	577	149	65	111
De Celles, Joseph H. E., and G. W. Wells, assignors to American Optical Company, Southbridge, Mass. Eyeglasses	492,622	Feb. 28	2498	619	62	1295
De Celles, Joseph H. E., and G. W. Wells, assignors to American Optical Company, Southbridge, Mass. Eyeglasses	499,320	June 13	944	228	63	1569
De Forest, Henry S., East Orange, N. J. Glazing system	511,325	Dec. 26	2556	623	65	1925
De Forest, Wyatt F., assignor to Lansberg Brake Company, St. Louis, Mo. Brake-valve, with governor attachment	497,405	May 16	1651	417	63	948
De Grasse, George W. (See Einsele and De Grasse.)						
De Grasse, George W., Crete, Ill. Dado-head	510,961	Dec. 19	1958	479	65	1801
De Groff, John, Chicago, Ill. Washtub	499,781	June 20	1731	418	63	1720
De Haven, William, Lancaster, Pa. Tobacco-case	503,717	Aug. 22	2458	612	64	1059
De Jounnette, John F., Murphy, N. C. Brake-lock for trucks	496,151	Apr. 25	2584	650	63	527
De La Porte, Julius A., Hannibal, Mo. Kitchen-table	494,191	Mar. 28	2321	588	62	1853
De Laney, Charlotte A., Santa Barbara, Cal. Hammock	493,245	May 30	2991	745	63	1216
De Laney, John, assignor to W. F. and H. W. Wendt, Buffalo, N. Y. Radiator	499,417	June 13	1143	273	63	1604
De Lisle, Thomas C. (See Gallinger and De Lisle.)						
De Lissa, Benja, <i>et al.</i> (See Smith, Thomas, assignor.)						
De Long, Frank E., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Garment-hook	492,741	Feb. 28	2673	663	62	1330
De Long, Frank E., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Garment-hook	492,742	Feb. 28	2674	664	62	1330
De Long, Frank E., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Garment-hook	492,743	Feb. 28	2675	664	62	1330
De Long, Frank E., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Garment-hook	492,744	Feb. 28	2677	664	62	1330
De Long, Frank E., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Garment-hook	492,745	Feb. 28	2679	665	62	1331
De Long, Julius, Brooklyn, N. Y. Window-ventilator	491,088	Feb. 7	40	10	62	756
De Long, Oscar A., New York, and E. Kempshall, Brooklyn, N. Y., assignors to Kempshall Specialty Manufacturing Company, of New Jersey. Hook	511,326	Dec. 26	2557	624	65	1925
De Mayo, Louis A., New York, N. Y. Loading device	493,986	Mar. 21	1978	504	62	1773
De Mond, Benjamin. (See Fisher, George W., assignor.)						
De Mooy, John, Jr., and W. H. Clemes, assignors to Taylor & Boggis Foundry Company, Cleveland, Ohio. Oil-stove	511,737	Dec. 26	3238	795	65	2050
De Neal, Jackson, assignor to A. M. Chapman and M. J. Mann, Toledo, Ohio. Gas-generator	507,975	Oct. 31	3703	919	65	746
De Pont, Alexandre and S., Lancaster, England. Mold for the manufacture of solid balls of artificial ivory	502,013	July 25	2355	590	64	473
De Pont, Silvius. (See De Pont, Alexandre and S.)						
De Rache, Pierre J. L., New York, N. Y. Construction of floors, ceilings, arches, &c.	506,478	Oct. 10	1197	297	65	241
De Raimes, Hippolyte A., Elizabeth, N. J. Metal railway-tie	511,072	Dec. 19	2129	526	65	1832
De Voe, William R., Shreveport, La. Conduit electric railway	499,374	June 13	1052	255	63	1589
De Voe, William R., Shreveport, La. Electric-railway conduit	510,634	Dec. 12	1349	331	65	1677
De Voe, William R., Shreveport, La., assignor of one-fourth to C. W. Dawley, Denison, Tex. Conduit electric railway	495,456	Apr. 11	1499	377	63	295
De Voe, William R., Shreveport, La., assignor of seven-twelfths to C. W. Dawley, Dallas, Tex., and P. B. Cash, Shreveport, La. Conduit electric railway	510,061	Dec. 5	374	83	65	1480
De Witt, Alvin G., Detroit, Mich. Electric-lamp supporter	493,578	Mar. 14	1296	331	62	1627
De Witt, Emil F., Lansingburg, N. Y. Sand-box for street-cars	491,161	Feb. 7	161	41,42	62	779
De Witt, Emil F., Lansingburg, N. Y. Sanding device for street-cars	498,632	May 30	3636	900	63	1331
De Wolfe, Edward R. (See Gray, William A., assignor.)						
Deacon, Clifford B., <i>et al.</i> (See Dion, Charles J., assignor.)						
Deafenbaugh, George W., Bellaire, Ohio. Smith's vise	495,787	Apr. 18	2037	516	63	409
Deal, Josiah J., Canton, Ohio. Permutation-padlock	490,784	Jan. 31	2899	744	62	641
Dean, Albert, Ottawa, Kans. Car-coupling	495,150	Apr. 11	1019	254	63	207
Dean, Albert F., Chicago, Ill. Indexed book	500,262	June 27	2530	619	63	1872
Dean, Asa, Willis, Tex. Flood-gate	511,516	Dec. 26	2882	701	65	1985
Dean, Cyrus S., Fort Erie, Canada, assignor of one-half to C. O. Rano, Buffalo, N. Y. Piston-rod packing	494,980	Apr. 4	708	180	63	135
Dean, Cyrus S., Fort Erie, Canada, assignor of one-half to C. O. Rano, Buffalo, N. Y. Boiler-flue cleaner	507,421	Oct. 24	2769	678	65	559
Dean, Francis W., Cambridge, Mass. Compound locomotive-engine	507,353	Oct. 24	2660	654	65	537
Dean, H. Elmer. (See Whitcomb, Alonzo L., assignor.)						
Dean, James, Detroit, Mich. Steam-boiler feeder	504,151	Aug. 29	3138	785	64	1205
Dean, John, assignor of one-half to J. P. Davies, Racine, Wis. Vehicle-wheel	505,701	Sept. 26	2348	594	64	1751
Dean, John A., Worcester, Mass. Elevator	511,726	Dec. 26	3222	790	65	2047
Dean, John A., Worcester, Mass. Elevator	511,727	Dec. 26	3225	791	65	2047
Dean, John C., Millsborough, Pa. Cable-grip	507,887	Oct. 31	3555	876	65	720
Dean, John H., Grand Rapids, Mich. Fruit-can wrench	492,714	Feb. 28	2636	653	62	1323
Dean, John R., Purley, Tex. Combination heel-sweep plow	492,462	Feb. 28	2230	558	62	1240
Dean, Lenard E., Vancouver, Canada. Crosscut-saw	493,687	Mar. 21	1472	375	62	1677
Dean, Ogden W., Chicago, Ill. Car-brake	498,774	June 6	38	8	63	1395

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Dean, Ogden W., assignor, by mesne assignments, of one-tenth to Air Brake Pressure Regulator Company, Chicago, Ill. Air-brake	511,071	Dec. 19	2125	{ 525 526 }	65	1832
Dean, P. C. (See Wieland, Louis A., assignor.)						
Dean, Proctor, assignor of one-half to G. H. Orr, Chicago, Ill. Combined corkscrew, match-holder, &c	502,351	Aug. 1	171	40	64	597
Dean, Seward A., assignor of one-half to H. L. Woodburn, Minneapolis, Minn. Work-man's time-recorder	502,226	July 25	2705	{ 682 683 }	64	540
Dean, Thomas, Indianapolis, Ind. Gluing-machine	510,630	Dec. 12	1341	{ 329 330 }	65	1675
Dean, William B., <i>et al.</i> (See Frey, Frank, assignor.)						
Dean, William F. (See Linkfield, Ralph E., assignor.)						
Deane, Francis B., Lynchburg, Va. Apparatus for liquefying gas	509,205	Nov. 21	2008	488	65	1168
Deane, William H., Brooklyn, N. Y. Electric alarm-clock	502,811	Aug. 8	962	234	64	758
Dear, Barton H., Pueblo, Colo. Steam-boiler furnace	492,148	Feb. 21	1737	433	62	1126
Dear, James W., assignor of one-half to T. W. Davy, Dayton, Ohio. Street-car indicator	502,227	July 25	2709	684	64	541
Dearborn, Wyman, Boston, Mass. Roller cotton-gin	504,775	Sept. 12	773	195	64	1428
Dearstyne, Adelaide V., administratrix. (See Dearstyne, Peter F.)						
Dearstyne, Peter F., deceased; A. V. Dearstyne, administratrix, assignor to R. H. Dearstyne, West Troy, N. Y. Wheelbarrow	511,045	Dec. 19	2083	516	65	1824
Dearstyne, Richard H. (See Dearstyne, Peter F., assignor.)						
Debarle, Louis, Paris, France. Flexible dam	495,788	Apr. 18	2038	516	63	409
Decatur, Granville S., Hamilton, Canada. Adjustable earth-auger	501,561	July 18	1636	409	64	330
Decatur Leader Manufacturing Company. (See Brown, Davis, assignor.)						
Decherd, Constant K., Meriden, Conn. Clamp for elevator-ropes	507,888	Oct. 31	3560	877	65	720
Deck, Henry. (See Higbee, Braun, and Deck.)						
Deck, Henry, assignor to J. J. F., and W. F. M. Braun, Philadelphia, Pa. Journal-box	497,017	May 9	1014	260	63	819
Deck, Henry, assignor to J. J. F., and W. F. M. Braun, Philadelphia, Pa. Lawn-mower	503,904	Aug. 22	2736	684	64	1112
Deckelmann, Otto J., St. Louis, Mo. Index-tab	508,289	Nov. 7	507	123	65	852
Decker, Erskine, Cassopolis, Mich. Lens for cameras	494,128	Mar. 28	2322	566	62	1834
Decker, Erskine, Cassopolis, Mich. Camera-shutter	507,790	Oct. 31	3402	834	65	690
Decker, Gottfried W., Danforth, Ill. Ditching-machine	494,368	Mar. 28	2609	655	62	1906
Decker, John J., Livingston Manor, N. Y. Water-wheel	494,127	Mar. 28	2321	566	62	1834
Decker, John J. and W. F., New York, N. Y., E. K. Winkler, West Orange, N. J., P. Friess and A. Werner, New York, N. Y., assignors to said W. F. Decker. Piano-key-board	497,426	May 16	1683	425	63	954
Decker, Louis, and B. M. Long, St. Louis, Mo. Wagon-stake	510,679	Dec. 12	1430	353	65	1592
Decker, Theodore, Charlottesville, assignor of one-half to T. Roberts, Arlington, Ind. Har-ness	509,464	Nov. 28	2508	606	65	1273
Decker, William F. (See Decker, Winkler, Friess, and Werner.)						
Decker, William S., Muskegon, Mich. Bill-book	506,628	Oct. 10	1412	354	65	283
Decouffé, Anatole E., Paris, France. Cigarette-machine	493,688	Mar. 21	1473	{ 375 376 377 378 }	62	1677
Decouffé, Anatole E., Nice, France. Machinery for the manufacture of non-pasted paper tubes	508,505	Nov. 14	859	{ 212 213 }	65	933
Decrow, David A., Lockport, N. Y. Hydrant	505,596	Sept. 26	2164	547	64	1717
Decrow, William E., Boston, Mass. Signaling-telegraph	493,253	Mar. 14	753	193	62	1524
Decrow, William E., Boston, Mass., assignor to Camewell Fire Alarm Telegraph Company, of New York. Signaling system	500,563	July 4	43	13	64	10
Dederick, Charles H., Malta, Ill. Burglar-alarm	498,708	May 30	3782	933	63	1355
Dederick, Ezra, Milwaukee, Wis. Hook	498,630	May 30	3634	899	63	1331
Dederick, Levi, Albany, N. Y. Extension fire-ladder	502,484	Aug. 1	395	94, 95	64	639
Dederick, Levi, Albany, N. Y. Folding and extension fire-ladder	502,485	Aug. 1	400	95	64	640
Dederick, Peter K., Loudonville, N. Y. Bale and forming same	496,042	Apr. 25	2421	612	63	496
Deeds, John B., and W. Mack, Terre Haute, Ind. Grinding-machine	497,567	May 16	1916	482	63	994
Deegan, Daniel J. (See Near and Deegan.)						
Deem, Miller M., Reading, Pa. Lamp	509,206	Nov. 21	2011	488	65	1168
Deem, Miller M., Reading, Pa. Extensible lamp-standard	510,243	Dec. 5	676	161	65	1538
Deen, James M., Harlan, Iowa. Loom-shuttle	490,010	Jan. 17	1606	419	62	361
Deere, Charles H., assignor to Deere & Company, Moline, Ill. Steel plow-standard	506,420	Oct. 10	1087	270	65	220
Deere & Company. (See Deere, Charles H., assignor.)						
Deere & Company. (See Moore, Gilpin, assignor.)						
Deere & Company. (See Poole, Staley D., assignor.)						
Deere & Company. (See Poole and Cross, assignors.)						
Deering, James E., Evanston, and J. F. Steward, Chicago, Ill. Self-binding harvester	509,020	Nov. 21	1696	{ 418 419 }	65	1107
Deering, William. (See Storle, Ole O., assignor.)						
Deevy, Patrick, Hansen, Nebr. Wheeled scraper	506,212	Oct. 10	711	179	65	146
Defiance Machine Works. (See Seymour, Charles, assignor.)						
Degen, Ludolph P. (See Hahn, Hermann, assignor.)						
Degenhardt, Frederick E., Chicago, Ill. Steering device for vehicles	493,354	Mar. 14	917	235	62	1553
Degner, Herman, West Bend, Wis. Thill-coupling	503,739	Aug. 22	2498	621	64	1066
Deibert, William E., Shamokin, Pa. Knob attachment	498,244	May 30	2990	745	63	1216
Deisinger, Michael F., Brooklyn, N. Y. Nut-lock	498,631	May 30	3635	900	63	1331
Deisher, John R. (See McCormick and Deisher.)						
Deiss, Jules A., Marseilles, assignor to Société Anonyme du Compresseur F. Jourdan, Aix, France. Press	499,416	June 13	1141	273	63	1604
Dela Mar, Joseph, <i>et al.</i> (See Winter, Louis F., assignor.)						
Dela Mar, Joseph, Poughkeepsie, assignor to Champion Tobacco Machine Company, New York, N. Y. Cigar-bunching machine	498,844	June 6	166	{ 40 41 42 }	63	1421
Delamare-Deboutteville, Edouard, and L. Malandin, Fontaine-le-Bourg, France. Gas or carbureted-air engine	511,593	Dec. 26	3008	{ 732 733 }	65	2008
Delaney, Charles W., assignor to J. W. Dysard, Hammond, Ind. Lung-tester	509,207	Nov. 21	2012	489	65	1168
Delaney, Charles W., assignor to J. W. Dysard, Hammond, Ind. Coin-controlled apparatus	511,594	Dec. 26	3010	733	65	2009
Delaney, Michael J., Oshkosh, Wis. Fifth-wheel	507,422	Oct. 24	2771	679	65	559
Delaney, Thomas A., assignor of one-half to R. E. Hills, Chicago, Ill. Gage-cock	509,879	Dec. 5	57	14	65	1421
Delano, Augustus A., <i>et al.</i> (See Austin, William H., assignor.)						
Delany, Miles H., Brooklyn, assignor to L. J. Wing, New York, N. Y. Oscillating engine	501,994	July 25	2327	541	64	468
Delany, Patrick B., South Orange, N. J. Machine telegraphy	507,791	Oct. 31	3403	{ 834 835 }	65	690
Delany, Patrick B., South Orange, N. J. Telegraphy	510,002	Dec. 5	268	62	65	1460

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Delany, Patrick B., South Orange, N. J. Telegraphy	510,003	Dec. 5	270	62	65	1460
Delany, Patrick B., South Orange, N. J. Telegraphy	510,004	Dec. 5	274	63	65	1462
Delany, Patrick B., South Orange, N. J. Telegraphy	510,005	Dec. 5	278	63, 64	65	1462
Delany, Patrick B., South Orange, N. J. Telegraphy	510,006	Dec. 5	285	64	65	1464
Delany, Patrick B., South Orange, N. J. Telegraphy	510,007	Dec. 5	289	65	65	1464
Delaunay-Belleville, Louis M. G., St. Denis, France. Water-tube boiler	506,165	Oct. 3	578	150	65	111
Delescluse, Carlos J., assignor to Society C. Delescluse & Company, Maromme, France. Bleaching cotton	499,184	June 6	740	176	63	1519
Delfer, Francis L., St. Patrick, La. Transferring-machine	494,129	Mar. 23	2324	566	62	1834
Delfia, Arnold, assignor of one-half to T. G. Parks, Bedford, Tenn. Barbed-wire fencing	490,187	Jan. 17	1902	495	62	420
Delfino, Guiseppa. (See Carson, Robert J., assignor.)						
Dell, Charles J., et al. (See Arkland, Henry D., assignor.)						
Dellac, Marcellin F., New York, N. Y. Railway-switch	495,025	Apr. 11	778	198	63	164
Dellar, Joseph, St. Paul, Minn. Standing platform for bath-rooms	490,869	Dec. 12	1794	440	65	1758
Dellinger, John W., Decatur, Ill. Car-door	499,909	June 20	1950	473	63	1759
Delong, Jacob B., Blanchard, Pa. Lifting-jack	498,246	May 30	2993	746	63	1217
Delorieux, John. (See Toulouse and Delorieux.)						
Delotter, Aaron, Goshen, Ind. Vehicle-seat	497,311	May 16	1509	379	63	922
Delp, Abraham J., Bangor, Pa. Paper-file	498,349	May 30	3180	792	63	1249
Delsarte Corset Company. (See Rew, Ida M., assignor.)						
Delug, Alois, Munich, Germany. Cutter for films	504,062	Aug. 29	2991	747	64	1177
Demelman, Lemuel E. (See Holmes, William E., assignor.)						
Dement, Isaac S. (See Bassett and Dement.)						
Demerath, Amelia C. (See Demerath, Joseph M., assignor.)						
Demerath, Joseph M., Rochester, N. Y., assignor to A. C. Demerath, Milwaukee, Wis. Candy-casting machine	506,981	Oct. 17	1999	495	65	404
Deming, Ferdinand, assignor to Randolph & Clowes, Waterbury, Conn. Tube-drawing bench	495,610	Apr. 18	1749	441	63	359
Deming, William B., and H. C. Fuller, Bentonville, Ark. Paint-pot. (Reissue)	11,302	Jan. 31	3353	856	62	732
Deming, William L., Salem, Ohio. Spraying-nozzle	511,728	Dec. 26	3328	792	65	2048
Deming, William L., Salem, Ohio. Spraying-nozzle	511,729	Dec. 26	3329	792	65	2048
Demmick, George W., Lynn, Mass., assignor to General Electric Company, of New York. Spool for electric coils	495,026	Apr. 11	779	198	63	165
Demonet, John H., Brooklyn, N. Y. Dental mallet	504,912	Sept. 12	993	256	64	1472
Dempsey, Arthur C., Rochester, N. Y. Spring-holder for druggists' labels	493,154	Mar. 7	595	149	62	1476
Dempsey, Michael E., Cincinnati, Ohio. Nut-lock	492,715	Feb. 28	2637	653	62	1323
Dempsey, William L., New Franklin, Mo. Display-case for cutlery	506,103	Oct. 3	471	122	65	92
Dempster, John T., Summit, N. J., assignor to S. Bergmann, New York, N. Y. Electric-arc lamp	501,768	July 18	1982	490	64	390
Dempster, Robert. (See Wilkinson, Joseph W., assignor.)						
Deneth, William, New York, N. Y. Tobacco-pipe	491,409	Feb. 7	576	145	62	858
Denbeigh, Joseph J., Brooklyn, assignor of three-fifths to A. K. and C. E. Gardiner, New York, N. Y. Machine for molding and shaping plastic materials	498,206	May 23	2923	728	63	1189
Dencer, Philip H., Sprague, Wash. Hose-coupling	499,100	June 6	605	145	63	1496
Denegar, Thomas E., Long Branch, assignor of one-half to G. D. Herrick, Greenbush, N. J. Cornice	511,197	Dec. 19	2341	572	65	1872
Denegri, Giambattista, Zoagli, Italy. Automatic cradle	511,127	Dec. 19	2324	545	65	1851
Denel, Eugene, et al. (See Wolf, John H., assignor.)						
Dengel, William, Salina, Kans. Combined heating and cooking stove	495,027	Apr. 11	780	199	63	165
Denham, Josephus C., St. Louis, Mo. Chicken-beheader	507,792	Oct. 31	3407	835	65	691
Denhard, William, Jr., Louisville, Ky. Trunk	489,732	Jan. 10	1146	296 } 297	62	253
Denio, William L., Rochester, N. Y. Smoke-consuming furnace	510,631	Dec. 12	1343	330	65	1676
Denison, Adna T., and H. L. Palmer, Portland, Me. Making pulp from vegetable substances	496,400	May 2	19		63	622
Denison, Arthur E. (See Robinson, Thomas C., assignor.)						
Denison, Charles, Denver, Colo. Chest-exerciser	497,774	May 23	2248	564	63	1071
Denison, Charles H., assignor to A. W. Allen, Springfield, Mass. Distilling apparatus	511,730	Dec. 26	3330	792	65	2048
Denison, James R., Grand Rapids, Mich. Quick-action vise	503,075	Aug. 8	1392	344	64	837
Denison, Julian F., New Haven, Conn., assignor to Backus Water Motor Company, New-ark, N. J. Electric rotary fan	498,462	May 30	3351	835	63	1282
Denison, Linus S., Youngstown, Ohio. Tack-extractor	509,613	Nov. 28	2745	662	65	1319
Denison, Sylvester P., Belleville, N. J., assignor to H. Broesel, trustee, New York, N. Y. Copying telegraphic apparatus	498,911	June 6	290	67	63	1443
Deniston, Albert J., Chicago, Ill. Apparatus for the manufacture of drop-shot	496,043	Apr. 25	2422	612	63	497
Deniston, Albert J., Chicago, Ill. Apparatus for the manufacture of drop-shot	496,044	Apr. 25	2427	613	63	497
Denne, Eli, Newmarket, assignor of one-half to F. A. Denne, Stayner, Canada. Cut-off for gas-burners	491,042	Jan. 31	3325	848	62	726
Denne, Frederick A. (See Denne, Eli, assignor.)						
Denne, Mark T., Eastbourne, England. Sewing-machine	505,034	Sept. 12	1198	307 } 308	64	1510
Denneler, Charles L. (See Clark, Henry J., assignor.)						
Denney, Harmer, New York, N. Y. Vacuum-engine	495,243	Apr. 11	1169	292 } 293	63	235
Denney, Harmer, Brooklyn, N. Y. Pumping-engine	499,013	June 6	480	111 } 112	63	1475
Denney, Samuel L., Rising Sun, Md. Car-coupling	510,903	Dec. 19	1847	455	65	1780
Denney, William G., South St. Paul, Minn. Seal	503,110	Aug. 8	1456	358	61	848
Dennick, Lyman L., Los Angeles, Cal. Index	494,466	Mar. 28	2756	601	62	1932
Dennis, Alexander E., Newark, N. J., assignor, by mesne assignments, to Meriden Curtain Fixture Company, of Connecticut. Spring shade-roller	504,970	Sept. 12	1092	270	64	1490
Dennis, Henry E., Buffalo, N. Y. Mold-press	500,320	June 27	2633	644	63	1990
Dennis, Henry W., Natick, Mass. Car-coupling	497,637	May 16	2018	503	63	1013
Dennis, Isaac M., Joplin, Mo. Water-elevating bucket	508,290	Nov. 7	508	123	65	852
Dennis, John B., Ottumwa, Iowa. Machine for printing cards	503,833	Aug. 22	2623	656 } 657	64	1091
Dennis, Martin, Brooklyn, N. Y. Tanning leather	495,028	Apr. 11	783		63	165
Dennis, Martin, Newark, N. J. Tanning-liquor	511,411	Dec. 26	2720		65	1954
Denniston, William M., and W. P. Wallheiser, Bedford, Ind. Rack for holding brooms	495,789	Apr. 18	2039	516	63	410
Denny, Christopher C., et al. (See Keester, Thomas L., assignor.)						
Dénoruz, Emile, assignor to C. Weber, Paris, France. Metallization	491,799	Feb. 14	1199		62	1003
Densmore, Amos, New York, N. Y. Type-writing machine	493,254	Mar. 14	756	193	62	1525
Densmore, Amos, New York, N. Y. Type-writing machine	493,255	Mar. 14	757	193	62	1525
Densmore, Amos, New York, N. Y. Type-writing machine	507,726	Oct. 31	3292	806	65	670

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Densmore, Amos, New York, N. Y. Type-writing machine	507,727	Oct. 31	3295	806	65	670
Densmore, Emmet, <i>et al.</i> (See Wastall, Arthur, assignor.)						
Densmore, Helen, <i>et al.</i> (See Wastall, Arthur, assignor.)						
Denton, Lemi B., Grand Rapids, Mich. Windmill	492,916	Mar. 7	235	59	62	1405
Denton, Whitley, Centreville, Mich. Garment-turner	509,655	Nov. 28	2803	674 675	65	1330
Denver Steel Rolling Mill Company. (See Govier, John W., assignor.)						
Depew, George M., Canandaigua, N. Y. Wire fence	495,029	Apr. 11	785	199	63	165
Deplanty, Charles, assignor of one-half to G. F. Boswell, Coffeyville, Kans. Window-screen	509,844	Nov. 28	3111	751	65	1388
Derby, Charles A., Beverly, Mass. Brick-mason's implement	506,391	Oct. 10	1030	257	65	208
Derby Cycle Company. (See Pease, Charles F., assignor.)						
Derby, Edwin C., Portland, Mich. Lathe-dog	510,412	Dec. 12	943	227	65	1603
Derr, William M., <i>et al.</i> (See Nipher, Henry W., assignor.)						
Derrick, Franklin R., and A. S. Moore, Brodhead, Wis. Buckle	500,705	July 4	276	75	64	52
Derrick, William E., assignor to C. E. Peabody, C. W. and S. Parks, Lansingburg, N. Y. Thill-support	493,487	Mar. 14	1129	289	62	1594
Derrrough, James S., Walnut Hill, La. Car-coupling	494,327	Mar. 28	2533	638	62	1892
Dervaux, Alfred, Brussels, Belgium. Purifying water	495,313	Apr. 11	1275	319	63	254
Des Brisay, James, New York, N. Y. Electrical switch	498,880	June 6	235	55	63	1434
Desant Electric Company. (See Desant, William F. Z., assignor.)						
Desant, William F. Z., assignor to Desant Electric Company, New York, N. Y. Railway-signal	489,629	Jan. 10	997	260	62	922
Desant, William F. Z., assignor to Desant Electric Company, New York, N. Y. Cash register and indicator	492,761	Feb. 28	2709	673 674	62	1337
Desant, William F. Z., New York, N. Y., assignor to Desant Electric Company, of Ohio. Cash register and indicator	505,444	Sept. 26	1868	481	64	1661
Desant, William F. Z., New York, N. Y., assignor to Desant Electric Company, of Ohio. Electrical contact-making device	508,871	Nov. 14	1430	335	65	1042
Desha, Abram S., Nolton, Ark. Car-door	492,276	Feb. 21	1934	483	62	1168
Desha, Abram S., Nolton, Ark. Car	492,277	Feb. 21	1935	483	62	1168
Deslauriers, Philip A., (See Pruden, Clarence D., assignor.)						
Deslauriers, Philip A., St. Paul, Minn. Means for securing sheet-metal fronts to the walls of buildings	489,467	Jan. 10	757	200	62	174
Deslauriers, Philippe A., St. Paul, Minn. Fireproof building-wall	504,415	Sept. 5	167	44	64	1301
Desmarais, Emmanuel, Boston, Mass. Extension hand-bag	495,151	Apr. 11	1021	254	63	207
Desmarais, Louis, Chicago, Ill. Potato digger and loader	507,087	Oct. 17	2170	538	65	434
Desmedt, Joseph, Bruges, Belgium. Car-starter	495,964	Apr. 25	2301	581 582	63	474
Desmond, John, Detroit, Mich., assignor, by mesne assignments, to Chaplin-Fulton Manufacturing Company, Pittsburg, Pa. Lubricator	510,632	Dec. 12	1345	330	65	1676
Desmond, John, Detroit, Mich., assignor to Chaplin-Fulton Manufacturing Company, Pittsburg, Pa. Lubricator	510,633	Dec. 12	1347	331	65	1677
Desper, Henry A. (See McCartney, John F., assignor.)						
Deste, A. Elie L. (See Boursier, Ernest, assignor.)						
Detector Patent Safety Postal Box Syndicate. (See Heatley, William, assignor.)						
Deters, Joseph, Louisville, Ky. Stave-bending machine	508,506	Nov. 14	860	213	65	933
Detombay, Benoit B., assignor to Société Anonyme des Mines and Ponderies de Zinc de la Vieille Montagne, Chénée, Belgium. Metal roofing	502,552	Aug. 1	513	132	64	660
Detrick, Edward L., Susanville, Cal. Measuring-vessel	492,957	Mar. 7	293	74	6.	1417
Detrick, Jacob S. (See Gable and Detrick.)						
Detro, Arthur E., Mauch Chunk, Pa. Locomotive-brake	506,104	Oct. 3	473	123	65	92
Detroit Combination Tool Company. (See Reinhold, Alexander and F. J., assignors.)						
Detroit Cork Screw Company. (See Puddlefoot, Charles, assignor.)						
Detroit Dental Manufacturing Company. (See Downie, James H., assignor.)						
Detroit Electrical Works. (See Rae, Frank B., assignor.)						
Detroit Stay Company. (See Brown, Garrett S., assignor.)						
Dettra, Benjamin F., Reading, assignor to W. W. Lesher, Mosserville, Pa. Window	491,043	Jan. 31	3326	848	62	726
Deurlam, John. (See Phillips and Deurlam.)						
Deuther, Charles G. (See Deuther, Lorenz A., assignor.)						
Deuther, Lorenz A., assignor of one-half to C. G. Deuther, Buffalo, N. Y. Sawing-machine	510,962	Dec. 19	1960	480	65	1801
Devendorf, De Witt A., and F. F. Burch, Fort Hunter, N. Y. Broom scraping or cleaning machine	505,754	Sept. 26	2429	613	64	1765
Dever, Daniel. (See Wilkins, Alfred T., assignor.)						
Dever, John E., and C. A. Cotter, assignors to Randolph & Clowes, Waterbury, Conn. Boiler	506,360	Oct. 10	973	242	65	196
Devers, James M. and W. J., Scranton, Pa. Seaming-roller for tin roofs	496,970	May 9	942	247	63	807
Devers, William J. (See Devers, James M. and W. J.)						
Devers, William J., assignor of one-half to A. P. O'Donnell, Scranton, Pa. Car-brake	508,872	Nov. 14	1431	355	65	1042
Devers, William J., assignor of one-third to J. Flynn, Scranton, Pa. Indicator for brake-pistons	511,046	Dec. 19	2084	516	65	1824
Devey, Mathew H., Chester, Pa. Insulating compound	490,641	Jan. 31	2666		62	597
Devlin, Peter, Baltimore, Md. Shutter-regulator	499,371	Jan. 3	593	160	62	128
Devlin, Thomas, <i>et al.</i> , executors. (See Meyers, William H., assignor.)						
Devoe, Alexander. (See Havell, Henry, assignor.)						
Devoe, Charles, Lima, Ohio. Hydrocarbon-gas generator and burner	506,772	Oct. 17	1661	416 417	65	341
Devore, Levi M., Freeport, Ill. Bicycle-stand	506,675	Oct. 17	1490	374	65	309
Dewé, John, London England. Photograph-exhibitor	492,149	Feb. 21	1738	433	62	1127
Deweese, John W., Philadelphia, Pa. Yarn-carrier for circular-knitting machines	501,876	July 18	2139	531	64	417
Deweese, William F., assignor of one-half to P. C. Lidell, Chicago, Ill. Making wood carvings	498,158	May 23	2831	709	63	1174
Dewey, Addice E. (See Just, John A., assignor.)						
Dewey, Daniel A., Columbus, Pa. Beehive	502,486	Aug. 1	405	96	64	641
Dewey Electric Heating Company. (See Dewey, Mark W., assignor.)						
Dewey, Frederic P., Washington, D. C. Treating mixtures containing sulphides	490,068	Jan. 17	1710		62	381
Dewey, John J., assignor to Minnesota Harvester Company, St. Paul, Minn. Platform and binder-deck for grain-harvesters	500,321	June 27	2635	644 645	63	1891
Dewey, Josiah A., San Francisco, Cal. Folding bedstead	499,287	June 13	894	216	63	1560
Dewey, Mark W., assignor, by mesne assignments, to Dewey Electric Heating Company, Syracuse, N. Y. Electric heating apparatus	494,291	Mar. 28	2482	626	62	1881
Dewey, Mary, Chicago, Ill. Heater	496,401	May 2	20	5.6	63	622
Dewey, Will. E., Rockford, Ill. Starching-machine	505,896	Oct. 3	153	39	65	30
Dewitt, John, Washington, D. C. Passenger-vehicle	508,414	Nov. 14	717	176 177	65	905

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Dexter, Evelyn L., Whitewater, Wis. Refrigerator-building.....	493,256	Mar. 14	758	194	62	1525
Dexter Folder Company. (See Dexter, Talbott C., assignor.)						
Dexter, Talbott C., assignor to Dexter Folder Company, Fulton, N. Y. Paper-folding-machine attachment for printing-presses.....	504,825	Sept. 12	853	219	64	1443
Dexter, Talbott C., assignor to Dexter Folder Company, Fulton, N. Y. Paper-folding-machine attachment for printing-presses.....	505,509	Sept. 26	1983	509	64	1682
Dexter, Talbott C., assignor to Dexter Folder Company, Fulton, N. Y. Paper-folding-machine attachment for printing-presses.....	506,392	Oct. 10	1031	257	65	209
Dexter, William A. (See Park and Dexter.)						
Dey, Charles E., Denver, Colo. Circuit-switch.....	504,123	Aug. 29	3090	774	64	1197
Dey, Charles H., assignor to A. & J. M. Anderson, Boston, Mass. Strain-insulator.....	509,614	Nov. 23	2746	662	65	1319
Deysterle, Charles, Iron Mountain, Mo. Steam-hammer.....	498,896	June 6	262	61	63	1438
Deyo, Calvin B., Calumet, Ill. Dump-wagon.....	502,249	July 25	2755	696	64	549
Dial, Wilbur F., Bridgeport, Conn., assignor to W. T. Lintner and W. L. Sporborg, Gloversville, N. Y. Speed-indicator for shafting.....	508,686	Nov. 14	1144	282	65	989
Diamond Car Coupler Company. (See Dickey, George W., assignor.)						
Diamond Paper Bag Company. (See Stevens, Arthur L., assignor.)						
Diamond, Patrick, Philadelphia, Pa. Sifting-bag.....	506,982	Oct. 17	2002	495	65	404
Diamond Sewing Machine Company. (See Maldaner, Charles, assignor.)						
Dibble, Fernando J., Peabody, Mass. Electric meter.....	490,011	Jan. 17	1607	419 420	62	361
Dibble, Fernando J., Peabody, Mass. Electric telemeter-transmitter.....	490,012	Jan. 17	1612	421 422	62	362
Dibble, Fernando J., Peabody, Mass. Electric telemeter-transmitter.....	490,013	Jan. 17	1618	422	62	363
Dibble, Fernando J., Peabody, Mass. Electric telemeter system.....	490,014	Jan. 17	1621	423 424	62	363
Dibble, Ira H. (See Livengood, Winfield S., assignor.)						
Diblin, Tertullus S., Trenton, N. J. Door-check.....	507,889	Oct. 31	3561	877	65	720
Dick, Adam. (See Davis and Dick.)						
Dick, George W. (See Cardarelli, Emilio, assignor.)						
Dick, Joseph C. F., La Grange, Ill. Display-stay for shoes.....	499,375	June 13	1055	256	63	1589
Dickelman, Joseph L. (See Bowers and Dickelman.)						
Dickens, Chester B., Minneapolis, Minn. Nailless horseshoe.....	496,351	Apr. 25	2913	725	63	589
Dickerson, Edward N., Jr. (See Bradley and Dickerson.)						
Dickerson, Edward N., New York, N. Y. Valve-gear for steam-engines.....	502,878	Aug. 8	1072	264 265	64	778
Dickerson, John H., Bayard, Kans. Gate.....	490,015	Jan. 17	1628	424	62	364
Dickerson, Malcolm, Burgin, Ky. Vestibule-car.....	506,421	Oct. 10	1088	270	65	220
Dickey, Edmund, Fremont, Ohio. Force-feed ruling-pen.....	490,340	Jan. 24	2171	566	62	485
Dickey, George W., Des Moines, Iowa, assignor to Diamond Car Coupler Company, Chicago, Ill. Car-coupling.....	509,208	Nov. 21	2013	489	65	1169
Dickey, Harrison, Pipestone, Minn. Draft-equalizer.....	499,522	June 13	1314	310	63	1634
Dickey, James N. (See Crisson, George A., assignor.)						
Dickey, James W., et al. (See Tiner, John F., assignor.)						
Dickey, Mary A. (See Russell, John Q. A., assignor.)						
Dickinson, Aldamar L., Montague, Mich. Jar-holder.....	497,775	May 23	2249	564	63	1071
Dickinson, Alfred, Darlaston, England. Electric-railway trolley.....	491,988	Feb. 21	1435	370 371	62	1075
Dickinson, Elijah G., and A. C. Sasser, Madison, Fla. Fumigator.....	499,877	June 20	1900	461	63	1750
Dickinson, Henry, Jr., Chappaqua, N. Y. Speculum.....	498,633	May 30	3638	900	63	1331
Dickinson, Joseph H., assignor to Trenton Iron Company, Trenton, N. J. Aerial tram-way.....	495,397	Apr. 11	1405	353	63	277
Dickinson, Joseph H., assignor to Trenton Iron Company, Trenton, N. J. Aerial tram-way.....	495,398	Apr. 11	1407	353	63	278
Dickinson, Joseph H., assignor to Trenton Iron Company, Trenton, N. J. Aerial tram-way.....	495,399	Apr. 11	1408	354	63	278
Dickinson, Laban A. (See Cahill and Dickinson.)						
Dickinson, Patrick F., New York, N. Y. Hot-air furnace.....	505,510	Sept. 26	1986	509	64	1682
Dicks, William, Buffalo, N. Y. Screw-wrench.....	509,151	Nov. 21	1919	469	65	1150
Dickson, Clarence A. (See Rosenblatt, Dickson, and Owen.)						
Dickson, Mathew R., New York, N. Y. Display-rack.....	504,913	Sept. 12	995	256	64	1472
Dickson, Rockwell W. (See Lake and Dickson.)						
Dickson, Thomas C., Paris, Texas. Gate-closer.....	506,213	Oct. 10	713	179	65	146
Dickson, William B., Kansas City, Mo. Weighing and registering attachment for refrigerators.....	508,507	Nov. 14	862	213	65	933
Diebel, William, Philadelphia, Pa., assignor to F. Buckhalter and V. C. Driesbach. Needle-picking device for circular-knitting machines.....	491,089	Feb. 7	41	11	62	756
Diebel, William, Philadelphia, Pa., assignor to F. Buckhalter and V. Driesbach. Knitting-machine.....	492,539	Feb. 28	2364	587	62	1268
Diebolt, Anthony J., Cleveland, Ohio. Bung.....	501,058	July 11	829	215	64	166
Dieckmann, Ferdinand, Cincinnati, Ohio. Sheet-metal elbow.....	500,119	June 27	2288	555	63	1829
Diedrich, John, et al. (See Harness, Samuel A., assignor.)						
Diedrich, Tonie, et al. (See Harness, Samuel A., assignor.)						
Diedrick, William H., assignor of one-third to C. H. Mason, San Francisco, Cal. Ratchet-wrench.....	502,410	Aug. 1	270	64	64	615
Diefenbach, Henry C., Jersey City, N. J. Safety-pocket.....	497,638	May 16	2020	503	63	1013
Diefenbach, Frederick A., Milwaukee, Wis. Wheel-washer.....	510,680	Dec. 12	1431	353	65	1692
Diehl, Edwin G. (See Diehl, Walter R. and E. G.)						
Diehl, Jacob. (See Lehr and Diehl.)						
Diehl, John H., Queen City, Mo. Saw-filing machine.....	495,400	Apr. 11	1410	354	63	278
Diehl, Philip, Elizabeth, N. J., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Self-exciting alternate-current electric generator.....	503,581	Aug. 22	2229	539	64	1017
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Clutch-lubricating device.....	511,412	Dec. 26	2722	659	65	1953
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Self-lubricating clutch.....	511,413	Dec. 26	2724	659 660	65	1955
Diehl, Theodor, assignor to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Blue-black azo dye.....	491,410	Feb. 7	577	.....	62	858
Diehl, Theodor, and M. Moeller, assignors to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Blue-black azo dye.....	511,688	Dec. 26	3164	.....	65	2036
Diehl, Walter R., Pittsburg, and E. G. Diehl, Sharpsburg, Pa. Velocipede.....	511,290	Dec. 19	2499	609	65	1901
Diemer, Emil, St. Louis, Mo. Frame for artificial flowers.....	490,642	Jan. 31	2667	687	62	597
Diemer, Peter, Cleveland, Ohio. Smoke-consumer.....	497,018	May 9	1016	260	63	819
Diemmer, Maximilian J., Augusta, Ga. Head-rest.....	506,983	Oct. 17	2003	495	65	405

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Dienelt & Eisenhardt. (See Eisenhardt, George F., assignor.)						
Dienst, Eduard, Leipsic-Gohlis, Germany. Harmonica	501,495	July 18	1529	384	64	309
Dierdorf, John, Indianapolis, Ind. Piano-stool	502,069	July 25	2451	615	64	490
Dierlamm, Ernst, Long Island City, N. Y. Guard for penholders	500,564	July 4	45	13	64	10
Dietmann, Leopold, Vienna, Austria-Hungary. Instrument for making perspectives, &c.	511,687	Dec. 26	3162	773	65	2036
Dietrich, Frederick A., Freeport, Ill. Inhaler	509,445	Nov. 28	2509	606	65	1273
Dietrich, Harry A. R., South Bethlehem, Pa. Boiler	492,664	Feb. 28	2565	635	62	1308
Dietrich, Joseph, and L. Habicht, Buffalo, N. Y. Baby-carriage	495,476	Apr. 18	1541	387	63	323
Dietrich, Ludwig, Chicago, Ill. Horseshoe	501,562	July 18	1637	409	64	330
Diets, William H., et al. (See Thompson, Charles, assignor.)						
Dietz, Charles A., Danville, Pa. Orange-knife	509,515	Nov. 28	2588	626	65	1288
Dietz, Frederick, assignor to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Tubular lantern	500,381	June 27	2726	670	63	1907
Dietz, Henry F., Newark, N. J., assignor to G. W. Beach, trustee, Hartford, Conn. Carrotting fur	498,910	June 6	289		63	1443
Dietz, Sydenham B., Jr., Washington, D. C. Key for musical stringed instruments	504,024	Aug. 29	2938	735	64	1167
Diez, George, Santa Clara, Cal. Pencil-sharpener	490,272	Jan. 24	2061	539	62	462
Diez, George, Santa Clara, Cal. Pencil-sharpener	491,536	Feb. 14	778	199	62	918
Diffenderfer, Aaron and S. A., Allensville, Pa. Gate	509,516	Nov. 28	2589	626	65	1288
Diffenderfer, Stephen A. (See Diffenderfer, Aaron and S. A.)						
Dighton Furnace Company. (See Mason, Ezra A., assignor.)						
Dikeman, Charles S., Torrington, Conn. Wheel-rim	509,021	Nov. 21	1698	420	65	1108
Dill, Thomas C., assignor to T. C. Dill Machine Company, Philadelphia, Pa. Spool-support for mules	490,950	Jan. 31	3167	811	62	694
Dillehay, Alonzo A., Meridian, Miss. Dental plugger	502,352	Aug. 1	172	40	64	598
Dilley, Fred. L. (See Brown, John A., assignor.)						
Dilley, John, Jr., Portland, Mich. Washing-machine	495,401	Apr. 11	1411	355	63	279
Dillingham, Edward, Chelsea, Mass. Tea-strainer	489,468	Jan. 10	759	201	62	175
Dillman, L. C., et al. (See Blair, John, assignor.)						
Dillman, William C., Brooklyn, and G. A. Seib, New York, N. Y. Burglar and fire alarm	496,724	May 2	524	140	63	714
Dillmann, Victor C., Kansas City, Mo. Hydrocarbon-burner	508,923	Nov. 21	1552	380	65	1079
Dillon, Edward W., New Haven, Conn. Saw-set	504,521	Sept. 5	350	89	64	1335
Dillon, Joseph, Larchmont, N. Y. Electric bunch-light	496,474	May 2	131	36	63	642
Dillon, Patrick R., Pittsburg, Pa. Valve for gas-furnaces	510,008	Dec. 5	291	65	65	1465
Dillon, Thomas H., Beaumont, Tex. Saw-hammering machine	501,769	July 18	1983	490	64	390
Dillon, William S. F., Chicago, Ill. Dynamo-electric machine	498,969	June 6	326	92.93	63	1460
Dilts, Charles C., Plainfield, N. J. Jar-fastener	492,391	Feb. 28	2116	528	62	1217
Dilworth, Robert, El Paso, Tex. Ore-separator	503,454	Aug. 15	2010	498 499	64	961
Dimick, Charles. (See Long and Dimick.)						
Dimick, Richard E., assignor of one-half to W. E. Brown, Rhinelander, Wis. Saw-swage.	504,124	Aug. 29	3091	774	64	1197
Dimity, Engelhard, Clay Centre, Kans. Cultivator for listed corn	494,130	Mar. 28	2225	567	62	1835
Dimock, Lucius, Leeds, Mass. Whiffletree-guard	493,761	Mar. 21	1601	407	62	1702
Dingee, William W., Racine, Wis. Thrashing-cylinder	493,155	Mar. 7	597	150	62	1476
Dingle, William H., and J. M. Urquhart, London, England. Electric switch	501,707	July 18	1874	466	64	371
Dingwall, Alexander, Montreal, Canada. Car-coupling	497,121	May 9	1179	301 302	63	849
Dinnendahl, R. W. (See Dünschede, Friedrich, assignor.)						
Dinsmore, Charles H., Claremont, N. H. Self-closing valve	496,045	Apr. 25	2431	613	63	498
Dinsmore, Orin O. (See Plummer and Dinsmore.)						
Dinsmore, Robert, assignor of one-half to A. Greenstein, Weston, W. Va. Magazine-gun	492,864	Mar. 7	143	35.36	62	1387
Dinsmore, Willard E. (See Matthews and Dinsmore.)						
Dion, Charles J., assignor of one-half to C. L. Caldwell, C. B. Deacon, and E. L. Mabon, St. Paul, Minn. Starching-machine	489,556	Jan. 10	891	233	62	201
Dippold, Georg, Brooklyn, N. Y. Safety attachment for vehicle-thills	491,838	Feb. 14	1252	312	62	1015
Dirnberger, Barbra, administratrix. (See Dirnberger, John.)						
Dirnberger, John, deceased; B. Dirnberger, administratrix, assignor to M. Hemmer, Syracuse, N. Y. Wall-plaster	494,981	Apr. 4	709		63	136
Disbrow, James B., et al. (See Lewis, Edward D., assignor.)						
Disbrow, Reuben B., assignor of one-half to D. W. Payne, Minneapolis, Minn. Combined churn and butter-worker	490,105	Jan. 17	1768	460 461	62	393
Dishart, David. (See Thompson and Dishart.)						
Diss, Albert B., Brooklyn, N. Y. Furniture-caster	506,813	Oct. 17	1729	435	65	353
Disston & Sons, Henry. (See Beilminger, Henry F., assignor.)						
Disston, Thomas S., Philadelphia, Pa. Nut-tapping machine	504,971	Sept. 12	1093	279 280	64	1491
Disston, Thomas S., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa. Handsaw	495,931	Apr. 18	2252	567	63	449
Disston, Thomas S., Haddonfield, N. J., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa. Saw-sharpening device	510,846	Dec. 12	1737	428 429	65	1749
Dister, Joseph, assignor of one-half to O. Soehner, Dayton, Ohio. Patty-pan and holder	489,372	Jan. 3	594	160	62	128
Ditman, William C. (See Barrow, Jacob F., assignor.)						
Dittmore, Charles L., Post Falls, Idaho. Horse hay-rake	497,639	May 16	2021	504	63	1013
Dittmann, Ernst C., Chicago, Ill. Bridge-gate	498,463	Mar. 30	3353	835	63	1282
Dittmann, Gustav. (See Nelson, Nels, assignor.)						
Ditton, Joseph, and H. J. Schneider, Cleveland, Ohio. Malt-liquor-pipe cleaner	497,312	May 16	1510	380	63	922
Diven, John M. (See Worden and Diven.)						
Dixon, Ezra, Bristol, R. I. Saddle for top rolls of spinning-machines	493,912	Mar. 21	1839	469	62	1747
Dixon, George E., Chicago, Ill. Air-valve for radiators	504,972	Sept. 12	1095	280	64	1491
Dixon, George E., assignor of one-half to R. W. Caldwell, Chicago, Ill. Regulator for furnaces	498,535	May 30	3476	861 862	63	1304
Dixon, George E., assignor of one-half to R. W. Caldwell, Chicago, Ill. Heater	498,536	May 30	3478	861 862	63	1304
Dixon, George V., Wait's, Ohio. Wheat-scourer	503,792	Sept. 26	2349	594	64	1751
Dixon, George W., Lynn, assignor to American Shoe Tip Company, Boston, Mass. Slip-sole for boots or shoes	491,731	Feb. 14	1088	275	62	982
Dixon, George W., Lynn, assignor to American Shoe Tip Company, Boston, Mass. Making imitation soles	491,732	Feb. 14	1089	275	62	982
Dixon, George W., Lynn, assignor to American Shoe Tip Company, Boston, Mass. Shoe-tip	507,793	Oct. 31	3408	835	65	691
Dixon, Henry. (See Boyer and Dixon.)						
Dixon, James A., et al. (See Pugh, Cortez V., assignor.)						
Dixon, John G., Huddersfield, England. Automatic fog-signal apparatus for railways	509,796	Nov. 28	3035	733 734	65	1373

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Dixon, John G., assignor to H. Wilck, New York, N. Y. Collar or cuff drying machine...	495,244	Apr. 11	1172	{ 293 294 }	63	235
Dixon, Patrick, and P. McLaughlin, Bloomington, Ill. Washing-machine.....	502,851	Aug. 8	1033	253	64	771
Dixon, Robert M., East Orange, N. J. Heater.....	494,711	Apr. 4	292	73	63	59
Dixon, Roger S. (See Martin, Charles C., assignor.)						
Dixon, Simon H., Cleghorn, Iowa. Apparatus for preventing railways from being blocked with snow.....	490,545	Jan. 24	2496	643	62	548
Doane, Francis, <i>et al.</i> , trustees. (See Ohmart, Eli C., assignor.)						
Doane, Francis, <i>et al.</i> , trustees. (See Severy, Melvin L., assignor.)						
Doane, Francis H., New York, N. Y. Lightning-arrester.....	501,708	July 18	1876	467	64	372
Doane, Samuel E. (See Burnett and Doane.)						
Doane, Stephen O., Sherman, Tex. Nut-lock.....	510,501	Dec. 12	1089	263	65	1631
Doane, William H., and J. Sofge, assignors, by mesne assignments, to J. A. Fay & Egan Company, Cincinnati, Ohio. Sandpapering-machine.....	499,014	June 6	484	{ 112 113 }	63	1475
Dobbie, Robert S. (See Rau, Otto, assignor.)						
Dobbie, Robert S., Jersey City, N. J., assignor of one-half to O. Rau, Milwaukee, Wis. Trolley-head.....	502,553	Aug. 1	514	123	64	661
Dobbins, Douglas, and R. McKenney, assignors of two-thirds to J. C. McNutt, T. J. Coyle, W. B. Jennings, Franklin, and T. Taggart, Indianapolis, Ind. Pneumatic tire.....	504,468	Sept. 5	254	66	64	1317
Dobbins, Peter B., Johnston Station, Ga. Trestle-track liner.....	494,553	Apr. 4	28	6	63	7
Dobbs, Charles, Nevada, Tex. Fire-escape.....	499,523	June 13	1315	310	63	1634
Dobbs, Wilhelm S., Vienna, Austria-Hungary. Grate.....	502,554	Aug. 1	515	123	64	661
Dobelin, Charles W., Madison, Wis. Lantern.....	501,877	July 18	2141	531	64	418
Doble, William A., San Francisco, Cal. Apparatus for reducing, refining, and separating bituminous substances.....	500,474	June 27	2852	702	63	1930
Doble, William A., Alameda, assignor to Will & Fink, San Francisco, Cal. Fruit-pitting machine.....	497,752	May 16	2198	550	63	1047
Dobson, Tom. (See Webster and Dobson.)						
Dobson, William, Rockford, Ill. Churn.....	509,880	Dec. 5	60	14, 15	65	1421
Doby, John B., Macey, Ark. Car-coupling.....	495,152	Apr. 11	1022	255	63	207
Dobyns, Lemuel P., and A. Brown, Ogden, Utah Ter. Machine for rolling, cutting, and shaping candy or the like.....	503,230	Aug. 15	1661	{ 408 409 }	64	899
Dock, Maggie, <i>et al.</i> (See Myers, John, assignor.)						
Dockery, Robert F., Highland Park, Cal. Apparatus for irrigating.....	499,524	June 13	1317	310	63	1635
Dockstader, James, Syracuse, N. Y. Cue-rack.....	483,373	Jan. 3	595	160	62	128
Docter, Adolph. (See Bassford, Isaac F., assignor.)						
Dodd, Bion H., Sheboygan, Wis. Chair seat and back.....	504,446	Sept. 5	215	56	64	1310
Dodd, John, Oldham, England. Fluted or grooved drawing-roll.....	494,271	Mar. 28	2450	618	62	1876
Dodd, John, Oldham, England. Fluted or grooved drawing-roller.....	497,912	May 23	2467	616	63	1109
Dodd, Joseph G., Egremont, England. Fly-paper holder.....	511,689	Dec. 26	3165	773	65	2036
Dodd, Joseph L., Camden, N. J. Galley-support.....	511,235	Dec. 19	2400	585	65	1884
Dodds, Alexander, Grand Rapids, Mich. Mitering-knife.....	491,773	Feb. 14	1159	290	62	995
Dodds, James H., Eau Claire, Wis. Setting device for sawmill-carriages.....	491,090	Feb. 7	42	12	62	756
Dodds, Matthew J., New Brunswick, N. J. Water tube steam-boiler.....	489,374	Jan. 3	596	161	62	128
Dodge, Alonzo P., Huntington, N. Y. Thill-coupling.....	499,973	June 20	2039	494	63	1774
Dodge, Benjamin S., Minneapolis, Minn. Coin-controlled vending-machine.....	511,291	Dec. 19	2501	610	65	1902
Dodge, Charles H., Ripon, Wis. Strainer for rain-water pipes.....	504,384	Sept. 5	113	29	64	1291
Dodge, Cheever K., New York, N. Y., assignor to Metropolitan Rubber Company, of Connecticut. Packing-gasket.....	505,703	Sept. 26	2350	594	64	1751
Dodge Coal Storage Company. (See Dodge, James M., assignor.)						
Dodge Coal Storage Company. (See Ewart, William D., assignor.)						
Dodge, Edward, Longview, Tex. Lumber-truck.....	494,523	Mar. 28	2856	714	62	1951
Dodge, Edwin H., assignor to W. A. Force, New York, N. Y. Hand-stamp.....	507,067	Oct. 17	2138	530	65	428
Dodge, George A. W., <i>et al.</i> (See Parrish, Homer A., assignor.)						
Dodge, James M., assignor to Link Belt Engineering Company, Philadelphia, Pa. Gate for conveyer-troughs.....	489,289	Jan. 3	472	131	62	103
Dodge, James M., assignor to Link-Belt Engineering Company, Philadelphia, Pa. Conveyer.....	499,525	June 13	1317	{ 310 311 }	63	1635
Dodge, James M., assignor to Link-Belt Engineering Company, Philadelphia, Pa. Conveyer.....	499,526	June 13	1319	311	63	1635
Dodge, James M., assignor to Link-Belt Engineering Company, Philadelphia, Pa. Conveyer.....	499,527	June 13	1320	311	63	1635
Dodge, James M., assignor to Link-Belt Engineering Company, Philadelphia, Pa. Removing piles of material.....	501,770	July 18	1984	491	64	391
Dodge, James M., assignor to Link-Belt Engineering Company, Philadelphia, Pa. Conveying apparatus.....	501,771	July 18	1985	491	64	391
Dodge, James M., assignor to Dodge Coal Storage Company, Philadelphia, Pa. Apparatus for piling coal.....	502,555	Aug. 1	516	{ 123 124 }	64	661
Dodge, James M., assignor to Dodge Coal Storage Company, Philadelphia, Pa. Apparatus for piling coal.....	503,409	Aug. 15	1944	483	64	950
Dodge, John S., Minneapolis, Minn. Air-purifier.....	507,675	Oct. 31	3222	789	65	656
Dodge, S. D. (See Mehling, John A., assignor.) (Reissue.)						
Dodge, Walter S., Washington, D. C. Sawmill-carriage.....	493,546	Mar. 14	1229	314	62	1613
Dodge, Willis, assignor of one-half to J. H. Bubar, Blaine, Me. Bit.....	494,251	Mar. 28	2415	609	62	1869
Dods, John C., assignor to J. Green, St. Louis, Mo. Furnace for the manufacture of gas...	501,457	July 11	1474	{ 370 371 }	64	283
Doe, Rasmus K., Duluth, Minn. Picture-exhibitor.....	507,529	Oct. 31	2960	726	65	607
Doebler, Charles F., Hartford, Conn. Knob attachment.....	503,200	Aug. 15	1612	396	64	890
Doebler, Charles F., Hartford, Conn. Knob attachment.....	503,201	Aug. 15	1614	396	64	891
Doebler, Charles F., Hartford, Conn. Knob attachment.....	503,202	Aug. 15	1615	396	64	891
Doebler, Charles F., Hartford, Conn. Knob attachment.....	503,204	Aug. 15	1618	397	64	891
Doebler, Charles F., assignor of one-half to C. K. Bryant, Hartford, Conn. Knob attachment.....	503,199	Aug. 15	1611	396	64	890
Doebler, Charles F., and C. K. Bryant, Hartford, Conn. Knob attachment.....	494,554	Apr. 4	29	7	63	7
Doebler, Charles F., and C. K. Bryant, Hartford, Conn. Knob attachment.....	503,198	Aug. 15	1610	395	64	890
Doebler, Charles F., and C. K. Bryant, Hartford, Conn. Knob attachment.....	503,203	Aug. 15	1617	397	64	891
Doehring, Charles. (See Lehmann, Heinrich, assignor.)						
Doellbor, Frederick, Philadelphia, Pa. Machine for turning pearl or other buttons.....	495,314	Apr. 11	1276	319	63	254
Doellbor, Frederick, Philadelphia, Pa. Machine for turning pearl or other buttons.....	507,794	Oct. 31	3410	836	65	691
Doerfinger, William, La Crosse, Wis. Playing-card.....	509,881	Dec. 5	61	15	65	1421
Doering, Herman, Reedsburg, Wis. Harness-pad.....	496,821	May 2	688	182	63	741
Doerr & Reinhart. (See Probst, Adam, assignor.)						
Doggett, Fred H. (See Lane, Madison W., assignor.)						
Doherty, John A., New York, N. Y. Shoe-lace fastener.....	499,376	June 13	1056	256	63	1590

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Doberty, Martin J., Philadelphia, Pa. Combined rise and winch	502,177	July 25	2627	662	64	525
Döhner, John M., Bridgeport, Conn. Gas-burner	490,764	Jan. 31	2864	735	62	634
Doidge, William J. (See Burrell and Doidge.)						
Doig, William S., Brooklyn, N. Y. Box-nailing machine	492,086	Feb. 21	1630	{ 405 406 }	62	1105
Dolan, Charles E., New York, N. Y., assignor to Safety Car Heating and Lighting Com- pany, of New Jersey. Car-heater	506,984	Oct. 17	2004	496	65	405
Dolan, James, Geneseo, N. Y. Heel-calk	492,194	Feb. 21	1806	451	62	1141
Dolan, John B., Central Falls, R. I. Nut-clamp	511,414	Dec. 26	2727	660	65	1956
Dolber, John E., Manchester, N. H. Sash-fastener	502,556	Aug. 1	518	124	64	661
Dolbey, Edward N., Philadelphia, Pa. Refrigerator	489,290	Jan. 3	472	131	62	103
Dolge, Alfred. (See Hammerl, Ignaz, assignor.)						
Dolge, Carl B., Westport, Conn. Head-rest for corpses	508,093	Nov. 7	190	51	65	793
Dolge, Carl B., Westport, Conn. Drainage-tube	510,413	Dec. 12	944	227	65	1603
Dolivo-Dobrowsky, Michael von, assignor to Allgemeine Elektrizitäts Gesellschaft, Ber- lin, Germany. Regulation of alternating-current motors	503,038	Aug. 8	1341	331	64	827
Doll, Fred. W. (See Doll, Philip J. and F. W.)						
Doll, Philip J. and F. W., La Salle, Ill. Steam-boiler	503,894	Aug. 22	2626	657	64	1092
Dollard, Albert H., assignor to Lewis & Fowler Manufacturing Company, Brooklyn, N. Y. Fare-register	506,620	Oct. 10	1413	354	65	283
Dom, Alexander, Mount Healthy, assignor to Globe Company, Cincinnati, Ohio. Clamp- file and manufacture of same	491,011	Jan. 31	3263	833	62	712
Dom, Alexander, Mount Healthy, assignor to Globe Company, Cincinnati, Ohio. Tempora- ry binder for file-cases	491,473	Feb. 7	679	171	62	878
Dom, Alexander, Mount Healthy, assignor to Globe Company, Cincinnati, Ohio. Binder for file-cases	498,744	May 30	3852	949	63	1369
Dom, Alexander, Mount Healthy, assignor to Globe Company, Cincinnati, Ohio. Paper- file	506,191	Oct. 3	643	164	65	124
Domenge, Etienne, Paterson, N. J. Tension device for loom-shuttles	504,567	Sept. 5	425	108	64	1349
Dominick, Bayard, Jr., New York, N. Y. Toy	504,152	Aug. 29	3140	785	64	1206
Donahoe, John F., Paola, Kans. Radiator	510,244	Dec. 5	677	{ 161 162 }	65	1538
Donahue, Daniel, Buffalo, N. Y. Car-coupling	495,315	Apr. 11	1278	319	63	255
Donahue, Daniel, San Francisco, Cal. Hoisting and conveying apparatus	504,522	Sept. 5	351	89	64	1335
Donald, George, assignor to Arnold Print Works, North Adams, Mass. Printing colors with aniline-black	491,961	Feb. 14	1444		62	1053
Donald, George, assignor to Arnold Print Works, North Adams, Mass. Printing on cot- ton	499,161	June 6	699		63	1512
Donaldson, Andrew T., Mount Clemens, Mich. Cultivator	497,369	May 16	1600	404	63	939
Donaldson, Jacob C. (See Saum, David F., assignor.)						
Donaldson Manufacturing Company. (See Atkinson, Henry C., assignor.)						
Donaldson, Richard A., Brooklyn, N. Y., assignor to W. F. Parker & Co., Oxford, Pa. Cara- mel-holder	489,858	Jan. 10	1328	347	62	291
Donaldson, Robert B., Washington, D. C., assignor of one-half to J. P. Stabler, Sandy Springs, Md. Surgical instrument to cure galls in fowls	506,676	Oct. 17	1492	375	65	310
Donaldson, William W., and R. Macrae, Baltimore, Md. Secondary-battery electrode	494,062	Mar. 21	2099	535	62	1796
Donally, Amalia M., New York, N. Y. Labeling-machine	491,989	Feb. 21	1486	371	62	1075
Donally, Amalia M., New York, N. Y., assignor, by mesne assignments, to Donally Manu- facturing Company. Bottle-filling apparatus. (Reissue.)	11,300	Jan. 17	2024	529	62	443
Donally Manufacturing Company. (See Donally, Amalia M., assignor.) (Reissue.)						
Donally, Melvin E., New York, N. Y. Bottling apparatus	500,866	July 4	527	137	64	96
Donard, Eugene. (See Boulet and Donard.)						
Donard, Eugene, Rouen, France. Apparatus for drying in vacuum	491,338	Feb. 7	461	119	62	836
Donathen, William B., Kansas City, Mo. Corn-popping apparatus	489,939	Jan. 17	1489	389	62	337
Donathen, William B., Kansas City, Mo. Liquid measurer and extractor	494,467	Mar. 28	2757	692	62	1932
Donecho, Isaac R. (See Rusing, Donecho, and Rusing.)						
Donegan, Daniel F., Los Angeles, Cal. Dumping-wagon	492,623	Feb. 28	2499	619	62	1295
Donegan, Daniel F., Los Angeles, Cal. Crematory	496,046	Apr. 25	2432	{ 613 614 }	63	498
Donegan, Thomas J., and F. W. Duenckel, St. Louis, Mo. Sink or other analogous con- struction	500,475	June 27	2855	703	63	1930
Donisthorpe, George E., and T. Burrows, London, England. Machine for breaking, scutch- ing, and decorticating flax, &c.	504,204	Aug. 29	3232	{ 805 806 }	64	1223
Donisthorpe, George E., and T. Burrows, London, England. Machine for combing fibrous materials	511,128	Dec. 19	2225	{ 545 546 }	65	1852
Donisthorpe, George E., and T. Burrows, London, England. Machine for preparing fibers for combing or spinning	511,129	Dec. 19	2230	{ 546 547 }	65	1853
Donkin, Samuel, Durham, England. Device for placing belts on pulleys	490,546	Jan. 24	2497	643	62	549
Donlevy, Thomas A., et al. (See Bolte, Frank H., assignor.)						
Donnell, William F., Rush Tower, Mo. Car-coupling	511,073	Dec. 19	2130	526	65	1833
Donnelly, Joseph C., Philadelphia, Pa. Machine for making matches	508,374	Nov. 7	642	158	65	877
Donnelly, Patrick, New York, N. Y. Violin	508,508	Nov. 14	864	213	65	934
Donnelly, Samuel A., Chicago, Ill. Bicycle	506,105	Oct. 3	475	{ 123 124 }	65	93
Donnelly, William T. (See Emery and Donnelly.)						
Donohue, Patrick. (See Baldwin, George, assignor.)						
Donohue, Thomas. (See Halliwell and Donohue.)						
Donovan, James, assignor to Roberts, Throp & Co., Three Rivers, Mich. Car-brake	511,198	Dec. 19	2341	573	65	1873
Donovan, John E., Cincinnati, Ohio. Vapor-stove	497,795	Jan. 3	597	161	62	129
Donovan, John J., Boston, Mass. Lamp-burner	507,795	Oct. 31	3411	836	65	692
Donzelman, Hugo, et al. (See Newell, Frank A., assignor.)						
Doody, Daniel F., Brooklyn, N. Y. Street-railway switch	496,725	May 2	527	140	63	715
Doody, Daniel F., Brooklyn, N. Y. Bottle-stopper	508,509	Nov. 14	865	214	65	934
Dooley, Clarence H. and H. L., Bloomington, Ill. Combined check-row and drill	509,797	Nov. 28	3039	734	65	1374
Dooley, Harry L. (See Dooley, Clarence H. and H. L.)						
Doolittle, Clarence E., Aspen, Colo. Speed-governor	502,557	Aug. 1	519	124	64	662
Doolittle, Irvin P. (See Goldman, Isaac S., assignor.)						
Doolittle, James L. (See Fay, Thomas J., assignor.)						
Doolittle, Thomas B., Bridgeport, Conn. Electric signaling apparatus	511,731	Dec. 26	3231	792	65	2048
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Screw-cutting machine	489,222	Jan. 3	371	103	62	84
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Automatic collapsible tap	489,223	Jan. 3	373	{ 103 104 }	62	84
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Tapping-machine	489,224	Jan. 3	375	104	62	85
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Tapping-machine	490,273	Jan. 24	2062	539	62	462

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Doolittle, William W., assignor to Crane Company, Chicago, Ill. Separator for castings ..	490,274	Jan. 24	2064	{ 539 540 318 319 320 }	{ 62 }	463
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Apparatus for making castings ..	501,331	July 11	1269	{ 550 409 509 510 }	{ 64 }	243
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Collapsible tap. (Reissue)	11,359	Aug. 15	2201	550	64	996
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Collapsible tap ..	505,268	Sept. 19	1565	409	64	1591
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Molding-machine ..	505,511	Sept. 26	1989	{ 509 510 }	{ 64 }	1683
Dop, Philip G. H., Utrecht, Netherlands. Protective covering for the seats of water-closets ..	498,159	May 23	2832	709	63	1174
Doran, Edward F., Pullman, Ill. Sliding-door lock ..	489,291	Jan. 3	473	131	62	103
Doro, Herman R., Moultonville, N. H. Car-coupling ..	493,913	Mar. 21	1840	469	62	1747
Doremus, Willard D., Charlton Heights, Md., and F. W. Brooks, New York, N. Y.; said Doremus assignor to said Brooks; said Brooks assignor of one-half to R. B. Constantine, New York, N. Y. Indicator-lock ..	497,640	May 16	2022	504	63	1014
Doremus, William T., Flatbush, N. Y. Blank check, draft, money-order, or similar instrument ..	490,951	Jan. 31	3169	812	62	694
Dorenwend, Christian H., Toronto, Canada. Telephone attachment ..	506,646	Oct. 10	1438	361	65	288
Dorgan, Thomas, Carlton, and A. Bridges, South Yarra, Victoria. Puzzle ..	490,069	Jan. 17	1712	446	62	381
Doriot, Constant, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine ..	503,740	Aug. 22	2499	{ 621 622 }	{ 64 }	1067
Doriot, Constant, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental plugger ..	504,489	Sept. 5	293	75	64	1325
Doriot, Constant, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine ..	504,490	Sept. 5	295	75	64	1325
Doriot, Constant, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine ..	504,491	Sept. 5	298	76	64	1325
Doriot, Constant, assignor of one-half to J. R. Painter, Philadelphia, Pa. Musical instrument ..	504,671	Sept. 5	533	149	64	1380
Doris, Thomas B. (See Baker and Doris.) ..						
Doris, Thomas B. and W. F., Providence, Ky. Back-band buckle ..	490,643	Jan. 31	2668	627	62	597
Doris, William F. (See Doris, Thomas B. and W. F.) ..						
Doruan, George E., Chicago, Ill. Multipolar-dynamo-electric-machine armature ..	491,990	Feb. 21	1488	372	62	1076
Dormitzer, Anna, New York, N. Y. Ornamental step-ladder ..	488,990	Jan. 3	22	6	62	7
Dornitzer, Anna, New York, N. Y. Chair for washing windows ..	493,464	May 30	3354	836	63	1282
Dorn, Herbert O., South Sioux City, Nebr. Combined stock bridge and door ..	502,510	Aug. 1	441	106	64	648
Dorn, Ludwig, Feuerbach, assignor to Kast & Ebinger, Stuttgart, Germany. Machine for grinding printing and lithographic inks ..	511,292	Dec. 19	2503	610	65	1902
Dornfeld, John F., Watertown, Wis. Apparatus for malting grain ..	506,036	Oct. 3	359	95, 96	65	70
Dornfeld, John F., Watertown, Wis. assignor to Saladin Pneumatic Malting Company, Chicago, Ill. Apparatus for moistening and tempering air ..	494,292	Mar. 28	2485	626	62	1882
Dorr, Charles P., Ellsworth, Me. Spring locking-nut ..	510,245	Dec. 5	679	162	65	1530
Dorr, Edward, Kansas City, Mo. Smoke and gas burner and heat-radiator ..	501,679	July 18	1827	455	64	263
Dorrance, George W., St. Paul, Minn. Reversible gate for water-ways ..	489,557	Jan. 10	895	234	62	202
Dorsch, Lorenz, Sr., Milwaukee, Wis. Agricultural implement ..	508,210	Nov. 7	382	93	65	829
Dorsey, George T. (See Hunton, William H., assignor.) ..						
Dorsey, Richard K., Allandale, Canada. Car-coupling ..	497,537	May 16	1868	471	63	986
Dorsey, Robert L., assignor to Tucker & Dorsey Manufacturing Company, Indianapolis, Ind. Kraut-cutter ..	503,697	Aug. 22	2427	604	64	1052
Dorton, Robert E., Minneapolis, Minn. Band-cutter and feeder ..	506,422	Oct. 10	1090	271	65	220
Dorton, William R., Orrick, Mo. Adjustable spirit-level and plumb device ..	505,445	Sept. 26	1870	482	64	1662
Dorsch, Peter, assignor to Fox Machine Company, Grand Rapids, Mich. Chucking-machine and gage-lathe ..	490,406	Jan. 24	2270	590	62	505
Dosmond, François G., and J. F. Rozès, Agen, France. Preserving meat ..	496,047	Apr. 25	2434		63	498
Doss, James P. (See Rice and Doss.) ..						
Dost, Carl O., Magdeburg, Germany. Device for spheric turning ..	494,737	Apr. 4	333	85	63	66
Dotey, Marian A., Dingman's Ferry, Pa. Sash-holder ..	503,168	Nov. 7	309	76, 77	65	815
Dotson, John W., assignor of one-half to R. J. Clark, Chicago, Ill. Cable railway ..	503,366	Aug. 15	1893	469	64	940
Doty, Ellsworth P., Weedsport, N. Y. Steam-cooker ..	492,195	Feb. 21	1806	451	62	1141
Doty, Ellsworth P., Weedsport, N. Y. Valve for cookers ..	503,787	Aug. 22	2567	639	64	1080
Doty, John H., Philadelphia, Pa. Umbrella-tie ..	501,772	July 18	1967	491	64	391
Doty, Milton W., Chicago, Ill. Turning-lathe ..	489,248	Jan. 3	414	{ 115 116 }	{ 62 }	92
Doty, William D., Jr. (See Long, Valentine J., Jr., assignor.) ..						
Doubleday, Harry M., Pittsburg, Pa. Electric-lighting system ..	489,526	Jan. 10	856	223	62	194
Doucet, Felix, Lynn, Mass., assignor to Goodyear Shoe Machinery Company, Portland, Me. Sewing-machine ..	507,530	Oct. 31	2962	726	65	608
Doud, Horace A., Farmer, Ohio. Medicated suspension-perch ..	510,847	Dec. 12	1738	429	65	1749
Douden, Clarence O. (See Ellsworth, Edwin R., assignor.) ..						
Douds, Alonzo J. and F. F., Canton, Ohio. Dentist's device for saving gold-fillings ..	510,963	Dec. 19	1962	480	65	1802
Douds, Frank F. (See Douds, Alonzo J. and F. F.) ..						
Dougan, Kennedy, Missoula, Mont., assignor to T. Dougan, Salem, Mo. Automatic feed-regulator ..	504,125	Aug. 29	3094	{ 774 775 }	{ 64 }	1197
Dougan, Thomas. (See Dougan, Kennedy, assignor.) ..						
Dougherty, James B., St. Joseph, Mo. Sanding device for cars ..	511,199	Dec. 19	2342	573	65	1873
Dougherty, William J., et al. (See Gledhill, Walter, assignor.) ..						
Dougherty, William J., Yonkers, N. Y. Fan for railway-cars ..	510,681	Dec. 12	1432	{ 353 354 }	{ 65 }	1692
Doughty, Charles W., Augusta, Ga. Marl pulverizing and drying apparatus ..	495,153	Apr. 11	1023	255	63	207
Doughty, Richard S. (See Brudon, Joseph, assignor.) ..						
Doughty, William T. (See Funk, William R., assignor.) ..						
Douglas, J. Walter. (See Stevens, Henry A., assignor.) ..						
Douglas, Frank, Chicago, Ill. Pneumatic tire ..	496,642	May 2	399	108	63	692
Douglas, Frank, Chicago, Ill. Bicycle-wheel ..	511,595	Dec. 26	3011	733	65	2009
Douglas, Hamilton. (See Hudson, John L., assignor.) ..						
Douglas, James, New York, N. Y. Separating and recovering copper ..	506,985	Oct. 17	2006		65	405
Douglas, John, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Sewing-machine guide ..	507,112	Oct. 24	2223	549	65	457
Douglas, John, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Guiding device for sewing-machines ..	507,489	Oct. 24	2873	{ 704 705 }	{ 65 }	578
Douglas, John B., Chicago, Ill. Puzzle ..	510,904	Dec. 19	1850	456	65	1780
Douglas, Robert, Fall River, Mass. Tool-fastening ..	502,708	Aug. 8	807	195	64	728
Douglas, Thomas, New York, N. Y. Music-leaf turner ..	511,200	Dec. 19	2344	573	65	1873

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Douglas, William B., Phenix, R. I. Ball-bearing	492,958	Mar. 7	294	75	62	1417
Douglas, William M., Galveston, Tex., assignor of one-half to Bucyrus Steam Shovel and Dredge Company, Bucyrus, Ohio. Dredging apparatus	491,723	Feb. 14	1076	272	62	980
Douglass, Adelbert J., Ilion, N. Y. Sheet-metal-bending machine	505,567	Sept. 26	2114	536	64	1708
Douglass, Heman F., and A. G. Stouder, Troy, Ohio. Carriage-sunshade	494,369	Mar. 28	2610	655	62	1906
Douglass, Robert C., assignor to A. B. McChesney, Chicago, Ill. Railway-gate	499,878	June 20	1900	461	63	1750
Douglass, Robert C., assignor to A. B. McChesney, Chicago, Ill. Railway-gate	501,926	July 25	2234	558	64	450
Douglass, Samuel W. (See Bullock and Douglass.)						
Douglass, Samuel W., assignor to M. C. Bullock, Chicago, Ill. Rock-drill support	511,074	Dec. 19	2132	{ 526 527 }	65	1833
Douglass, William E. (See Havenor, Frank O., assignor.)						
Doulton, Henry, London, and J. Slater, Burslem, England. Treating vitreous substances for making metallic connection thereto	507,890	Oct. 31	3562		65	720
Douthit, Benjamin F., assignor of two-thirds to H. A. H. Gibson and J. J. Norton, Waltham, S. C. Transplanting implement	500,476	June 27	2855	703	63	1930
Douty, William H. (See Floyd and Douty.)						
Dovel, J. M. (See Black, William M., assignor.)						
Dover, Joseph, Souderton, Pa. Window-screen	510,530	Dec. 12	1169	282	65	1644
Dover Stamping Company. (See Kirby, John L., assignor.)						
Dow, Albert F. (See Buffinton, Elisha W., assignor.)						
Dow, George E., San Francisco, Cal. Engine-governor	504,205	Aug. 29	3233	806	64	1223
Dow, Joseph H., assignor of one-half to W. Chisholm, Sr., Cleveland, Ohio. Rotary engine	496,352	Apr. 25	2913	728	63	589
Dow, Josiah, Philadelphia, Pa. Steam-engine	498,634	May 30	3640	{ 901 902 }	63	1331
Dow, Josiah, Philadelphia, Pa. Steam-engine valve	498,635	May 30	3645	902	63	1332
Dow, William H., and D. G. Crane, Burlington, Vt. Machine for painting, varnishing, &c.	504,672	Sept. 5	587	149	64	1320
Dowald, Eugen, Elberfeld, Germany. Surface for skating-rinks	494,468	Mar. 28	2758		62	1933
Dowdell, Arthur B. C. (See Dowdell, James and A. B. C.)						
Dowdell, James and A. B. C., St. Helena, Cal. Apparatus for making wine	494,982	Apr. 4	710	180	63	136
Dowell, Frances S., Eureka Springs, Ark. Wire clothes-line	499,528	June 13	1321	311	63	1636
Dowell, Lawson H., Walton, assignor of one-half to D. R. Murchison, Athens, Tex. Wire-stretcher and spicer	490,070	Jan. 17	1713	{ 446 447 }	62	361
Dowling, John, Altoona, Pa. Seal-lock	506,214	Oct. 10	714	179	65	146
Dowling, John C. (See Miracle, John, assignor.)						
Dowling, North, assignor to American Incinerating Company, Philadelphia, Pa. Hydro-carbon incinerating-furnace	501,458	July 11	1475	371	64	284
Dowling, North, assignor to American Incinerating Company, Philadelphia, Pa. Apparatus for treating garbage	506,361	Oct. 10	974	242	65	197
Dowling, North, assignor to American Incinerating Company, Philadelphia, Pa. Apparatus for pulping and compressing garbage, &c.	506,362	Oct. 10	976	242	65	197
Dowling, North, assignor to American Incinerating Company, Philadelphia, Pa. Process of and apparatus for treating garbage	506,363	Oct. 10	978	242	65	197
Dowling, William C., Alpine, Mich. Wagon-tongue	506,986	Oct. 17	2007	496	65	405
Down, John V. (See Thacker and Down.)						
Down, William. (See Bishop and Down.)						
Downer, Edward F., Utica, N. Y. Folding wardrobe	497,975	May 23	2561	639	63	1125
Downes, William A., assignor to Penberthy Injector Company, Detroit, Mich. Lubricator	490,246	Jan. 17	2006	525	62	440
Downey, Thomas F., Detroit, Mich. Gas-meter	491,411	Feb. 7	578	{ 145 146 }	62	858
Downie, James H., assignor to Detroit Dental Manufacturing Company, Detroit, Mich. Dental furnace	499,015	June 6	486	113	63	1476
Downing, George H. (See Curell, Daniel, assignor.)						
Downing, John S., Oil City, assignor of one-half to S. G. Robbins, Siverly, Pa. Device for heading barrels	501,828	July 18	2062	508	64	404
Downing, Thomas J., Lincoln, Ill. Type-writing machine	504,713	Sept. 12	656	{ 166 167 }	64	1406
Downing, Thomas J., Lincoln, Ill. Type-writing machine	510,331	Dec. 5	806	195	65	1563
Downing, William H., Goodell, Pa. Sucker-rod elevator	506,584	Oct. 10	1352	339	65	271
Downing, William H., Goodell, Pa. Tube-elevator	506,585	Oct. 10	1353	339	65	272
Downs, Ann M., et al. (See McKinnon, James W., assignor.)						
Downs, Harry T., assignor of one-half to L. N. Downs, New York, N. Y. Fire-alarm system	505,819	Oct. 3	28	8	65	8
Downs, John, Johnstown, Pa. Device for pouring metal	501,062	Dec. 5	376	83	65	1480
Downs, Loren N. (See Downs, Harry T., assignor.)						
Downs, Taylor W., St. Louis, Mo. Street-sweeper	506,423	Oct. 10	1094	{ 271 272 }	65	221
Downs, Taylor W., St. Louis, Mo. Street-sweeper	507,354	Oct. 24	2664	655	65	538
Dowse, William B. H., trustee. (See Mead, Albert G., assignor.)						
Dowse, William B. H., Newton, Mass. Lacing-hook	500,565	July 4	45	13	64	10
Dowse, William B. H., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Fastening for gloves	508,604	Nov. 14	1029	253	65	965
Dowse, William B. H., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove-fastener	508,605	Nov. 14	1030	254	65	965
Doxey, Richard A., et al. (See Cook and Harrison, assignors.)						
Doxstader, Fred C., Ithaca, N. Y. Periodical-holder	504,714	Sept. 12	658	167	64	1406
Doy, William S. (See Metcalf and Doy.)						
Doyle, Luke, deceased; M. E. Doyle, Boston, Mass., administratrix. Carriage-body	500,740	July 4	334	89	64	62
Doyle, Mary E., administratrix. (See Doyle, Luke.)						
Doyle, Richard J., Owen Sound, Canada. Non-inflammable paint	490,547	Jan. 24	2498		62	549
Doyle, Richard J., Owen Sound, Canada. Non-inflammable cement	490,548	Jan. 24	2498		62	549
Doyle, Thomas, San Francisco, Cal. Rope-tread horseshoe	492,665	Feb. 28	2567	635	62	1308
Doyle, Thomas W., Holyoke, Mass. Key-fastener	494,555	Apr. 4	30	7	63	8
Doyle, Thomas W., Holyoke, Mass. Canopy attachment for velocipedes	494,556	Apr. 4	32	7	63	8
Dozier, James C., Louisville, Ky. Barrel and making same	505,446	Sept. 26	1872	482	64	1662
Drader, Joseph, London, Canada. Vehicle-pole	505,820	Oct. 3	29	8	65	9
Draher, John. (See Sheridan and Draher.)						
Drake, Albert R., Waltham, and F. A. Higgins; said Higgins assignor to said Drake, and said Drake assignor of one-half to E. L. Higgins, Winthrop, Mass. Shoe-lace fastener	504,568	Sept. 5	427	108	64	1349
Drake, Charles C., Trenton, N. J. Trip for releasing horses	502,487	Aug. 1	407	96	64	641
Drake, Edwin L., Winchester, Tenn. Ice-cream freezer. (Reissue)	11,326	Apr. 25	2982	744	63	603
Drake, George H., Omaha, Neb., assignor of two-thirds to A. M. Castle, Chicago, Ill., and W. J. Wickes, Saginaw, Mich. Supporting-lug	491,091	Feb. 7	44	12	62	757
Drake, George H., Omaha, Neb., assignor of two-thirds to W. J. Wickes, Saginaw, Mich., and A. M. Castle, Chicago, Ill. Making supporting-brackets for boilers, &c.	494,370	Mar. 28	2612	656	62	1906

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Drake, Jesse, Jackson, Miss. Hay-loader.....	506,677	Oct. 17	1493	375	65	310
Drake, Marshall D., Irvington, Ky. Vehicle propelled by hand or foot.....	510,332	Dec. 5	808	195	65	1563
Drake, William T., and F. C. Heffron, Minneapolis, Minn. Compositor's pay-measure.....	509,073	Nov. 21	1786	440	65	1125
Dranga, T. A., <i>et al.</i> (See Swigart, Frank W., assignor.)						
Draper, Eben S., assignor to Sawyer Spindle Company, Hopedale, Mass. Spinning-ring.....	491,962	Feb. 14	1445	359	62	1053
Draper, George A., and A. E. Rhoades, assignors to Hopedale Machine Company, Hopedale, Mass. Machine for twisting or doubling yarn.....	503,905	Aug. 22	2729	685	64	1112
Draper, George E., assignor of one-half to C. W. Hawes, Boston, Mass. Railway-switch.....	497,913	May 23	2469	616	63	1109
Draper, George O., Hopedale, Mass. Bicycle.....	490,844	Jan. 31	2983	764	62	659
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Spinning-ring.....	500,999	July 4	731	192	64	133
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing.....	501,408	July 11	1409	353	64	270
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing.....	507,355	Oct. 24	2665	655	65	538
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing.....	507,356	Oct. 24	2667	656	65	538
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Spindle.....	510,485	Dec. 12	1739	429	65	1749
Draper, John, Brooklyn, N. Y. Removing scales from boilers.....	509,209	Nov. 21	2015		65	1169
Draper & Sons, George. (See Allen, George H., assignor.)						
Draper & Sons, George. (See Brooks, John C., assignor.)						
Draper & Sons, George. (See Chandler, Alfred D., assignor.)						
Draper & Sons, George. (See Chandler, George E., assignor.)						
Draper & Sons, George. (See Chandler, Walter A., assignor.)						
Draper & Sons, George. (See Covo, Joseph T., assignor.)						
Draper & Sons, George. (See Draper, George O., assignor.)						
Draper & Sons, George. (See Draper, William F., assignor.)						
Draper & Sons, George. (See Durkin, Daniel, assignor.)						
Draper & Sons, George. (See Hicks, Nebemiah, assignor.)						
Draper & Sons, George. (See Keeley, John W., assignor.)						
Draper & Sons, George. (See Kent, Charles C., assignor.)						
Draper & Sons, George. (See Knight, George W., assignor.)						
Draper & Sons, George. (See McVeigh, Thomas, assignor.)						
Draper & Sons, George. (See Morin, Frank, assignor.)						
Draper & Sons, George. (See Northrop, James H., assignor.)						
Draper & Sons, George. (See Rhoades, Alonzo E., assignor.)						
Draper & Sons, George. (See Roper, Charles F., assignor.)						
Draper & Sons, George. (See Smith, Edward, assignor.)						
Draper, William B. (See Huff, Orison, assignor.)						
Draper, William B., Cambridge, Mass. Buckle and cast-off.....	499,214	June 13	787	187	63	1541
Draper, William B., Cambridge, Mass. Garment-supporter.....	499,215	June 13	788	187	63	1542
Draper, William B., Cambridge, Mass. Clasp.....	510,333	Dec. 5	809	196	65	1564
Draper, William B., Cambridge, assignor of one-half to E. H. Richards, Boston, Mass. Clasp.....	497,710	May 16	2135	533	63	1034
Draper, William B., Cambridge, assignor of one-half to W. N. Todd, Melrose, Mass. Buckle.....	504,867	Sept. 12	921	238	61	1458
Draper, William F., assignor to G. Draper & Sons, Hopedale, Mass. Loom.....	491,044	Jan. 31	3328	849	62	726
Draper, William F., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing.....	505,196	Sept. 19	1461	377	64	1571
Draper, William F., Hopedale, Mass., assignor to Northrop Loom Company, Saco, Me. Warp stop-motion for looms.....	496,353	Apr. 25	2917	729	63	590
Dratt, Andrew, San Francisco, Cal. Vehicle running-gear.....	506,814	Oct. 17	1730	435	65	354
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to Pneumatic and Electric Tool Company, New York, N. Y. Pneumatic tool.....	504,802	Sept. 12	813	207	64	1436
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to Pneumatic and Electric Tool Company, New York, N. Y. Pneumatic tool.....	504,803	Sept. 12	816	207	64	1436
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to Automatic and Electric Scale Company, of New Jersey. Rotating grain-weigher.....	507,531	Oct. 31	2964	726	65	608
Dreifuss, Herrmann. (See Baumgartner and Dreiffuss.)						
Dreisbach, Stephen S., Catawissa, Pa. Head-rest.....	490,865	Jan. 31	3015	775	62	666
Dresback, C. R. (See Grove, William H., assignor.)						
Drescher, Julius W., Minneapolis, Minn. Motor-sled.....	509,595	Nov. 28	2711	656	65	1312
Dresdner, Isidor, Brooklyn, N. Y. Fur-plucking machine.....	493,017	Mar. 7	392	98	62	1436
Dresses, Henry, Cincinnati, Ohio. Turning-lathe.....	493,018	Mar. 7	393	98	62	1436
Dressel, Oscar. (See Kothe, Ulrich, and Dressel.)						
Dressler, Charles E., New York, N. Y. Dynamo-electric machine.....	498,537	May 30	3480	862	63	1304
Dressler, Charles E., New York, N. Y. Electric generator or motor.....	498,538	May 30	3484	862	63	1305
Dreves, A. W., <i>et al.</i> (See Jones, Thomas D., assignor.)						
Drevet, Ernest, New York, N. Y. Napkin-ring.....	501,332	July 11	1275	320	64	244
Drew, Charles E., assignor of one-half to G. H. Baker, Woonsocket, R. I. Undershirt.....	495,316	Apr. 11	1278	320	63	255
Drew, Ernest L. (See Merrithew, Levi A., assignor.)						
Drew, George H., assignor, by mesne assignments, to United States Postage Stamp Delivery Company, Boston, Mass. Combined demand-draft and advertising coupon.....	493,619	Mar. 14	1363	346	62	1639
Drew, James C., Arcadia, La. Motor for sewing-machines.....	489,121	Jan. 3	216	58	62	50
Drewett, William A., assignor to M. T. Davidson, Brooklyn, N. Y. Direct-acting steam-engine.....	497,443	May 16	1715	433	63	959
Drewett, William A., assignor to M. T. Davidson, Brooklyn, N. Y. Direct-acting engine.....	503,231	Aug. 15	1663	409	64	899
Drewsen, Viggo B., Eidsvold, Norway. Recovering organic substances from sulphite liquor.....	505,755	Sept. 26	2431		64	1766
Drewsen, Viggo, assignor to himself and H. and C. Bache-Wüg, Christiania, Norway. Regaining sulphurous acid.....	492,196	Feb. 21	1807	451	62	1142
Drey, Wilfred J., assignor of one-half to T. Beatty, Philadelphia, Pa. Shoe.....	492,192	May 2	689	182	63	741
Dreyer, William, Cleveland, Ohio. Lock.....	491,991	Feb. 21	1489	372	62	1076
Dreyfus, Bernhard, New York, N. Y. Rope portière.....	501,590	Dec. 12	1272	309	65	1662
Dreyfus, Edward, <i>et al.</i> (See Brass, Robert, assignor.)						
Dreyfus, George, Paris, France. Perpetual calendar.....	506,003	Oct. 3	315	83	65	62
Dreyfus, Louis G. (See Lacombe, Joseph M., assignor.)						
Dreyfuss, Bernard, assignor to R. Dreyfuss, New York, N. Y. Cement.....	491,280	Feb. 7	348		62	815
Dreyfuss, Rosa. (See Dreyfuss, Bernard, assignor.)						
Driesbach, Victor, <i>et al.</i> (See Diebel, William, assignor.)						
Driesbach, Victor C., <i>et al.</i> (See Diebel, William, assignor.)						
Driggs, George W., assignor of one-half to M. Beal, Elyria, Ohio. Baling-press.....	498,845	June 6	171	43	63	1422
Driggs, Gertrude, <i>et al.</i> (See Loree, Manfred U., assignor.)						
Driggs, Louis L., Washington, D. C. Check-punch.....	493,547	Mar. 14	1230	315	62	1613
Driggs, William H., Washington, D. C. Mechanism for firing breech-loading ordnance.....	493,987	Mar. 21	1979	505	62	1773
Driggs, William H., U. S. Navy. Recoil-mount for ordnance.....	502,178	July 25	2628	662	64	525
Drill, Charles, and H. J. Schmitt, St. Louis, Mo.; said Schmitt assignor to said Drill. Elevated-railway system.....	490,549	Jan. 24	2499	644	62	549
Driscoll, James E., St. Paul, Minn. Bridle-bit.....	492,666	Feb. 28	2368	636	62	1308

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Drohan, Thomas, and T. Pearce, Denver, Colo. Apparatus for separating matte from slag.	496,823	May 2	690	182	63	742
Dromgold, Walker A. (See Reese, Hench, and Dromgold.)						
Dromgold, Walker A. (See Richey, Hench, and Dromgold.)						
Dronsfield, James, Oldham, England. Differential-motion mechanism	500,322	June 27	2637	645	63	1891
Dronsfield, Joseph S., Oldham, England. Fillet-card mounting machine	492,716	Feb. 28	2637	653 654	62	1323
Drozeski, Julius R., Erie, Pa. Lubricator	505,597	Sept. 26	2165	548	64	1717
Drozeski, Julius R., assignor of one-half to J. McCarter, Erie, Pa. Steam heating apparatus for railway-trains	508,291	Nov. 7	509	123	65	852
Drucbert, Achille. (See Drucbert, Napoleon and A.)						
Drucbert, Napoleon and A., Fournes, France. Lubricator	494,738	Apr. 4	335	85	63	66
Druet, Samuel, Marysville, Iowa. Bed attachment for handling invalids	505,821	Oct. 3	31	8, 9	65	9
Drukenbrod, Forest, New Berlin, Ohio. Portable bath-tub	494,557	Apr. 4	33	7	63	8
Drum, George M., West Superior, Wis. Heating apparatus	509,366	Nov. 28	2298	557	65	1233
Drummond, Alexander, South Evanston, Ill. Screen-door	498,508	May 30	3429	851	63	1295
Drury, Charles E., Girard, Pa. Cleaning attachment for oil-cans	494,702	Apr. 4	273	70	63	55
Drury, Marshal P., et al. (See Saxton, Harry, assignor.)						
Drymon, Henry, Marvin, Tenn. Churn	495,478	Apr. 18	1542	3-7	63	323
Drysdale, Bruce, assignor to A. Priestman, Philadelphia, Pa. Valve for hydrocarbon-engines	500,477	June 27	2856	703 704	63	1930
Drysdale, David, Cleveland, Ohio. Gas-heater	492,577	Feb. 28	2423	604	62	1281
Drysdale, Hugh, Cleveland, Ohio. Turret-lathe	493,019	Mar. 7	394	98, 99	62	1436
Du Bois, Johannes A., Newark, N. J. Rim-spreader for velocipede-wheels	499,824	June 20	1809	440	63	1733
Du Bois, Lewis, and M. Le Grand, Brooklyn, N. Y. Device for locking drawers, doors, &c.	497,406	May 16	1654	418	63	949
Du Bois-Reymond, Alard, Charlottenburg, assignor to Siemens & Halske, Berlin, Germany. Converter system for railways	493,914	Mar. 21	1841	469 470	62	1747
Du Bois, Theodore. (See Goldsmith, Ferdinand, assignor.)						
Du Bois, William, Stevensville, N. Y. Sleigh-runner	509,723	Nov. 28	2913	705	65	1349
Du Moulin, Ferdinand E., Joliet, Ill. Riding-saddle	496,726	May 2	529	140	63	715
Du Moulin, Samuel, Boston, Mass. Fender and life-guard for street-cars	504,081	Aug. 29	3015	753 754	64	1182
Du Pont, Francis G., Wilmington, Del. Apparatus for producing smokeless explosives	503,584	Aug. 22	2235	560	64	1012
Du Pont, Francis G., Wilmington, Del. Apparatus for distilling volatile substances	503,586	Aug. 22	2239	561	64	1019
Du Pont, Francis G., Wilmington, Del. Making smokeless explosives	503,587	Aug. 22	2241	561 562	64	1019
Du Pont, Francis G. and P. S., Wilmington, Del. Making smokeless explosives	503,583	Aug. 22	2231	560	64	1017
Du Pont, Francis G. and P. S., Wilmington, Del. Making smokeless explosives	503,585	Aug. 22	2236	561	64	1018
Du Pont, Pierre S. (See Du Pont, Francis G. and P. S.)						
Du Pont, Thomas C. (See Jones, Bishop, and Du Pont.)						
Du Pont, Thomas C., Central City, Ky. Coal-weighing basket	505,394	Sept. 19	1778	461	64	1631
Du Shane, James, South Bend, Ind. Currcomb	505,756	Sept. 26	2432	614	64	1766
Dubault, Pierre R. P. (See Linzeler and Dubault.)						
Dubey, Edward A. (See Chappel, John H., assignor.)						
Dubiel, Julius, Waukegan, Ill. Manufacture of starch	493,689	Mar. 21	1478	379	62	1678
Dubois, Louis. (See Lacroix and Dubois.)						
Dubois, Louis E., Toronto, Canada. Safety attachment for street-cars	499,910	June 20	1951	474	63	1759
Dubois, Olivier F., Turtle Lake, Wis. Measuring-vessel	509,210	Nov. 21	2016	489	65	1169
Dubois, Victor, and W. C. Stewart, Harvey, Ill. Enameling sheet-metal ware	498,207	May 23	2925		63	1190
Dubosc, André. (See Hermite and Dubosc.)						
Dubrule, Joseph D. O., and F. Lebel, Montreal, Canada. Axle-lubricator	496,824	May 2	691	182	63	742
Ducasble, Alfred, Paris, France. Tire	506,424	Oct. 10	1095	272	65	921
Ducey, Patrick A. (See Tarrant, George, assignor.)						
Duchardt, George W. (See Schmid, Gottlob F., assignor.)						
Ducker, William M., New York, assignor to H. D. Dumont, Brooklyn, N. Y., and C. Balcom, trustee, Metuchen, N. J. Coin-controlled machine	499,453	June 13	1201	285 286	63	1615
Duckett, Walter G., Washington, D. C. Card, sign, or label rack	496,152	Apr. 25	2584	650	63	527
Duckworth, Joseph A., Rocky Pass, N. C. Stalk-cutter	507,676	Oct. 31	3223	789	65	656
Duckworth, Ormerod, Norristown, Pa. Process of and apparatus for oxidizing yarn	508,094	Nov. 7	191	51	65	794
Ducros, Louis. (See Tymeson and Ducros.)						
Dudgeon, Addebert, Homestead, and J. P. McKee, Pittsburg, Pa. Bench-dog	510,531	Dec. 12	1171	282	65	1644
Dudley-Cooper, Henry, assignor to J. Kemp-Welch, London, England. Construction of glass or porcelain lined joints	494,671	Apr. 4	225	56	63	46
Dudley, George E., Canon City, Colo. Combination funnel and coffee percolator and strainer	496,510	May 2	186	51	63	653
Dudley, George E., Provo, Utah Ter. Door check and spring	504,826	Sept. 12	253	219	64	1444
Dudley, Plummer A., Bath, N. Y. Wedge-extractor	510,246	Dec. 5	680	162	65	1539
Dudley, Plummer A., and F. G. Kleckler, Bath, N. Y. Cutting implement	497,568	May 16	1917	483	63	995
Duenckel, Frederick W. (See Donegan and Duenckel.)						
Duesberg-Delrez, Maurice, Verviers, Belgium. Card-clothing	495,694	Apr. 18	1885	472	63	381
Duesbury, William A., assignor of one-half to J. F. Tevlin and F. P. Hughes, San Francisco, Cal. Label	496,554	May 2	257	68	63	666
Duff, John T., Pittsburg, Pa. Press for straightening plow-colters	499,418	June 13	1144	274	63	1604
Duff, John T., Pittsburg, Pa. Machine for making plow-colters	499,454	June 13	1203	286	63	1615
Duff, John T., Pittsburg, Pa. Car-brake	500,649	July 4	183	48	64	36
Duffie, Matthew M. (See Duffie, Samuel M. and M. M.)						
Duffie, Samuel M. and M. M., Princeton, Ark. Store-truck	497,444	May 16	1718	434	63	960
Duffield, Harry, et al. (See Ford, Charles S., Sr., assignor.)						
Duffy, John. (See Bostwick and Duffy.)						
Duffy, Joseph, Paterson, N. J. Duplex spindle	489,292	Jan. 3	474	131	62	103
Duffy, Patrick, assignor of one-half to J. F. Powers, New Bedford, Mass. Let-off for looms	497,170	May 9	1248	317	63	861
Duffy, Peter, New York, N. Y. Piano	505,447	Sept. 26	1874	482	64	1662
Dufour, John J., assignor of one-half to F. L. Scott, Paducah, Ky. Device for preventing the fraudulent filling of bottles	500,057	June 20	2172	522	63	1797
Dugan, John J., Salem, Oreg. Bedstead	500,867	July 4	530	137	64	96
Dugan, John J., Salem, Oreg. Spraying device	503,455	Aug. 15	2012	429	64	961
Duggan, Francis, Odessa, Del. Combined pitchfork and band-cutter	501,773	July 18	1987	491	64	391
Duggan, Frederic A., Trenton, N. J. Junction-block for electric fixtures	498,539	May 30	3486	862	63	1305
Duggan, Frederic A., Trenton, N. J. Cleat for electric wiring	508,687	Nov. 14	1146	282	65	990
Duggan, Michael. (See Batters and Duggan.)						
Duggan, Philip J., assignor of one-half to P. Krumschied, Boston, Mass. Agraffe for pianos	491,877	Feb. 14	1320	326	62	1027
Dugger, Collin C., assignor of two-thirds to E. M. Carrell and D. A. Nunn, Nashville, Tenn. Fire-extinguishing attachment for elevator-shafts or stairways	495,402	Apr. 11	1412	355	63	279
Dührkop, Fritz, New York, N. Y. Baker's oven	492,392	Feb. 28	2116	528	62	1217

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Dnisberg, Carl, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue tetrazo dye	499,216	June 13	789		63	1542
Dujardin, Paul J. R., Paris, France. Electric accumulator	497,869	May 23	2400		63	1098
Duke, James B., New York, N. Y. Cigarette-machine	503,582	Aug. 22	2230	559 560	64	1017
Dulany, James G., assignor of one-third to J. T. Lighter, Hannibal, Mo. Nut-lock	498,208	May 23	2927	729	63	1190
Dulier, Edward E., London, England. Apparatus for removing impurities from smoke	490,550	Jan. 24	2502	644	62	550
Dulier, Edward E., London, England. Apparatus for removing impurities from smoke	509,798	Nov. 28	3041	735	65	1375
Dumars, Horace, Brooklyn, N. Y. Theatrical device	501,647	July 18	1770	440 441	64	354
Dumas, Frank C., New York, N. Y. Cuff	503,762	Aug. 22	2532	630	64	1073
Dumbauld, Levi, Hartford, Kans. Derrick	493,690	Mar. 21	1480	379	62	1678
Dumke, August F., Milwaukee, Wis. Valve-gear for steam-engines	497,171	May 9	1249	317	63	861
Dumont, Henry D., <i>et al.</i> (See Ducker, William M., assignor.)						
Dunbar, Francis W. (See Picknell and Dunbar.)						
Dunbar, Francis W., New York, N. Y., assignor to American Telephone and Telegraph Company, of New York. Visible signal	501,185	July 11	1044	264	64	205
Dunbar, Francis W., New York, N. Y., assignor to American Telephone and Telegraph Company, of New York. Electric switchboard-signal	502,660	Aug. 1	692	166	64	693
Dunbar, Francis W., and E. S. C. May, Newark, N. J., assignors to American Telephone and Telegraph Company, of New York. Switchboard circuit and signaling apparatus	509,367	Nov. 28	2300	557	65	1233
Dunbar, Henry D., North Hartland, Vt. Driving connection for compound engines	502,956	Aug. 8	1215	299	64	804
Dunbar, Henry D., North Hartland, Vt. Piston-valve	504,153	Aug. 29	3141	785	64	1206
Dunbar, Marcene B., Torrington, Conn. Extension-skate	490,872	Jan. 31	3025	778	62	668
Duncan & Co., J. (See Werner, Paul F., assignor.)						
Duncan, George T., assignor of seven-sixteenths to A. F. Hoska, Tacoma, Wash. Churn-rest for horses	496,248	Apr. 25	2738	685	63	555
Duncan, Harrie E., Newton, assignor to American Waltham Watch Company, Waltham, Mass. Watch-movement holder	498,004	May 23	2610	652	63	1134
Duncan, Harrie E., Newton, assignor to American Waltham Watch Company, Waltham, Mass. Hair-spring stud for watches	498,209	May 23	2928	729	63	1190
Duncan, James. (See Duncan, Robert B. and J.)						
Duncan, James E., Centralia, Wis., assignor of one-half to J. H. Welch, Minneapolis, Minn. Folding try-square	489,413	Jan. 3	650	176	62	140
Duncan, John H., Syracuse, N. Y. Vacuum-pan	499,721	June 20	1620	392	63	1702
Duncan, John H., Syracuse, N. Y. Vacuum-pan	503,312	Aug. 15	1803	448	64	923
Duncan, John H. H., London, England. Churn	503,654	Aug. 22	2357	588	64	1039
Duncan, John R., Glen Cove, assignor of one-half to W. P. Rasco, Coleman, Tex. Quilting attachment for sewing-machines	489,156	Jan. 3	263	73	62	61
Duncan, Joseph M., Silver Springs, N. Y. Vacuum-pan	496,111	Apr. 25	2528	639	63	516
Duncan, Joseph M., Silver Springs, N. Y. Centrifugal salt-drier	498,383	May 30	3228	803	63	1258
Duncan, Nathaniel J. H., Parkville, Md. Lubricator	506,308	Oct. 10	879	216	65	179
Duncan, Robert B. and J., Gornley, Canada. Farm-fence	504,025	Aug. 29	2939	735	64	1167
Duncan, Thomas, Fort Wayne, Ind. Multiphase meter	500,868	July 4	531	138	64	97
Duncan, Thomas, Fort Wayne, Ind. Meter for alternating, pulsating, or intermittent electric currents	501,000	July 4	732	192 193	64	133
Duncan, William, Allegheny, Pa. Electric-railway trolley	495,695	Apr. 18	1885	472 473	63	382
Duncan, William, Allegheny, Pa. Trolley-support	500,283	June 27	2532	619 620	63	1872
Duncan, William, Harrison, N. J. Blanket-controller for calico-printing machines	497,953	May 23	2528	631 632	63	1119
Dundas, John H., Auburn, Nebr. Swinging gate	510,063	Dec. 5	377	83	65	1480
Dundon, John H. (See Boyle, Dundon, and Boyle.)						
Dundon, William, Leavenworth, Kans. Device for cleaning flues, drains, or pipes	492,393	Feb. 28	2117	528	62	1217
Dunham, Frank, <i>et al.</i> (See Toucer, Ferris D., assignor.)						
Dunham, James S., and E. D. Middlekauff, Stockton, Cal. Lemon-squeezer	490,802	Jan. 31	2925	751	62	646
Dunham, John E., Siloam Springs, Ark. Hand-stamp	506,586	Oct. 10	1355	340	65	272
Dunham, Oren. (See Schofield, Eugene H., assignor.)						
Dunham, W. C., <i>et al.</i> (See Dahill, Thomas H., assignor.)						
Dunham, William R., Troy, N. H. Tellurian	493,988	Mar. 21	1980	505	62	1774
Dunfee, Otis L., Monroeton, Pa. Vehicle bolster-plate	496,249	Apr. 25	2739	625	63	555
Dunkerley, Benjamin, Glenorchy, Tasmania, assignor of one-fourth to J. D. Kain, Stockport, England. Machine for dressing fur	506,192	Oct. 3	644	164	65	124
Dunks, George W., Hope, Kans. Feed-trough	495,666	Apr. 18	1813	461	63	375
Dunlap, Henry G., Chicago, Ill., assignor to Ford, Johnson & Co., Michigan City, Ind. Machine for splitting the ends of cane	489,225	Jan. 3	377	104	62	85
Dunlap, John S., Peoria, Ill. Weed-extermiator	500,538	June 27	2964	728	63	1950
Dunlap, William P., Maquoketa, Iowa. Wagon body or rack	507,262	Oct. 24	2500	615 616	65	506
Dunlevy, Joseph E., Memphis, Ind. Safety hinge-switch frog	507,423	Oct. 24	2772	679	65	559
Dunlop, John B., Sr., and John B., Jr., Dublin, Ireland; said Dunlop, Jr., assignor to said Dunlop, Sr. Spring-rim for wheels	501,409	July 11	1411	353	64	271
Dunn, Benjamin F., Kansas City, Mo. Light-varying attachment for lamps	490,644	Jan. 31	2668	687	62	598
Dunn, Charles C., <i>et al.</i> (See Lassar, Zabby, assignor.)						
Dunn, Claudius A., Denver, Colo. Car-coupling	500,098	June 20	2229	543	63	1807
Dunn, David W., Pittsburg, Pa. Commutator-brush for dynamos	494,629	Apr. 4	164	39	63	33
Dunn, Dennis, assignor of one-half to T. Gorman, Mahanoy City, Pa. Air-brake for railway-cars	489,527	Jan. 10	857	223	62	194
Dunn, Frank M. (See Dunn, Wilbur A. and F. M.)						
Dunn, Franklin M., Baltimore, Md. Electro-mechanical gong	504,827	Sept. 12	856	219 220	64	1444
Dunn, Gano S., assignor to Crocker-Wheeler Electric Company, New York, N. Y. Balanced armature for dynamo-electric machines or electric motors and balancing same	493,375	Mar. 14	955	246	62	1562
Dunn, Isaac and W. B., Jr., New Brunswick, N. J. Potato-cutter	499,101	June 6	605	145	63	1496
Dunn, John M., Toronto, Canada. Boiler-tube cleaner	504,569	Sept. 5	427	108	64	1349
Dunn, Sola B. (See Haussmann and Dunn.)						
Dunn, Wilbur A. and F. M., Newton, Iowa. Can-labeling machine	500,566	July 4	46	14	64	10
Dunn, William B., Jr. (See Dunn, Isaac and W. B., Jr.)						
Dunning, Harry, assignor to W. T. Bolton and F. E. Greene, Chicago, Ill. Manufacturing type for printing and stamping and type made by such process	495,667	Apr. 18	1845	462	63	375
Dunning, William B., Geneva, N. Y. Ventilating-window	510,009	Dec. 5	292	65	65	1465
Dunnington, Frank D., Buckhannon, W. Va. Carpenter's square	501,774	July 18	1988	492	64	391
Dünschede, Friedrich, Essenberg, assignor to R. W. Dinnendahl, Steele, Germany. Apparatus for boring mine-galleries, tunnels, &c	507,891	Oct. 31	3563	877 878	65	720

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Dunshee, William H., and C. H. Chandler, assignors to Chandler Pump Company, Cedar Rapids, Iowa. Packing for piston-rods	494,703	Apr. 4	275	70	63	55
Dunson, Beniah M., Kenton, Ohio. Heating apparatus	508,820	Nov. 14	1342	332	65	1026
Duntze, Johann C., Frankfort-on-the-Main, Germany. Producing colors on glass surfaces	508,873	Nov. 14	1432		65	1043
Dunwell, John E. (See Mattice and Dunwell.)						
Dupée, Henry D. (See Whitehead, William T., assignor.)						
Duplex Printing Press Company. (See Cox, Joseph L., assignor.)						
Duplex Rotary Engine Company. (See Meyer, Kiehl, and Grant, assignors.)						
Dupont, Hippolyte. (See Rion and Dupont.)						
Dupree, Fred L. (See Morton, William O., assignor.)						
Durand, Edwin C., Wellington, Ohio. Combination-tool	496,300	Apr. 25	2818	705	63	571
Durand, Eugène A., Paris, France. Carbureted-air engine	497,048	May 9	1054	270	63	827
Durand, Henry S. (See Long, Adam A., assignor.)						
Durand, Henry S. (See Phillips, Charles, assignor.) (Reissue.)						
Durand, Louis, New York, N. Y. Dough-kneader	493,074	Mar. 7	466	118	62	1451
Durand, Oscar N. (See Hastings and Durand.)						
Durant, Walter N., Milwaukee, Wis. Counting-register	491,537	Feb. 14	779	199	62	919
Durborow, Edwin D. (See Callaghan, George F., assignor.)						
Duret, James S., Noblesville, Ind. Calculating device	504,776	Sept. 12	774	195	64	1428
Durfee, Bradford K., et al. (See Hartley, Charles J., assignor.)						
Durfinger, Oliver L., Shelbyville, Ind. Foot-guard for railways	501,927	July 25	2235	558	64	450
Durgin, Henry C., Hartford, Conn. Revolving hand-fan	493,915	Mar. 21	1845	470	62	1748
Durham, Rosina M., New Barnet, England. Thimble	495,790	Apr. 18	2040	517	63	410
Durham, Thomas C., Gates, Tenn. Harrow or cultivator	492,717	Feb. 28	2639	654	62	1323
Durkee, George B., assignor to Lyon & Healy, Chicago, Ill. Harp	509,022	Nov. 21	1699	420	65	1108
Durkin, Daniel, Woonsocket, R. I., assignor to G. Draper & Sons, Hopedale, Mass. Loom	501,001	July 4	737	193	64	134
Durkin, Daniel, West Upton, assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	503,906	Aug. 22	2731	625	64	1113
Durkin, William, Philadelphia, Pa. Shield for buildings	494,848	Apr. 4	523	131	63	101
Durland, Albert E., Staplehurst, Nebr. Door-bolt	497,445	May 16	1719	434	63	960
Durnbaugh, Joseph A. (See Stutz and Durnbaugh.)						
Durr, Charles C., Plymouth, Ind. Artificial tooth	504,126	Aug. 29	3096	775	64	1198
Durr, Franklin, Pittsfield, Ill. Fence-wire stretcher	492,278	Feb. 21	1936	483	62	1168
Dürr, Gustav, Dusseldorf, Germany. Steam-generator	497,233	May 9	1339	341	63	878
Dürr, Gustav, Dusseldorf, Germany. Steam-boiler	498,465	May 30	3357	836	63	1283
Dürr, Gustav, Dusseldorf, Germany. Steam-boiler	501,612	July 18	1715	428	64	345
Dürr, Walther, Munich, Germany. Device for measuring the density of gases	494,192	Mar. 28	2323	588	62	1853
Durst, Murray H., Wheatland, Cal. Magazine-gun	502,812	Aug. 8	963	236	64	758
Duryea, Charles E., Springfield, Mass. Pneumatic tire	493,488	Mar. 14	1130	289	62	1594
Duryea, Edgar E. (See Grimm, Paul H., assignor.)						
Duryea, Edwin G., assignor of one-half to C. M. Blydenburgh, Riverhead, N. Y. Carpenter's hammer	493,989	Mar. 21	1983	505	62	1774
Duryea, Walter E. (See Hoffman, John J., assignor.)						
Dusang, John E., Larue, Ohio. Fence	504,570	Sept. 5	428	108	64	1349
Duse, William A., Stewartville, Mo. Running-gear for wagons	490,803	Jan. 31	2926	751	62	647
Dutcher Temple Company. (See Durkin, Daniel, assignor.)						
Dutcher Temple Company. (See Field, Frank E. D., assignor.)						
Dutcher Temple Company. (See Stimpson, Wallace I., assignor.)						
Dutcher Temple Company. (See Tomlinson, Ambrose, assignor.)						
Dutrey, Justin, New Orleans, La. Composition for producing artificial-emery wheels	510,874	Dec. 12	1803		65	1760
Dutton, Rufus, New York, N. Y. Machine for grinding mower-knives	503,127	Aug. 15	1494	367	64	868
Dutton, Samuel T., Worcester, England. Interlocking apparatus for railway signaling	489,940	Jan. 17	1492	390	62	337
Dutton, Samuel T., Worcester, England. Measuring-pump	503,529	Aug. 15	2133	536	64	984
Dutton, Samuel T., Worcester, England. Interlocking apparatus for railway signaling	503,530	Aug. 15	2136	536	64	984
Dutton, William H., Beaver, Wis. Shingle-packing machine	495,403	Apr. 11	1414	355	63	279
Duval, Jennie P., Richmond, Mo. Lunch-box	490,341	Jan. 24	2172	566	62	486
Duval, Martin L. E., assignor to Fives Lille Company, Paris, France. Pressure-regulator for air-brakes	510,635	Dec. 12	1350	331	65	1677
Duval, Martin L. E., assignor to Fives Lille Company, Paris, France. Regulator for air-brakes	510,870	Dec. 12	1795	441	65	1758
Duys, Henry, Jr., New York, N. Y. Car starter and brake	495,725	Apr. 13	1943	489	63	392
Dwelle, Charles W., Denver, Colo. Wooden pipe	494,996	Apr. 4	727	185	63	139
Dwelle, Charles W., Denver, Colo. Metal hoop and coupling therefor	494,997	Apr. 4	727	185	63	139
Dwelly, Charles H., assignor of one-half to S. N. Turner, Hanover, Mass. Wagon-jack	501,410	July 11	1413	354	64	271
Dwenger, Emil W. J. H., Greenwich, Conn. Ash-sifter	489,293	Jan. 3	476	132	62	104
Dwiggins, John W., assignor of one-half to L. Urnston, Frankton, Ind. Wire-fence machine	494,953	Apr. 4	711	181	63	136
Dwyer, John T., Montreal, Canada. Internal stay for trunks, boxes, &c	505,939	Oct. 3	209	53	65	41
Dyas, Webster M., Arlington Heights, Ill. Hot-air register	504,469	Sept. 5	256	66, 67	64	1318
Dye, Edward R., and C. W. Boettner, Wolcott, Ind. Bag-holder	506,587	Oct. 10	1355	340	65	272
Dyer, Frank L. and L. H., Washington, D. C., assignors of one-third to A. McDougall, Duluth, Minn. Electric steering-gear	498,160	May 23	2633	709	63	1174
Dye, George W., Washington, Iowa. Ditching and grading machine	492,087	Feb. 21	1632	406	62	1105
Dyer, Harold P., Cleveland, Ohio. Locking device for diffusion-cells	499,529	June 13	1321	312	63	1636
Dyer, John T. (See Lewis, Harry A., assignor.)						
Dyer, John W., assignor of one-half to J. B. Nutt, Mt. Airy, N. C. Car-coupling	499,016	June 6	487	113	63	1476
Dyer, Leonard H. (See Dyer, Frank L. and L. H.)						
Dyer, Lucius, Millbridge, Me., assignor to Schott Brothers, Providence, R. I. Buckle	489,859	Jan. 10	1329	347	62	291
Dyer, Millard F., assignor to Automatic Register Company, Detroit, Mich. Display-cabinet	505,035	Sept. 12	1199	308	64	1510
Dyer, Richard N., et al. (See White, Wendell P., assignor.)						
Dyer, Samuel. (See Whiteley and Dyer.)						
Dyer, William J., Honolulu, Hawaii, assignor to Risdon Iron and Locomotive Works, San Francisco, Cal. Suction-pipe for dredgers	510,591	Dec. 12	1273	309	65	1662
Dyke, Albion, assignor to J. K. Sullivan, Newport, R. I. Buckle	490,551	Jan. 24	2503	644	62	550
Dyke, Albion, assignor of one-half to J. K. Sullivan, Newport, R. I. Saddle-tree	490,552	Jan. 24	2504	645	62	550
Dyre, William E., assignor of one-half to E. S. York, Washington, D. C. Temporary binder	489,794	Jan. 10	1342	325	62	272

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Dysard, Joseph W. (See Delaney, Charles W., assignor.)						
Dysart, Marby P., assignor of one-half to G. A. F. Parker, Cornelia, Tex. Hand-stamp	508,292	Nov. 7	510	124	65	852
Dysinger, Sarah E., Eldora, Iowa. Culinary device	510,010	Dec. 5	293	65	65	1465
Dyson, John H., Belleville, Wis. Electric clock	491,339	Feb. 7	462	120	62	836
Dyson, Joseph, Jr., deceased, Cleveland, Ohio; J. Dyson, administrator. Apparatus for forging hammers	507,892	Oct. 31	3565	878	65	720
E. C. Atkins & Company. (See Krieger, Andrew, assignor.)						
E. C. Stearns & Company. (See Seely, Obadiah, assignor.)						
E. & H. T. Anthony & Company. (See Grantland, John W., assignor.)						
E. & H. T. Anthony & Company. (See Harrison, Frederick J., assignor.)						
E. & H. T. Anthony & Company. (See Lewis, William H., assignor.)						
E. & H. T. Anthony & Company. (See Smith, Burgess, assignor.)						
E. Howard Watch and Clock Company. (See Carr, Rufus B., assignor.)						
E. Howard Watch and Clock Company. (See Learned, William B., assignor.)						
E. J. Brooks & Company. (See Brooks, Edward J., assignor.)						
E. Jenckes Manufacturing Company. (See Frink, George E., assignor.)						
E. & T. Fairbanks & Company. (See Sargent, Willis H., assignor.)						
E. W. Bliss Company. (See Leavitt, Frank M., assignor.)						
Eachus, Howard T., St. Paul, Minn. Brake for dental engines	497,370	May 16	1601	404	63	939
Eades, Charles L., Blue Ridge, Mo. Latch	490,645	Jan. 31	2671	688	62	598
Eades, William T., Birmingham, England. Differential pulley	506,166	Oct. 3	581	{ 150 151 }	{ 65 65 }	{ 111 111 }
Eagan, Thomas J. (See Howard and Eagan.)						
Eagan, Thomas, New Haven, Conn. Laundry-tongs	506,479	Oct. 10	1198	298	65	241
Eagle Cotton Gin Company. (See Gammons, Ferdinand C., assignor.)						
Eagle Manufacturing Company. (See Einfeldt, Emil, assignor.)						
Eagle Pencil Company. (See Boman, Claes W., assignor.)						
Eagle Pencil Company. (See Fischer, Frederick J. W., assignor.)						
Eagle Pencil Company. (See Norell, Ernst, assignor.)						
Eagle Pencil Company. (See Stuart, Tom R., assignor.)						
Eames, George H., South Framingham, Mass. Chin-rest for violins	493,020	Mar. 7	396	99	62	1436
Eames, Henry H., Baltimore, Md., assignor to Eames Purifying and Separating Company, of West Virginia. Desulphurizing metallic ores	502,431	Aug. 1	305	73	64	622
Eames Purifying and Separating Company. (See Eames, Henry H., assignor.)						
Earhart, John F., Cincinnati, Ohio. Making relief-plates	509,120	Nov. 21	1873	459	65	1141
Earich, Joseph, Millfield, Ohio. Elevator	497,711	May 16	2136	534	63	1035
Earl, Edwin T., Los Angeles, Cal. Ventilator and combined ventilator and refrigerator-car. (Reissue)	11,324	Apr. 18	2282	575	63	455
Earl, Henry R., Lexington, Mass. Apparatus for the manufacture of gas	498,005	May 23	2611	652	63	1134
Earle, Charles H., assignor to A. H. Smith, Salem, Mass. Railway-chair	503,835	Aug. 22	2627	657	64	1092
Earle, Henry C., New York, N. Y. Gas-heater	491,045	Jan. 31	3329	849	62	727
Earle, Salyer R., Belleville, Canada. Steam and air injector	493,257	Mar. 14	760	194	62	1525
Earle, Salyer R., Belleville, Canada. Combined air injector and exhaustor	504,334	Sept. 5	35	11	64	1278
Earles, Frank A. (See Earles, John H. and F. A.)						
Earles, John H. and F. A., Denver, Colo. Car-coupling	497,266	May 9	1398	354	63	888
Earles, John H. and F. A., Denver, Colo. Lubricator	502,264	July 25	2782	703	64	553
Earll, Charles I., New York, N. Y. Cable railway	511,596	Dec. 26	3013	{ 734 735 736 }	{ 65 65 65 }	{ 2009 2009 2010 }
Earll, Charles I., New York, N. Y. Cable railway	511,597	Dec. 26	3019	{ 736 737 }	{ 65 65 }	{ 2010 2010 }
Early, John, et al. (See Jones, Thomas D., assignor.)						
Earnist, Charles W. (See Kane, Bart, assignor.)						
East-Coast Manufacturing Company of New Jersey. (See Lee, George S., assignor.)						
East, George W., Heltonville, Ind. Wrench	498,157	May 23	2829	708	63	1174
East Hampton Bell Company. (See Abell, Irvin H., assignor.)						
East, J. Frank. (See Rumble, Harry H., assignor.)						
East, William S., Lima, Ohio. Railway-crossing	499,455	June 13	1204	287	63	1616
Easthope, Frederick, et al. (See Hynes, Julius W., assignor.)						
Eastman, Adelbert L., Morristown, N. J., and W. H. Babcock, New York, N. Y. Means for keeping accounts	510,011	Dec. 5	294	66	65	1465
Eastman, Henry, Racine, Wis. Cultivator	496,727	May 2	530	141	63	715
Eastman, John I. (See Cowles, William, assignor.)						
Eastman Kodak Company. (See Brownell, Frank A., assignor.)						
Eastman Kodak Company. (See Foxlee, Edward W., assignor.)						
Eastman, Olaf. (See Stodder and Eastman.)						
Eastman, Olaf, Chicago, Ill. Water-filter	509,596	Nov. 28	2712	656	65	1312
Eastman, Sylvester, Providence, R. I. Eyeglasses	511,293	Dec. 19	2505	610	65	1903
Eastman, Sylvester, Providence, R. I., assignor to R. B. Fowler and O. C. C. Adams, Worcester, Mass. Eyeglasses	511,598	Dec. 26	3023	738	65	2010
Eastman, William E., Boston, Mass. Refrigerator-car	502,661	Aug. 1	694	166	64	693
Eastman, William E., Boston, Mass. Refrigerator-car	502,662	Aug. 1	696	166	64	693
Easton & Burnham. (See Bosworth, George P., assignor.)						
Easton & Burnham Machine Company. (See Hawes, Colin A., assignor.)						
Easton, Edgar, Kansas City, Mo. Gage for riveting-machines	500,869	July 4	533	138	64	97
Easton, Frederic W., Pawtucket, R. I. Front spooler-spindle	511,266	Dec. 19	2454	598	65	1893
Easton, Herbert P., New York, N. Y. Driving-rein	509,882	Dec. 5	62	15	65	1422
Easton, Thomas O., A. Watt, and J. Buchanan, Jr., Liverpool, England. Bag-filter	502,511	Aug. 1	442	{ 106 107 }	{ 64 64 }	{ 648 648 }
Eastwood, Benjamin. (See Birchall, Thomas, assignor.)						
Eastwood, Benjamin. (See Eastwood, James, assignor.)						
Eastwood, Benjamin. (See Goodline, George, assignor.)						
Eastwood, Benjamin. (See Risk, Robert J., assignor.)						
Eastwood, George, Norwich, England. Stereotyping	503,950	Aug. 29	2818	704	64	1146
Eastwood, James, assignor to B. Eastwood, Paterson, N. J. Shuttle box-operating mechanism for looms	509,615	Nov. 28	2747	663	65	1319
Eastwood, James N., Kansas City, Mo. Vehicle-spring	492,788	Mar. 7	26	7	62	1364
Eatherton, Henry H., Monticello, Ill. Flood-gate	500,870	July 4	534	138	64	97
Eaton, Aaron J., et al. (See Miller, Henry O., assignor.)						
Eaton, D. G., et al. (See Blair, John, assignor.)						
Eaton, Edgar F., Northford, Conn. Holdback for vehicles	497,093	May 9	1132	290	63	840
Eaton, Ethan W., Socorro, N. Mex. Ter. Attachment for type-writing machines	509,121	Nov. 21	1875	459	65	1142
Eaton, Howard F. (See Storey, Andrews, Cushing, and Eaton.)						
Eaton, James E., Utica, N. Y. Artificial board	491,092	Feb. 7	46	12	62	757

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Eaton, James L. (See Swegles, John, assignor.)						
Eaton & Prince Company. (See Allen, Henry A., assignor.)						
Eaton & Prince Company. (See Eaton, Thomas W., assignor.)						
Eaton, Solomon. (See Clarke, Edward H., assignor.)						
Eaton, Thomas T., <i>et al.</i> (See Carpenter, James H., assignor.)						
Eaton, Thomas W., assignor to Eaton & Prince Company, Chicago, Ill. Elevator brake mechanism	490,275	Jan. 24	2066	540	62	463
Eaton, Thomas W., assignor to Eaton & Prince Company, Chicago, Ill. Hydraulic elevator.	508,470	Nov. 14	799	197	65	921
Eaton, Thomas W., assignor to Eaton & Prince Company, Chicago, Ill. Controlling mechanism for elevators	508,510	Nov. 14	867	214	65	934
Eaton, William S., Sag Harbor, N. Y. Tool-handle	498,247	May 30	2993	746	63	1217
Eaton, William S., and E. A. Fargo, assignors to Fahys Watch Case Company, Sag Harbor, N. Y. Engraving-chuck	508,606	Nov. 14	1031	254	65	965
Eaves, William, Sheffield, England. Tube for tubular boilers	493,376	Mar. 14	956	246	62	1562
Ebbs, William F. (See Snyder, Christopher, assignor.)						
Eberhardt, Fred L. (See Eberhardt, Ulrich, F. L., and H. E.)						
Eberhardt, Fred L. (See Eberhardt, Ulrich, H. E., and F. L.)						
Eberhardt, Henry E. (See Eberhardt, Ulrich, F. L., and H. E.)						
Eberhardt, Henry E. (See Eberhardt, Ulrich, H. E., and F. L.)						
Eberhardt, Ulrich, Newark, N. J. Barrel-washer	493,762	Mar. 21	1602	407	62	1702
Eberhardt, Ulrich, Newark, N. J. Ram connection for shaping or slotting machines	506,678	Oct. 17	1495	375	65	310
Eberhardt, Ulrich, F. L., and H. E., Newark, N. J. Rotary cutter for making similar teeth	496,511	May 2	187	52	63	053
Eberhardt, Ulrich, H. E., and F. L., Newark, N. J. Gear-cutting machine	510,121	Dec. 5	468	106 107	65	1498
Eberhardt, Ulrich, H. E., and F. L., Newark, N. J. Gear-cutting and hobbing machine	510,122	Dec. 5	472	108	65	1499
Eberhart, David C., Shrewsbury, Pa. Pulpit or rostrum	506,588	Oct. 10	1356	340	65	272
Eberhart, Frank, New York, N. Y. Baking-oven	492,938	Mar. 7	263	67	62	1411
Eberhart, William A., Asbury Park, N. J. Supply and waste pipe	500,871	July 4	535	138 139 429 430	64	97
Eberle, Charles R., Philadelphia, Pa. Portable letter-press	503,280	Aug. 15	1739	429 430	64	913
Eberle, D. A. (See Raby, Richard, assignor.)						
Eberle, Gottlieb F., Philadelphia, Pa. Thill-coupling	491,774	Feb. 14	1161	290	62	995
Eberle, Martin, Columbus, Ohio. Flour-sieve	495,545	Apr. 18	1645	414	63	341
Ebert, Ira F., Oskaloosa, Iowa. Wire-stretcher	504,127	Aug. 29	3097	775	64	1198
Ebert, John S., Brooklyn, N. Y. Shutter-fastener	503,128	Aug. 15	1498	368	64	869
Ebert, Oscar H., Hamburg, Germany. Apparatus for night-commodes	495,546	Apr. 18	1646	414	63	342
Ebert, Wilson H. (See Kern, William H., assignor.)						
Eblesior, John M., New Albany, Ind. Tag-holder	510,849	Dec. 12	1740	429	65	1750
Ecaubert, Frederic, Brooklyn, N. Y. Means for forming spectacle-bow wire or other articles	492,466	May 30	3357	836 837	63	1283
Ecaubert, Frederic, Brooklyn, N. Y. Die for watchcase-backs	498,540	May 30	3487	863	63	1305
Ecaubert, Frederic, Brooklyn, N. Y. Die for making type-wheels	500,801	July 4	429	113	64	79
Eccles, Nicholas, Auburn, N. Y. Wrench	510,414	Dec. 12	945	227	65	1604
Eccleston, William H., Southbridge, Mass. Eyeglasses	502,879	Aug. 8	1075	265	64	779
Echo Telephone Company. (See Francis, John C., assignor.)						
Eck, August, Helena, Mont. Safety device for elevators	498,161	May 23	2836	710	63	1175
Eckart, Josef, Munich, Germany. Horseshoe	511,010	Dec. 19	2039	503 504	65	1815
Eckel, Charles E., Syracuse, N. Y. Plumber's tool	510,682	Dec. 12	1433	354	65	1693
Eckert, Amos, Gettysburg, Pa. Convertible furniture	490,952	Jan. 31	3171	812	62	095
Eckert, Henry F., San Francisco, Cal. Apparatus for preserving timoer	509,724	Nov. 28	2914	705	65	1349
Eckert, Thomas T., and S. Bergmann, assignors to Western Union Telegraph Company, New York, N. Y. Mold for the formation of type-wheels	498,248	May 30	2994	746	63	1217
Eckert, Thomas T., New York, N. Y., and G. B. Scott, Lakewood, N. J., assignors to Western Union Telegraph Company, New York, N. Y. Type-wheel	499,911	June 20	1952	474	63	1759
Eckert, Wesley, assignor of one-half to C. H. Freeman, Elk Point, S. D. Check-hook	495,627	Apr. 18	1778	447	63	364
Eckman, Jacob, Brooklyn, N. Y. Soap-press	504,206	Aug. 29	3236	807 808	64	1224
Eclipse Patent Nut Lock Washer Company. (See Schroeder, Frederick W., assignor.)						
Eclipse Wind-Engine Company. (See Ford, Henry W., assignor.)						
Eclipse Wind-Engine Company. (See Moore, Moses M., assignor.)						
Economic Manufacturing Company. (See Babcock, Sylvester P., assignor.)						
Economist Plow Company. (See Tower, Caleb E., assignor.)						
Economy Feed Water Heater Company. (See McDaniel, Charles W., assignor.)						
Eddy, Arthur J., <i>et al.</i> (See North, Alfred C., assignor.)						
Eddy, Charles R., Springfield, Mo. Windlass for lowering or raising street electric lamps	491,412	Feb. 7	580	146	62	859
Eddy, Daniel M., Stockton, Mo. Bridge	510,064	Dec. 5	378	84	65	1481
Eddy, George A. (See Nash and Eddy.)						
Eddy, George W., Bristol, assignor to P. & F. Corbin, New Britain, Conn. Saw-set	499,825	June 20	1810	440	63	1733
Eddy, George W., Waterford, N. Y., assignor to L. K. Eddy, Boston, Mass. Car-wheel	504,416	Sept. 5	168	44	64	1302
Eddy, Jerome, <i>et al.</i> (See North, Alfred C., assignor.)						
Eddy, Lyman K. (See Eddy, George W., assignor.)						
Eddy, Oscar H., Greenwich, N. Y. Stone-boat	508,169	Nov. 7	311	77	65	816
Eder, Alfred S., Des Moines, Iowa. Car-coupling	496,930	May 9	887	232	63	797
Edelheim, Carl. (See Osborne, John W., assignor.)						
Edgar, Ellis F., Woodbridge, N. J. Steam-boiler	498,381	May 30	3230	803	63	1259
Edgar, Ellis F., Woodbridge, N. J. Heating apparatus	500,223	June 27	2484	606	63	1864
Edgar, Ellis F., Woodbridge, N. J. Tubular boiler	505,036	Sept. 12	1201	309	64	1510
Edgar, John, Rochester, Minn. Whiffletree-center	499,217	June 13	790	187	63	1542
Edgar, Malcolm W., assignor of one-half to J. McGregor, Detroit, Mich. Railway-car	509,300	Nov. 21	2178	523 524	65	1199
Edgar, Stuart. (See Temple, Robert, assignor.)						
Edgar, William, Sanford, Fla. Molder's flask	494,469	Mar. 28	2759	692	62	1933
Edge, Isaiah J., Minneapolis, Minn. Fly-trap	499,722	June 20	1624	392	63	1703
Edge, James, assignor of one-half to S. H. Brooks, Gorton, England. Apparatus for grinding revolving flats of carding-engines	501,995	July 25	2322	581 582 583	64	468
Edge, William, Brooklyn, N. Y. Hollow sheet-metal ware	492,463	Feb. 28	2231	558	62	1241
Edge, William, Brooklyn, N. Y. Making spirally-corrugated sheet-metal bodies	496,601	May 2	324	89	63	678
Edge, William, Orange, N. J., and W. J. Fitzgerald, Brooklyn, N. Y. Coin-controlled dice-box	500,478	June 27	2858	704	63	1930
Edge, William C., Newark, N. J. Horseshoe	508,607	Nov. 14	1032	254	65	966
Edgerton, Charles W., Bristol, Conn. Hanging shelf	491,093	Feb. 7	47	12	62	757

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Edgerton, Herbert O. (See Tirrell, Jacob P., assignor.)						
Edgerton, Nathan H., Philadelphia, Pa. Secondary battery	491,878	Feb. 14	1321	327	62	1027
Edison Electric Light Company. (See Edison, Thomas A., assignor.)						
Edison Electric Light Company. (See Johnson, Edward H., assignor.)						
Edison General Electric Company. (See Ball, Henry P., assignor.)						
Edison General Electric Company. (See Gould, Frederick D., assignor.)						
Edison General Electric Company. (See Hutchinson, Joseph, assignor.)						
Edison General Electric Company. (See Kolben, Emil, assignor.)						
Edison General Electric Company. (See Lozier, Robert T., assignor.)						
Edison General Electric Company. (See Metzger, Amandus, assignor.)						
Edison General Electric Company. (See Ott and Kennelly, assignors.)						
Edison General Electric Company. (See Robb, James T., assignor.)						
Edison Phonograph Company. (See Edison, Thomas A., assignor.)						
Edison, Thomas A. (See Kennelly, Arthur E., assignor.)						
Edison, Thomas A., Menlo Park, N. J. Generating electricity	490,953	Jan. 31	3174	812	62	695
Edison, Thomas A., Menlo Park, N. J. System of electrical distribution	509,517	Nov. 28	2590	626	65	1289
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of carbon filaments for electric lamps	490,954	Jan. 31	3175		62	696
Edison, Thomas A., Llewellyn Park, N. J. Cut-out for incandescent electric lamps	491,992	Feb. 21	1490	372	62	1076
Edison, Thomas A., Llewellyn Park, N. J. Stop device	491,993	Feb. 21	1491	372	62	1077
Edison, Thomas A., Llewellyn Park, N. J. Electric locomotive	493,425	Mar. 14	1020	263 264	62	1575
Edison, Thomas A., Llewellyn Park, N. J. Apparatus for exhibiting photographs of moving objects	493,426	Mar. 14	1024	265	62	1575
Edison, Thomas A., Llewellyn Park, N. J. Transmission of power	493,858	Mar. 21	1750	446	62	1731
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	496,191	Apr. 25	2640	664	63	537
Edison, Thomas A., Llewellyn Park, N. J. Roller for crushing ore or other material	498,385	May 30	3241	801	63	1259
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	500,280	June 27	2557	624	63	1877
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	500,281	June 27	2558	625	63	1877
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	500,282	June 27	2559	625	63	1877
Edison, Thomas A., Llewellyn Park, N. J. Composition brick and making same	509,428	Nov. 28	2419		65	1254
Edison, Thomas A., Llewellyn Park, N. J. Electric railway	509,518	Nov. 28	2591	627	65	1289
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Coating conductors for incandescent lamps	492,150	Feb. 21	1740	433	62	1127
Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Speaking-telegraph	492,789	Mar. 7	27	7	62	1364
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Phonograph Company, of New Jersey. Phonograph	499,879	June 20	1902	462 463	63	1750
Edison, Thomas A., Llewellyn Park, N. J., assignor of one-half to E. P. King, Cleveland, W. D. Burgess, G. Herman, and M. Churchill, Toledo, Ohio. Making plate-glass	506,215	Oct. 10	716	180	65	147
Edison, Thomas A., Llewellyn Park, N. J., assignor of one-half to E. P. King, Cleveland, W. D. Burgess, G. Herman, and M. Churchill, Toledo, Ohio. Apparatus for making glass	506,216	Oct. 10	717	180	65	147
Edland, Joseph L., Brooklyn, assignor of one-half to J. M. Van Orden, New York, N. Y. Type-writing machine	489,072	Jan. 3	137	38, 39	62	34
Edmeston, Alfred. (See Bentz, Edmeston, and Grether.)						
Edmeston, Charles. (See Bentz, Edmeston, and Grether.)						
Edmister, Worden, assignor to J. Ast. Mount Vernon, Ohio. Churn	502,179	July 25	2629	663	64	526
Edmond, Emma. (See Judson and Edmond, assignors.)						
Edmond, Frank. (See Judson and Edmond.)						
Edmonds, Charles S., Bradford, Pa. Feed-regulator	506,773	Oct. 17	1662	417	65	341
Edmonds, Charles S., Colleville, assignor of one-half to D. W. Robertson and L. Senderker, Bradford, Pa. Feed-regulator	494,984	Apr. 4	713	181	63	136
Edmonds, Nelson D. (See Weatherwax, Leon J., assignor.)						
Edmonds & Son, Richard, et al. (See Schellhammer, Christian, assignor.)						
Edmondson, Joseph. (See Oulton and Edmondson.)						
Edmondson, Joseph, and J. Oulton, Bradford, England. Electric meter	496,728	May 2	532	141 142 143	63	715
Edmondson, William H., New Haven, Conn. Siphon-tank valve mechanism	506,217	Oct. 10	718	180	65	147
Edmunds, George C., Rochester, assignor of one-half to F. G. Ramsdell, Macedon Centre, N. Y. Whiffletree-hook	501,002	July 4	738	193	64	134
Edmunds, George C., Rochester, assignor of one-half to F. G. Ramsdell, Macedon Centre, N. Y. Holdback	501,003	July 4	738	193	64	134
Edmunds, Henry, Jr., London, England, assignor of nine-tenths to A. Sechrist, Denver, Colo. Electric-lighting system	495,932	Apr. 18	2253	568	63	449
Edmunds, John, assignor to Boston Manufacturing Company, Waltham, Mass. Pulley for feeding cloth	494,131	Mar. 28	2226	567	62	1835
Edmunds, William H., New York, N. Y. Insulator-clip	491,208	Feb. 7	238	60	62	793
Edsall, William H., Brooklyn, N. Y. Lamp	502,880	Aug. 8	1076	265	64	779
Edsall, William H., and H. C. H. Walsh, Brooklyn, assignors to H. L. Judd & Company, New York, N. Y. Lamp-burner gallery	502,284	Aug. 1	32	7	64	572
Edson, Jacob, assignor to Edson Manufacturing Company, Boston, Mass. Street-sweeper	490,185	Jan. 17	1904	495 496	62	420
Edson, Jacob, Boston, assignor of one-half to E. A. Jacobs, Arlington, Mass. Branding device	508,375	Nov. 7	648	158 159	65	878
Edson Manufacturing Company. (See Edson, Jacob, assignor.)						
Edward Miller & Company. (See Homan, William C., assignor.)						
Edward Miller & Company. (See Williams, Frank T., assignor.)						
Edward P. Allis Company. (See Clark, Myron W., assignor.)						
Edward P. Allis Company. (See Gray, William D., assignor.)						
Edward P. Allis Company. (See Hinkley, Hanson, and Trout, assignors.)						
Edward P. Allis Company. (See Shaw, Solomon, assignor.)						
Edwards, Albert J., Athens, Ga. Car-coupling	489,376	Jan. 3	600	162	62	129
Edwards, Charles H., Alta, Iowa. Automatic band-cutter and feeder	504,715	Sept. 12	659	167	64	1406
Edwards, Cora S., Centropolis, Mo. Toy	500,567	July 4	48	14	64	10
Edwards, Daniel, Morriston, England. Apparatus for the manufacture of tin-plate	495,696	Apr. 18	1887	473 474 475	63	382
Edwards, Edgar A., Cincinnati, Ohio. Electric automatic steam-governor	504,492	Sept. 5	300	76, 77	64	1326
Edwards, Edgar A., Cincinnati, Ohio. Steam-motor	504,493	Sept. 5	304	77	64	1326
Edwards, Edgar A., Cincinnati, Ohio. Steam-motor	505,350	Sept. 19	1702	439 440	64	1617
Edwards, Edgar A., Cincinnati, Ohio. Electric headlight	505,351	Sept. 19	1705	440	64	1617

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Edwards, Edward W., deceased; M. A. Edwards, San Francisco, Cal., administratrix. Turntable	510,592	Dec. 12	1274	310	65	1663
Edwards, Edward W., deceased; M. A. Edwards, San Francisco, Cal., administratrix. Signal for cable roads	510,593	Dec. 12	1276	310	65	1663
Edwards, Evan A., Toledo, Ohio. Oil-stove	492,718	Feb. 28	2640	654	62	1324
Edwards, Evan A., Toledo, Ohio. Hydrocarbon-gas generator and burner	495,726	Apr. 18	1945	489	63	392
Edwards, Evan A., Chicago, Ill. Atmospheric heater	509,023	Nov. 21	1700	420 421	65	1108
Edwards, George, Berkeley, Cal. Heating attachment for gas-burners	494,470	Mar. 28	2760	692	62	1933
Edwards, George Z. (See Williams and Edwards.)						
Edwards, Gwilym. (See Cronin and Edwards.)						
Edwards, Gwilym, Edwardsville, and R. Blackledge, Larksville, Pa. Covering for pipes	493,489	Mar. 14	1133	290	62	1594
Edwards, Herbert S., Titusville, Pa. Machinery for pumping oil-wells	489,073	Jan. 3	138	39	62	34
Edwards, John E., Toronto, Canada. School-bag	511,690	Dec. 26	3166	774	65	2036
Edwards, Margaret A., administratrix. (See Edwards, Edward W.)						
Edwards, Robert. (See Hornsby, Edwards, and Gibbon.)						
Edwards, Thomas H., assignor of one-half to D. Klos, Latrobe, Cal. Vehicle-axle gage	490,804	Jan. 31	2927	751	62	647
Edwards, Victor E., assignor to Morgan Construction Company, Worcester, Mass. Shears for cutting rods while in motion	505,512	Sept. 26	1993	511	64	1683
Edwards, William C., Holyoke, Mass. Apparatus for heating size for surfacing paper	498,775	June 6	39	9	63	1395
Edwards, William F. (See Church, Frank S., assignor.)						
Edwards, William J., assignor to Union Manufacturing and Plating Company, Chicago, Ill. Velocipede-saddle	491,162	Feb. 7	163	42	62	779
Edwards, William S., Charleston, W. Va. Newspaper-file	489,074	Jan. 3	139	39	62	34
Eframson, Carl, Nicollet, Minn. Combined cane and seat	489,294	Jan. 3	476	132	62	104
Egan, Charles E., Chicago, Ill. Fire-alarm	496,269	May 9	777	206	63	777
Egan, Charles E., and F. M. Bailey, Chicago, Ill., said Egan assignor to said Bailey. Temperature-indicator	504,335	Sept. 5	36	11	64	1278
Egbert, William H., assignor to Turnbull & Company, Newark, N. J. Hearse	494,712	Apr. 4	293	74	63	59
Egberts, Heinrich, Bremen, Germany. Holder for umbrellas, canes, &c	499,974	June 20	2040	494	63	1775
Ege, Alexander H. (See Richardson, John T., assignor.)						
Egerton, Charles C., Baltimore, assignor to J. G. Rouse, Bel Air, Md. Folding basket	492,379	Feb. 21	2091	522	62	1198
EGge, Frederick, Bridgeport, Conn. Machine for making chain	507,263	Oct. 21	2502	616 617	65	506
EGge, Frederick, assignor to Smith & EGge Manufacturing Company, Bridgeport, Conn. Padlock	490,428	Jan. 24	2305	598	62	510
Egger, Ernst, assignor of one-third to A. Naumburg, New York, N. Y. Electric cut-out	500,229	June 27	2486	607	63	1865
Eggers, William, Allegheny, and S. Mueller, Sharpsburg, Pa. Bottle-packing device	511,130	Dec. 19	2232	547	65	1853
Egert, John, <i>et al.</i> (See Bryan, John, assignor.)						
Eglin, William, assignor of one-half to J. L. Hill, Philadelphia, Pa. Coin-controlled lock	493,209	Mar. 7	675	172 173	62	1491
Eglin, William, assignor of one-half to J. L. Hill, Philadelphia, Pa. Patrol-box	511,599	Dec. 26	3025	738	65	2010
Egner, Frederic, St. Louis, Mo. Protector for pipes from powerful electric currents	505,822	Oct. 3	32	9	65	9
Egyptian Lacquer Manufacturing Company. (See Paget, Leonard, assignor.)						
Ehlen, Charles, assignor of one-half to N. Biedinger, Cincinnati, Ohio. Shipping-wrapper for vehicles	494,713	Apr. 4	294	74	63	59
Ehlen, Frank, <i>et al.</i> (See Shaffer, Richard M., assignor.)						
Ehlers, William H., <i>et al.</i> (See Wilson, William C., assignor.)						
Ehlert, Charles O., New York, N. Y. Conduit electric railway	505,081	Sept. 12	1282	331	64	1526
Ehlis, Jules. (See Oudin, Marie P., assignor.)						
Ehman, Benedict, Brownwood, Tex. Composition of matter for removing grease, &c	491,413	Feb. 7	582		62	859
Ehrcke, Johannes, Badresch, near Oertzenhof, Germany. Window	508,924	Nov. 21	1553	380	65	1072
Ehrenberg, Robert, <i>et al.</i> (See Allan, John W., assignor.)						
Ehrgott, Louis E., Mendon, Ill. Carpet-stretcher	496,777	May 2	613	164	63	729
Ehrhardt, Gustave, Pittsburg, Pa. Lathe-dog	497,517	May 16	1838	463	63	980
Ehrhardt, Gustave, Pittsburg, Pa. Cold-sawing machine	500,193	June 27	2427	592	63	1854
Ehrhardt, Gustave, Pittsburg, Pa. Metal-sawing machine	500,194	June 27	2429	592	63	1854
Ehrhardt, Heinrich, Dusseldorf, Germany. Process of and apparatus for manufacturing tubular bodies	495,245	Apr. 11	1175	294 295	63	236
Ehrhardt, Heinrich, Dusseldorf, Germany. Machine for grinding saws	510,165	Dec. 5	541	125	65	1512
Ehrlich, Leo, assignor to St. Louis Register Company, St. Louis, Mo. Street-car register	490,342	Jan. 24	2173	567 8	62	486
Ehrlich, Leo, St. Louis, Mo., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Electrical cash register, recorder, and indicator	502,287	Aug. 1	35	9 10 11	64	573
Ehrlich, Leo, St. Louis, Mo., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash-register	502,353	Aug. 1	174	40, 41	64	598
Ehrlich, Leo, St. Louis, Mo., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Blind for cash registers and indicators	504,470	Sept. 5	258	67	64	1318
Ehrlich, Leo, St. Louis, Mo., assignor to National Cash Register Company, Dayton, Ohio. Cash-register	506,167	Oct. 3	582	151 152 153	65	112
Ehrlich, Leo, St. Louis, Mo., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	507,313	Oct. 24	2592	637 638 639	65	524
Ehrlich, Leo, St. Louis, Mo., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash-register	509,656	Nov. 28	2804	675 676 677	65	1330
Ehrlich, Leo, St. Louis, Mo., assignor to National Cash Register Company, Dayton, Ohio. Cash register, indicator, and check-printer	509,657	Nov. 28	2807	677 678 679	65	1330
Ehrlich, Leo, St. Louis, Mo., and J. B. Benton, New York, N. Y., assignors, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash register, indicator, and check-printer	511,743	Dec. 26	3249	797 798 799	65	2051
Eichberg, William N., Chicago, Ill. Insulator-bracket	492,394	Feb. 28	2118	528	62	1217
Eichbaum, Henry, Mount Vernon, N. Y., assignor of one-half to G. Maitland, Detroit, Mich. Valve-controlling mechanism for motors	498,970	June 6	394	93	63	1461
Eichbaum, Henry, Mount Vernon, N. Y., assignor of one-half to G. Maitland, Detroit, Mich. Elevator	498,971	June 6	396	93	63	1461
Eichelberger, John T., St. Louis, Mo. Step-ladder	497,712	May 16	2138	534 535	63	1035
Eichenauer, Fredrick W., St. Paul, Minn. Machine for cutting miters	496,643	May 2	401	109	63	692
Eichenhofer, Frederick. (See Dahmer, August G., assignor.)						
Eicher, Joseph. (See Faisant and Eicher.)						
Eicher, Thomas C., Scottdale, Pa. Valve for steam-pumps	490,140	Jan. 17	1830	478	62	406

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Eicher, Thomas C., Scottsdale, Pa. Steam-pump	490,141	Jan. 17	1833	479	62	407
Eichhorn, Martin. (See McCurdy, John R., assignor.)						
Eickemeyer, Rudolf, Yonkers, N. Y. Dynamo-electric machine	510,472	Dec. 12	1045	{ 250 251 }	{ 65 65 }	1622
Eicken, Richard de, Paris, France. Engine-governor	490,343	Jan. 24	2179	568	62	487
Eicken, Richard de, Paris, France. Horseshoe	502,354	Aug. 1	177	41	64	598
Eickershoff, John H., Cincinnati, Ohio. Filtering and sterilizing apparatus	507,264	Oct. 24	2505	617	65	507
Eickershoff, John H., assignor to United States Engine Company, Cincinnati, Ohio. Steam-engine	501,223	July 11	1098	{ 279 280 }	{ 64 64 }	216
Eickershoff, John H., assignor to United States Engine Company, Cincinnati, Ohio. Engine	501,224	July 11	1101	280	64	216
Eilers, Hio P., Cleveland, Ohio. Cushioned clutch	505,037	Sept. 12	1202	309	64	1511
Eils, Bette E. J. (See Poulson and Eils.)						
Eimers, William H. (See Hansen, Julius W., assignor.)						
Einfeldt, Emil. (See French and Einfeldt.)						
Einfeldt, Emil, Davenport, Iowa. Wheel-cultivator	509,024	Nov. 21	1703	421	65	1108
Einfeldt, Emil, Davenport, Iowa, assignor to Eagle Manufacturing Company, of Iowa. Hand-lever, &c.	497,641	May 16	2028	505	63	1015
Einsele, George N., Crete, Ill. Balance-staff protector for watches	490,708	Jan. 31	2776	713	62	618
Einsele, George N., and G. W. De Grasse, Crete, Ill. Automatic railway-switch	492,790	Mar. 7	28	7	62	1364
Einstein, James, Munich, Germany, assignor to P. Lemaire, New York, N. Y. Electric-arc lamp	497,494	May 16	1808	{ 454 455 }	{ 63 63 }	975
Eisele, Charles, Newark, N. J. Pliers, nippers, or similar tool	505,217	Sept. 19	1494	389	64	1577
Eisele, Otto, Karlsruhe, assignor to M. Jaeger, Darmstadt, Germany. Casement-holder	509,853	Nov. 28	3132	756	65	1392
Eiseman, Kaiser & Co. (See Kaiser, Joseph M., assignor.)						
Eiseman, Walter S., assignor to one-half to C. D. Kelly, St. Louis, Mo. Combined ticket punch and stamp	508,821	Nov. 14	1343	332	65	1026
Eisenbrandt, Christian H., Baltimore, Md. Hammer for anteharps	490,407	Jan. 24	2273	590	62	505
Eisengart, William L., Chicago, Ill., assignor of two-fifths to R. J. Fisher, Fort Wayne, Ind. Top for sheet-metal cans	497,976	May 23	2562	639	63	1126
Eisenhardt, George F., Philadelphia, Pa. Machine for printing oil-cloth	509,569	Nov. 28	2674	647	65	1305
Eisenhardt, George F., assignor to Dienelt & Eisenhardt, Philadelphia, Pa. Oil-cloth-printing machine	492,902	Mar. 7	206	50, 51	62	1399
Eisenhart, Charles A., York, Pa. Insulator pin and bracket machine	505,309	Sept. 19	1648	426	64	1606
Eisenhart, Charles A., York, Pa. Tip for wagon-shafts	506,309	Oct. 10	880	217	65	179
Eisenhart, Edward H., New York, N. Y. Machine for bunching match-sticks	496,778	May 2	614	164	63	729
Eisenhart, Edward H., New York, N. Y. Match-bunching machine	500,872	July 4	537	139	64	97
Eisenhart, Edward H., New York, N. Y. Machine for cutting and bunching match-sticks	508,293	Nov. 7	510	124	65	853
Eisenhart, Henry W., assignor to A. B. Farquhar, York, Pa. Spring-tooth harrow	490,226	Jan. 17	1971	517	62	433
Eisenhart, Henry W., assignor to A. B. Farquhar, York, Pa. Holder for spring harrow-teeth	492,349	Feb. 21	2046	510	62	1190
Eisenhart, Henry W., assignor to A. B. Farquhar, York, Pa. Holder for spring harrow teeth	495,317	Apr. 11	1279	320	63	255
Eisenhart, Henry W., assignor to A. B. Farquhar, York, Pa. Cultivator	495,404	Apr. 11	1415	356	63	279
Eisenhart, Henry W., S. S. Morton, and H. B. Waltman, assignors to A. B. Farquhar, York, Pa. Sawmill-networks	495,405	Apr. 11	1417	{ 356 357 }	{ 63 63 }	280
Eisenmann, Richard, Berlin, Germany. Musical instrument	496,402	May 2	21	6	63	623
Eisert, Hermann. (See Adams and Eisert.)						
Eisler, Anthony. (See Olmesdahl, August, assignor.)						
Eisner, Gustav, Neustadt-on-the-Hardt, Germany. Sorting or sifting apparatus	511,517	Dec. 26	2883	701	65	1985
Ekholm, William C., Joliet, Ill. Electric belt	504,336	Sept. 5	38	11	64	1278
Eklund, Gustaf, Davenport, Iowa. Car-coupling	491,474	Feb. 7	680	171	62	878
Ekstrom, Axel, Lynn, Mass., assignor to General Electric Company, of New York. Brush-supporter for dynamo-electric machines	494,739	Apr. 4	337	85	63	66
Ekstrom, Axel, Lynn, Mass., assignor to General Electric Company, of New York. Electrical transformer	508,688	Nov. 14	1147	283	65	990
Ekström, Axel, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Socket for incandescent lamps	501,205	July 11	1072	272	64	211
Elam, William E., assignor of two-thirds to R. S. Thomas and S. W. Hardwick, Dallas, Tex. Seed-cotton feeder	508,376	Nov. 7	649	159	65	878
Elam, William E., and R. S. Thomas, Dallas, Tex. Cotton-gin brush	493,691	Mar. 21	1482	379	62	1679
Eldredge, Alonzo W. (See Hobart and Eldredge.)						
Eldredge, Clyde T., Kirkwood, Ohio. Cultivator	500,873	July 4	540	140	64	98
Eldredge, Marcellus, et al. (See Hayes, John W., assignor.)						
Eldredge, Rolfe, New York, N. Y. Dynamo-electric machine	504,914	Sept. 12	996	{ 257 258 }	{ 64 64 }	1473
Eldridge, Edward E., assignor of one-half to O. D. Standcliff and J. B. Campbell, North East, Pa. Boiler-cleaning apparatus	495,457	Apr. 11	1502	277	63	295
Eldridge, Griffith M., Philadelphia, Pa. Ore washer and concentrator	502,663	Aug. 1	697	167	64	696
Eldridge, Hilbiary. (See Martyr and Eldridge.)						
Eldridge, Willard C., Chicago, Ill. Inkstand and attachments	500,480	Oct. 10	1199	298	65	241
Electric Brand Company. (See Fitzmaurice, James S., assignor.)						
Electric Car Company of America. (See Hunter, Rudolph M., assignor.)						
Electric Cutter Company. (See Thyll, Arthur K., assignor.)						
Electric Cutting Machine Company. (See Caldwell, Henry A., assignor.)						
Electric Cutting Machine Company. (See Salisbury, Wilber S., assignor.)						
Electric Disinfectant Company. (See Crosby, George G., assignor.)						
Electric Engineering and Supply Company. (See Hinds, Jesse L., assignor.)						
Electric Gas Lighting Company. (See Lane, Thomas W., assignor.)						
Electric Gas Lighting Company. (See Lane and Lee, assignors.)						
Electric Gold and Silver Chlorination Company. (See Wiswell, John F., assignor.)						
Electric Motor Company. (See Merritt, Frank W., assignor.)						
Electric Motor Company. (See Roe, Arthur R., assignor.)						
Electric Pneumatic Transit Company. (See Clay, Henry, assignor.)						
Electric Selector and Signal Company. (See Bogart, Samuel S., assignor.)						
Electric Selector and Signal Company. (See Leonard, Michael B., assignor.)						
Electric Selector and Signal Company. (See Mackie, Robb, assignor.)						
Electric Storage Battery Company. (See Lloyd, Henry H., assignor.)						
Electrical Forging Company. (See Burton, George D., assignor.)						
Electrical Forging Company. (See Burton and Angell, assignors.)						
Electrical Specialty Company. (See Woltmann and Triggs, assignors.)						
Electro-Automatic Appliance Company. (See Taylor, Frederick D., assignor.)						
Electro-Dynamic Company. (See Croasdale, Edgar, assignor.)						
Electro-Dynamic Company of Philadelphia. (See Bedell, Charles H., assignor.)						
Electro-Novelty Company. (See Connolly, William A., assignor.)						
Elektron Manufacturing Company. (See Perret, Frank A., assignor.)						
Elevator Safety Manufacturing Company. (See Reynolds, Charles J., assignor.)						
Eley, Philip, Bayonne, N. J. Hydrant for water-mains	507,651	Oct. 31	3189	781	65	650

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Eley, Philip, Bayonne, N. J. Machine for tapping mains under pressure	511,327	Dec. 26	2558	624	65	1925
Elfering, John H., Milford, Conn. Annunciato	496,192	Apr. 25	2642	664	63	358
Elford, Alfred T., San Francisco, Cal. Ship's propeller	495,727	Apr. 18	1946	490	63	392
Elgin National Watch Company. (See Buchanan, David R., assignor.)						
Elgin National Watch Company. (See Corliss, Charles P., assignor.)						
Elgin National Watch Company. (See Cutter, John M., assignor.)						
Elgin National Watch Company. (See Hunter, George E., assignor.)						
Elgin Wind Power and Pump Company. (See Snow, Gilbert B., assignor.)						
Elieson, Chaimsonovitz P., New York, N. Y., assignor of one-half to F. A. Pellas, Oggebbio, Italy. Separator for battery elements	494,849	Apr. 4	524	132	63	102
Elieson, Chaimsonovitz P., New York, N. Y., assignor of one-half to F. A. Pellas, Oggebbio, Italy. Fan-motor	508,481	Oct. 10	1202	298	65	241
Elkins, Eugene W. (See Hathaway and Elkins.)						
Elkins, William H., Cambridge, Mass. Regulator for dynamos	505,914	Oct. 3	178	45	65	35
Elkins, William H., Cambridge, Mass. Regulator for dynamos	506,482	Oct. 10	1203	299	65	242
Elkins, William H., Cambridge, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Regulator for dynamo-electric machines	501,059	July 11	830	216	64	166
Elkins, William H., Cambridge, Mass., assignor to General Electric Company, of New York. Regulator	502,285	Aug. 1	33	8	64	572
Ellar, Caroline. (See Ellar, Henry, assignor.)						
Ellar, Henry, assignor to C. Ellar, Clarksdale, Mo. Machine for making wire-and-slat fencing	509,725	Nov. 28	2916	705	65	1350
Ellicott, Charles E. and F., Lake Roland, Md. Hydraulic dredger	503,655	Aug. 22	2358	589	64	1039
Ellicott, Francis. (See Ellicott, Charles E. and F.)						
Ellington, Alvey M., Almira, assignor of one-half to T. N. Westbrook, Atlanta, Tex. Plow-fender	489,941	Jan. 17	1494	390	62	338
Ellington, George W., et al. (See Kernodle, James A., assignor.)						
Elliott, Henry, St. Louis, Mo. Railway-crossing	500,706	July 4	277	75	64	52
Elliott, Henry C. (See Hardie, Robert, assignor.)						
Elliott, Abraham, Rochester, assignor of one-half to Excelsior Elevator Guard and Hatch Cover Company, New York, N. Y. Elevator-guard	490,785	Jan. 31	2900	745	62	641
Elliott, Abraham, Rochester, assignor to Excelsior Elevator Guard and Hatch Cover Company, New York, N. Y. Elevator-guard	492,350	Feb. 21	2047	510	62	1190
Elliott, Alvin D., Lawrence, assignor to J. W. Brooks, trustee, Petersham, Mass. Heeling-machine	510,012	Dec. 5	295	66, 67	65	1466
Elliott, Charles B., assignor to Revere Rubber Company, Boston, Mass. Trolley-wire hanger	499,662	June 13	1529	368	63	1671
Elliott, Edwin E., Litchfield, Ill. Lamp-socket	491,268	Feb. 7	328	83	62	811
Elliott, George, New York, N. Y. Bath	500,479	June 27	2860	704	63	1931
Elliott, Henry N., E. L. Bemis, and E. L. Ward, Los Angeles, Cal. Garment-supporter	495,154	Apr. 11	1025	255	63	208
Elliott, James A. R., Kansas City, Mo. Shot or powder gage and shell-loader	506,425	Oct. 10	1096	272	65	221
Elliott, James J., London, England. Chiming-clock	496,870	May 9	778	206	63	778
Elliott, John, Latour, Mo. Earth-grader	494,805	Apr. 4	448	{ 111 112 }	63	87
Elliott, Manning and A. J. Crigler, Monroe City, Mo. Churn	502,286	Aug. 1	34	8	64	572
Elliott, Richard, Mount Vernon, Ohio. Bag-holder	495,728	Apr. 18	1947	{ 368 369 }	63	392
Elliott, Robert C., Prairie Creek, Ind. Picture-exhibitor	503,129	Aug. 15	1499	{ 490 369 }	64	869
Elliott, Robert H., Birmingham, Ala. Closed-conduit system for electric railways	510,850	Dec. 12	1741	430	65	1750
Elliott, Sterling, Newton, Mass. Pneumatic tire	489,295	Jan. 3	478	132	62	104
Elliott, Sterling, Newton, Mass. Shield or covering for drive-chains	491,570	Feb. 14	1113	{ 281 282 }	62	987
Elliott, Sterling, Newton, Mass. Sulky	494,113	Mar. 21	2190	560	62	1814
Elliott, Sterling, Newton, Mass. Sulky	498,709	May 30	3783	933	63	1355
Elliott, Sterling, Newton, assignor to Hickory Wheel Company, Watertown, Mass. Support for velocipedes	491,475	Feb. 7	681	171	62	879
Elliott, Sterling, Newton, assignor to Hickory Wheel Company, Watertown, Mass. Ball-bearing	491,938	Feb. 14	1411	352	62	1046
Elliott, Sterling, Newton, assignor to Hickory Wheel Company, South Framingham, Mass. Wheel-support for vehicles	507,068	Oct. 17	2139	531	65	428
Elliott, Sterling, Newton, assignor to Hickory Wheel Company, South Framingham, Mass. Bicycle	509,429	Nov. 28	2420	586	65	1254
Elliott, W. K., et al. (See Smith, George, assignor.)						
Elliott, William G. (See Painton, Richard B., assignor.)						
Elliott, William S., and William S., Jr., Washington, D. C. Cutting apparatus for mowers and reapers	491,340	Feb. 7	464	120	62	836
Ellis, Charles B. (See Schanck and Ellis.)						
Ellis, Charles L., San Francisco, Cal. Educational cabinet	498,636	May 30	3648	903	63	1333
Ellis, Edgar E., assignor of two-thirds to E. R. Andrews and A. L. Lehnkering, Rochester, N. Y. Magazine-camera	500,707	July 4	278	75, 76	64	52
Ellis, Edward E., Washington, D. C. Bottle and stopper therefor	511,600	Dec. 26	3027	738	65	2011
Ellis, Elias C., Colorado Springs, Colo. Weather-strip	499,629	June 13	1480	355	63	1664
Ellis, Ferrand F., Oneida, assignor to Oneida Community, Limited, Kenwood, N. Y. Machine for making wire rings	500,058	June 20	2173	{ 528 529 530 }	63	1798
Ellis, Fred E., Melrose, Mass. Floor-frame for cars	497,776	May 23	2250	564	63	1071
Ellis, Fred E., Melrose, Mass. Draw-gear for cars	497,777	May 23	2251	564	63	1072
Ellis, Frederick. (See Currier and Ellis.)						
Ellis, John, Lynn, Mass. Liquid-filter	507,493	Oct. 31	3568	878	65	721
Ellis, John D., Sheffield, England. Boiler-furnace	501,709	July 18	1877	467	64	372
Ellis, John S. (See Barnes, John S., assignor.)						
Ellis, John T., assignor to J. Ruse, Toronto, Canada, and J. M. Cullis, Buffalo, N. Y. Smoke-consumer	491,775	Feb. 14	1161	290	62	996
Ellis, Seele H., Waverly, N. Y., assignor to G. S. and F. M. Scofield, Greenwich, Conn. Inflator for pneumatic tires	490,620	Jan. 24	2609	672	62	571
Ellis, Thomas, Rochester, Mass. Steering apparatus	493,692	Mar. 21	1483	380	62	1679
Ellis, William G. (See Leitch, James N., assignor.)						
Ellison, Alonzo, and W. A. Wright, Detroit, Mich. Combined match-lighter and cigar-cutter	510,778	Dec. 12	1590	396	65	1722
Ellison, Joseph, Denver, Colo. Amalgamator	497,267	May 9	1399	354	63	888
Ellison, Joseph C. (See Sweet, Thomas, assignor.)						
Ellison, William T., Jr., Salford, and J. Unsworth, Jr., assignors to G. Thomas, Manchester, England. Turnstile	501,680	July 18	1827	455	64	363
Ellithorp, Orren S., Chicago, Ill. Draft-equalizer	507,113	Oct. 24	2225	549	65	458

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Ellithorpe, A. B., <i>et al.</i> (See Hultgren, William H., assignor.)						
Ellithorpe, Albert B. (See Hultgren, William H., assignor.)						
Ells, George F., Binghamton, N. Y. Water bandage	500,568	July 4	49	15	64	11
Ellsworth, Edwin R., assignor to C. O. Douden, Brooklyn, N. Y. Process of and apparatus for the manufacture of gas	506,168	Oct. 3	601	153	65	116
Ellsworth, Harry B., Excelsior, Wis. Sleigh	510,123	Dec. 5	477	109	65	1500
Ellsworth, John J., Alma, Mich., assignor to E. Ash, Baltimore, Md. Cutter-bar for mowing and reaping machines	489,433	Jan. 3	689	185	62	148
Ellsworth, Marcus E., Hudson, Ohio. Apparatus for operating car-brakes	489,122	Jan. 3	218	58, 59	62	50
Ellsworth, Marcus E., Hudson, Ohio. Car-brake	491,094	Feb. 7	48	13	62	757
Ellsworth, Prosper H. (See Calhoun and Beam, assignors.)						
Ellsworth, Rufus G., Northcott, Kans. Farm-gate	489,469	Jan. 10	759	201	62	175
Ellwood, Abram. (See Macphail, James, assignor.)						
Ellwood, Isaac L., De Kalb, Ill. Metallic fencing	502,512	Aug. 1	445	107	64	648
Elmer, Dion T., Monroe, Mich. Photograph-holder	499,975	June 20	2041	494	63	1775
Elmore, Alexander S., Leeds, assignor to Elmore's American and Canadian Patent Copper Depositing Company, Limited, London, England. Apparatus for the electrolytic manufacture of tubes	503,076	Aug. 8	1393	344	64	837
Elmore, Benton, Biggs, Cal. Pump	496,683	May 2	464	125	63	704
Elmore, Thomas M. (See Newman, Warden, and Stempel, assignors.)						
Elmore's American and Canadian Patent Copper Depositing Company. (See Elmore, Alexander S., assignor.)						
Elmorr, Alonzo B., Magnolia, Ark. Dental bracket	504,828	Sept. 12	857	220	64	1444
Elrod, Walter, <i>et al.</i> (See Miller, Daniel F., assignor.)						
Elsbree, Martin V., Cherry Creek, N. Y. Churn	507,677	Oct. 31	3225	789	65	657
Elten, Alfred P. (See Krastin, August, assignor.)						
Elterich, Gotthold O. (See Elterich, Otto P. and G. O.)						
Elterich, Otto P. and G. O., Maywood, N. J. Shoe	503,588	Aug. 22	2244	562	64	1020
Elwell, Howard P. (See Hunt, David F., assignor.)						
Elwood, Jonathan, Sanger, Cal. Furniture-caster	490,016	Jan. 17	1629	424	62	364
Ely, Caroline S., administratrix. (See Ely, Charles R.)						
Ely, Charles R., deceased; C. S. Ely, Champlain, N. Y., administratrix. Washing compound	493,693	Mar. 21	1484		62	1679
Ely, Edward O., Boston, Mass., assignor to Heaton-Peninsular Button Fastener Company, Providence, R. I. Button-setting machine	494,740	Apr. 4	338	85	63	67
Ely, Theodore J., Girard, Pa. Handle for crosscut-saws	493,823	Mar. 21	1701	433	62	1721
Ely, William, assignor of one-half to W. S. Johnson and H. Wolcott, Providence, R. I. Whistle	504,716	Sept. 12	661	168	64	1407
Emans, Theodore F., Mendon, Ohio. Harrow	507,894	Oct. 31	3569	879	65	721
Embalmer's Supply Company. (See Huncke, Max, assignor.)						
Embree, Pearson, West Chester, Pa. Butter-worker	492,325	Feb. 21	2004	499	62	1183
Embrey, Leonard B. (See Sessions and Embrey.)						
Emde, Edward C., Tacoma, Wash. Steadying device for portable engines	469,795	Jan. 10	1244	326	62	273
Emde, Edward C., Tacoma, Wash. Stilt	509,726	Nov. 28	2917	706	65	1350
Emerick, George S., Philadelphia, Pa. Pulverizing-machine	506,364	Oct. 10	980	243	65	198
Emerson, Charles M. (See Emerson, James E. and C. M.)						
Emerson, Charles M., assignor to Phenix Manufacturing Company, Eau Claire, Wis. Band-saw-blazing clamp	495,881	Apr. 18	2185	518	63	436
Emerson, Don C., Peoria, Ill. Tongue-support	503,205	Aug. 15	1619	397	64	892
Emerson, Edwin J., Jersey City, N. J. Track-scraper	498,249	May 30	2996	747	63	1217
Emerson Electric Manufacturing Company. (See Weston, Alexander W., assignor.)						
Emerson, James E., Beaver Falls, Pa. Insertible-toothed saw	495,729	Apr. 18	1948	490	63	393
Emerson, James E., Beaver Falls, Pa., and C. M. Emerson, Bay City, Mich. Band-saw mill	499,162	June 6	701	168	63	1512
Emerson, Talcott & Co. (See Jones, James H., assignor.)						
Emerson, Talcott & Co. (See Traphagen, William H., assignor.)						
Emery, Abram D., Taunton, Mass. Double tension device for looms	503,456	Aug. 15	2013	499 } 500 }	64	961
Emery, Abram D., Taunton, Mass. Lay-driving mechanism for vertical looms	503,457	Aug. 15	2015	500	64	962
Emery, Abram D., Taunton, Mass. Take-up mechanism for looms	503,458	Aug. 15	2017	501	64	962
Emery, Abram D., Taunton, Mass. Picker for looms	503,459	Aug. 15	2019	501	64	962
Emery, Abram D., Taunton, Mass. Shedding mechanism for looms	503,460	Aug. 15	2020	501 } 502 } 503 }	64	962
Emery, Abram D., Taunton, Mass. Stopping mechanism for looms	503,461	Aug. 15	2024	503 } 504 }	64	962
Emery, Abram D., Taunton, Mass. Let-off mechanism for looms	503,462	Aug. 15	2027	504 } 505 }	64	963
Emery, Abram D., Taunton, Mass. Fluff-catcher for vertical looms	503,463	Aug. 15	2030	505	61	964
Emery, Abram D., Taunton, Mass. Picker for looms	503,464	Aug. 15	2031	505	64	964
Emery, Abram D., Taunton, Mass. Race-rail for double-shed vertical looms	503,465	Aug. 15	2033	506	64	964
Emery, Abram D., Taunton, Mass. Weft stop mechanism for looms	503,466	Aug. 15	2034	506	64	964
Emery, Abram D., Taunton, Mass. Loom	503,467	Aug. 15	2036	507	64	965
Emery, Abram D., Taunton, Mass. Let-off mechanism for looms	503,468	Aug. 15	2039	508	64	965
Emery, Abram D., Taunton, Mass. Shedding mechanism for looms	503,469	Aug. 15	2040	508 } 509 }	64	966
Emery, Abram D., Taunton, Mass. Picking mechanism for looms	503,470	Aug. 15	2042	509	64	966
Emery, Abram D., Taunton, Mass. Fluffing-discharger for looms	502,471	Aug. 15	2045	509	64	966
Emery, Abram D., Taunton, Mass. Picker-cam for looms	503,473	Aug. 15	2049	510	64	967
Emery, Abram D., and W. T. Donnelly, Taunton, Mass. Loom	503,472	Aug. 15	2046	510	64	967
Emery, Albert H., Stamford, Conn. Constructing and assembling railway-rails, their joints and chairs	496,555	May 2	258	68, 69	63	666
Emery, Albert H., Stamford, Conn. Belt fly-wheel	496,556	May 2	262	70	63	667
Emery, Charles E., Brooklyn, N. Y. Electric commutation and a fluid electric commutator	511,328	Dec. 26	2561	624 } 625 }	65	1926
Emery, Frank V. (See Crittenden and Emery.)						
Emery, Henry. (See Garfield, Julius D., assignor.)						
Emery, Thomas, administrator. (See Cartland, John.)						
Emery, William P., assignor to Manufacturing Mechanical and Chemical Company, Topeka, Kans. Composition of matter for railway-ties, &c	495,581	Apr. 18	1705		63	353
Emick, Stephan, Noblestown, Pa. Corn or potato marker and coverer	511,329	Dec. 26	2569	625	65	1927
Emig, Clayton E., Baltimore, Md. System of water-supply	492,351	Feb. 21	2049	510 } 511 }	62	1191
Emig, Jacob, assignor of one-half to E. V. Abrams, Buffalo, N. Y. Chuck	499,377	June 13	1057	256	63	1590

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Emison, J. H., <i>et al.</i> (See Smith, George, assignor.)						
Emme, Michael, Oakland, Cal. Ground generator of electricity	495,582	Apr. 18	1706	429	63	353
Emmens, Stephen H., London, England. Electrolytic bath	501,996	July 25	2330	584	64	469
Emmens, Stephen H., London, England. Apparatus for the electrolytic extraction of metals.	501,997	July 25	2331	584	64	469
Emmerich, Charles B. (See Freeman and Emmerich.)						
Emmert, Joseph F., Waynesborough, Pa. Jeweler's vise	510,124	Dec. 5	479	109	65	1500
Emmet, William L., Chicago, Ill. Lightning-arrester	503,788	Aug. 22	2567	639	64	1080
Emmitt, John V. (See Thorne, Lawrence C., assignor.)						
Emmons, Charles C., Pittsburg, Pa. Plaiting-machine	498,637	May 30	3649	903	63	1333
Emond, William H., Boston, Mass. Carriage	505,197	Sept. 19	1463	377	64	1572
Emons, Charles, West Troy, N. Y. Wagon-jack	502,397	Aug. 1	246	59	64	611
Empire Car Coupler Company. (See Dale and Fox, assignors.)						
Empire Portable Forge Company. (See Kellogg, Warren T., assignor.)						
Empire State Cigar Machine Company. (See Abraham, John H., assignor.)						
Enamel Insulator Company. (See Morford, Thomas E., assignor.)						
Enamel Insulator Company. (See Morford, Thomas E., assignor.) (Reissue.)						
Endemann, Hermann, Brooklyn, assignor to American Carbonate Company, New York, N. Y. Composition of matter for artificial stone	489,377	Jan. 3	601	.....	62	129
Enders, Henry M., assignor of one-half to W. S. Stair, York, Pa. Carriage-axle	497,371	May 16	1602	405	63	940
Endrueit, Carl, Berlin, Germany. Producing metal film and metal paper	510,013	Dec. 5	299	.....	65	1466
Endter, Charles F. (See Foos and Endter.)						
Engel, Albert W., Chicago, Ill. Key-ring	510,247	Dec. 5	621	162	65	1539
Engel, David, and J. Knob, Brooklyn, N. Y. Printing-roll	499,185	June 6	742	176	63	1520
Engel, Fred, Jr., Muskegon, Mich. Pipe-holder	500,230	June 27	2477	607	63	1865
Engel, Godfrey, South Baltimore, Md. Sectional steam-boiler	490,741	Jan. 31	2826	726	62	627
Engel, Godfrey, South Baltimore, Md. Sectional steam-boiler	496,153	Apr. 25	2586	651	63	527
Engel, Godfrey, South Baltimore, Md. Refining sugar	501,878	July 18	2142	{ 431 432 }	{ 64 64 }	{ 418 418 }
Engelbach, Augustus L., and S. E. Bretherton, Leadville, Colo. Apparatus for reducing and smelting sulphide ores	496,250	Apr. 25	2740	685	63	555
Engelhardt, Ernest C., Deadwood, S. D. Treating ores	509,368	Nov. 28	2304	.....	65	1234
Engelke, Leopold A. H., Philadelphia, Pa. Fire-escape	504,268	Sept. 12	922	238	64	1458
Engelman, Harry H., assignor of two-thirds to P. J. Engelman and E. H. Potter, Toledo, Ohio. Natural-gas burner	508,689	Nov. 14	1147	283	65	990
Engelman, Paul J., <i>et al.</i> (See Engelman, Harry H., assignor.)						
Engle, Andrew, Des Moines, Iowa, and S. C. Thompson, Baldwin, Kans.; said Thompson assignor to C. Huttenlocher, Des Moines, Iowa. Apparatus for destroying garbage, night-soil, &c.	508,511	Nov. 14	869	{ 214 215 }	{ 65 65 }	{ 935 935 }
Engle, Jacob P., San Francisco, Cal. Means for utilizing waste products of petroleum	505,395	Sept. 19	1779	461	64	1631
Engley, Willard A. (See Sherman, John E., assignor.)						
English, Analdo M., assignor to J. Jacobson, Boston, Mass. Engraving-machine	510,905	Dec. 19	1851	456	65	1781
English, Andrew J., Cincinnati, Ohio. Regenerative lamp	489,582	Jan. 10	933	{ 241 242 }	{ 62 62 }	{ 209 209 }
English, Andrew J., Cincinnati, Ohio. Hydrocarbon-vaporizing burner	503,531	Aug. 15	2137	536	64	984
English, Arthur B. (See Grant and Richardson, assignors.)						
English, David B., Guerneville, Cal. Plow	490,276	Jan. 24	2067	{ 540 541 }	{ 62 62 }	{ 464 464 }
English, Edmund, Philadelphia, Pa. Oil-pump	493,694	Mar. 21	1485	380	62	1679
English & Mersick. (See Pfeiffer, Frank P., assignor.)						
Englund, Axel H., Chicago, Ill. Clamp for electric conductors	498,776	June 6	41	9	63	1395
Englund, Gustaf, Seattle, Wash. Tool for turning pipes, car-axles, &c.	498,638	May 30	3651	903	63	1334
Engsberg, Karl, New York, N. Y. Fringe attachment for looms	491,305	Feb. 7	409	105	62	825
Engstfeld, Augustin C. L., Memphis, Tenn. Tramway-switch	503,474	Aug. 15	2050	511	64	967
Ennis, Frank, assignor to E. C. Stearns & Co., Syracuse, N. Y. Spring-hinge	495,965	Apr. 25	2305	582	63	474
Ennis, Frank, assignor to E. C. Stearns & Co., Syracuse, N. Y. Spring-hinge	495,966	Apr. 25	2306	583	63	474
Ennis, George A., Livingston, Mont. Seat	504,915	Sept. 12	1001	258	64	1473
Ennis, John E., Duluth, Minn. Hoisting-machine	494,328	Mar. 28	2533	{ 638 639 }	{ 62 62 }	{ 1892 1892 }
Eno, Joseph A., Newark, N. J. Removable cap for street-railway rails	491,538	Feb. 14	780	199	62	919
Eno, Joseph A., Newark, N. J. Steam-boiler	505,940	Oct. 3	211	53, 54	65	42
Eno, Joseph A., Newark, N. J. Marine boiler	505,941	Oct. 3	213	55, 56	65	42
Enright, Daniel R., Stamford, Conn. Printer's galley	499,912	June 20	1953	474	63	1760
Ensign, David T., Cortland, N. Y. Vehicle-spring	497,372	May 16	1604	405	63	940
Ensign, Frank H., Toledo, Ohio. Wheelbarrow-wheel	490,277	Jan. 24	2069	541	62	464
Ensminger, Emanuel and H. S., Bloomington, Ill. Sash-fastener	493,258	Mar. 14	761	194	62	1525
Ensminger, Henry S. (See Ensminger, Emanuel and H. S.)						
Ensminger, William. (See Hunsinger and Ensminger.)						
Enterprise Manufacturing Company. (See Wyand, William, assignor.)						
Enterprise Manufacturing Company of Pennsylvania. (See Baker, John G., assignor.)						
Entwistle, Edward B., Johnstown, Pa., assignor, by mesne assignments, to Johnson Company, of Pennsylvania. Railway-switch	508,095	Nov. 7	194	52	65	795
Entwistle, Alexander, Bristol, R. I. Camera-shutter	496,512	May 2	189	52	63	653
Entwistle, Alfred. (See Small and Entwistle.)						
Envelope and Stamp Machine Company. (See Braun, Charles A., assignor.)						
Enzinger, Lorenz A., Worms, Germany. Bottle-washing machine	491,414	Feb. 7	582	{ 146 147 }	{ 62 62 }	{ 859 859 }
Eppler, John, Philadelphia, Pa. Sausage-stuffing machine. (Reissue.)	11,317	Mar. 28	2892	724	62	1957
Eppler Welt Machine Company. (See Arnold, Ezra P. and H. H., assignors.)						
Eppler Welt Machine Company. (See Moulton, James N., assignor.)						
Epps, Charles. (See Murray and Epps.)						
Erb, Charles F., assignor to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Wire-fastening	493,916	Mar. 21	1846	470	62	1748
Erb, Harry P., St. Louis, Mo., assignor of one-half to J. P. Bolin, Vandalia, Ill. Cultivator	502,957	Aug. 8	1216	{ 299 300 }	{ 64 64 }	{ 804 804 }
Erb, Warren H., New York, N. Y. Bicycle	510,502	Dec. 12	1090	263	65	1631
Erbach, Valentine, Scranton, Pa. Car-coupling	496,251	Apr. 25	2742	686	63	556
Erickson, Edward, assignor of one-half to G. C. Pierce and J. P. Olson, Ouray, Colo. Rotary harrow	505,038	Sept. 12	1203	310	64	1511
Erdman, Albert K., Louisville, Ky. Bedstead-exhibitor	498,972	June 6	398	93	63	1462
Erdody, Joseph, assignor of one-half to J. H. Cardoza, San Francisco, Cal. Air-brake	510,594	Dec. 12	1277	310	65	1663
Erhardt, Friedrich, assignor to Taxameter Fabrik Westendarp & Pieper, Hamburg, Germany. Fare indicator and register	509,799	Nov. 28	3041	735	65	1375
Erickson, Andrew M., Cork, Minn. Machine for welding plow-irons	489,670	Jan. 10	1047	273	62	233
Erickson, Olaf, Cannon Falls, Minn. Seeder	491,994	Feb. 21	1493	373	62	1077

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Erickson, Paul E., Scandia, Kans. Hog-feeding house	493,355	Mar. 14	917	236	62	1553
Ericson, Lewis E., San Francisco, Cal. Bicycle-bell	491,012	Jan. 31	3264	834	62	712
Ericson, Richard W., Aurora, Ill. Discharge apparatus for coal or ore bins	504,673	Sept. 5	529	150	64	1381
Ericson, Richard W., Aurora, Ill. Discharge apparatus for coal or ore docks	504,674	Sept. 5	591	150	64	1381
Ericson, Richard W., Aurora, Ill. Discharge apparatus for coal or ore docks	504,675	Sept. 5	593	151	64	1382
Ericsson, John N., Chicago, Ill. Dumping-wagon	496,048	Apr. 25	2435	614	62	498
Ericsson, Oscar, Sioux Falls, S. D. Electric meter	496,871	May 9	780	207	63	778
Erie Cash Register Company. (See Clark, William H., assignor.)						
Eriksen, Eduard A. O., and W. H. Day, Morgan, Tex. Hoe attachment for cultivators	491,676	Feb. 14	1001	252	62	965
Erkens, Charles R. H., Lakewood, N. Y. Thermometric indicator	489,075	Jan. 3	140	39	62	34
Ermold, Edward, New York, N. Y. Compressor for bottle-corking machines	492,540	Feb. 28	2164	587	62	1268
Ermold, Edward, New York, and W. Hollis, Brooklyn, N. Y.; said Hollis assignor to said Ermold. Envelope-machine	510,415	Dec. 12	946	228	65	1404
Ernest, Juan W., Los Angeles, Cal. Duplex ballot-box	499,337	June 13	978	237	63	1574
Eriksner, Harmen, North Creek, Ohio. Cutter for planers	497,713	May 16	2139	535	63	1035
Eriksner, Harmen, North Creek, Ohio. Cutter-head	509,301	Nov. 21	2180	524	65	1200
Ernst, Gustav A., Camden, N. J. Pin for strings of musical instruments	493,917	Mar. 21	1847	471	62	1748
Ernst, Wendell. (See Wagener, William, assignor.)						
Errington, William, Melbourne, Victoria. Automatic stone-cutting and stone-dressing machinery	505,624	Sept. 26	2201	557	64	1724
Erskine, Abner C., Bowling Green, Ohio. Gas-generator	508,001	Nov. 7	33	11	65	765
Erskine, Wilbur. (See Cameron, John S., assignor.)						
Ersler, Bertha M. (See Gedde, Charles and C. C. J., assignors.)						
Ertel, George. (See Menefee and Ertel.)						
Ertel, George. (See Sheer, Henry M., assignor.)						
Ertel, George, Quincy, Ill. Brooder	501,775	July 18	1989	492	64	392
Ervin, Robert N., Temple, Tex. Car-coupling	494,630	Apr. 4	165	39	63	33
Erwin, Alexander J., Mansfield, Ohio. Hot-air furnace	505,096	Sept. 19	1308	337	64	1544
Erwin, Charles O., and F. Winkler, Kansas City, Kans. Type-writing machine	499,723	June 20	1625	392	63	1703
Erwin, Charles O., and F. Winkler, Kansas City, Kans. Type-writing machine	506,426	Oct. 10	1100	273	65	222
Erwin, Charles O., and F. Winkler, Kansas City, Kans. Type-writing machine	506,427	Oct. 10	1103	273	65	222
Erwin, Harry M. (See Sedgwick and Erwin.)						
Eschner, Louis, Philadelphia, Pa. Guide for double needle sewing-machines	504,571	Sept. 5	429	109	64	1350
Eshleman, Samuel B., assignor to M. B. Shantz Company, Rochester, N. Y. Machine for polishing buttons	497,714	May 16	2140	535	63	1035
Eshleman, Samuel B., assignor to M. B. Shantz Company, Rochester, N. Y. Machine for polishing buttons	497,715	May 16	2142	536	63	1036
Eskeu, Samuel T., Sugar Valley, Ga. Harrow, cultivator, &c.	497,642	May 16	2029	505	63	1015
Esler, Jacob J., Belleville, Ill. Grain-drill feed device	500,323	June 27	2639	645	63	1891
Esmond, Ernest R., New York, N. Y. Railway-rail	500,688	July 4	249	67	64	47
Esmond, Ernest R., New York, N. Y. Electric motor	505,396	Sept. 19	1781	461	64	1631
Esmond, Ernest R., New York, N. Y. Electric elevator	506,169	Oct. 3	603	153	65	117
Espey, William C., et al. (See Preston, Charles W., assignor.)						
Esplin, Richard M., Manchester, England. Hinge	506,679	Oct. 17	1496	376	65	310
Esselen, Henry M., Boston, Mass. Snow-guard	511,295	Dec. 19	2508	611	65	1903
Esser, Hermann, Hoboken, N. J. Dividers	494,132	Mar. 28	2227	567	62	1835
Essex, David, New York, N. Y. Corset-clasp	505,288	Sept. 19	1609	418	64	1599
Essex, George B., assignor to Michigan Lubricator Company, Detroit, Mich. Lubricator	493,824	Mar. 21	1702	433	62	1721
Essex, George B., assignor to Michigan Lubricator Company, Detroit, Mich. Boiler-alarm	496,557	May 2	264	70	63	667
Essick, William B., Manley, Nebr. Conductor support and insulator	503,039	Aug. 8	1342	331	64	828
Essick, William S. (See Mansur, John H., assignor.)						
Essington, Heber B., St. Louis, Mo. Drawer for sewing-machine needles	489,558	Jan. 10	899	234	62	203
Essler, John F., and H. K. Berkheimer, Minneapolis, Minn. Method of and apparatus for producing stove-duffs	508,002	Nov. 7	35	11	65	765
Essley, Elisha L., Chicago, Ill. Wrench	491,415	Feb. 7	584	147	62	860
Estabrook, Alanson C., Northampton, Mass. Molded article	497,778	May 23	2253	565	63	1072
Estep, Blair A., Chartiers, Pa. Spark-guard	498,108	May 23	2761	690	63	1161
Estep, Thomas B., Norwood, Ohio. Velocipede	499,724	June 20	1628	393	63	1703
Estep, William J. (See Lewis and Estep.)						
Ester, George L., Erie, Pa. Lampblack-machine	507,220	Oct. 24	2436	601	65	494
Estes, John W., Hale City, Mo. Combination-lock	493,259	Mar. 14	761	194	62	1526
Estey, David M., assignor of two-thirds to D. C. Clapp and Estey Manufacturing Company, Owosso, Mich. Drawer-guide	511,601	Dec. 26	3028	738	65	2011
Estey Manufacturing Company et al. (See Estey, David M., assignor.)						
Estey Organ Company. (See Fuller, Levi K., assignor.)						
Etheridge, Richard L., Quitman, Miss., assignor of one-half to T. W. Hand. Manufacture of rosin	508,608	Nov. 14	1033	207	65	966
Ethridge, Martin V. B., Everett, Mass. Feeding mechanism for stamp-canceling machines	496,872	May 9	782	208	63	778
Ethridge, Martin V. B., Everett, Mass., assignor to American Postal Machines Company, of Maine. Stamp-canceling machine	503,836	Aug. 22	2628	657	64	1092
Ettenger, George W., Barrow-in-Furness, assignor of one-half to G. E. Church, London, England. Car-truck frame	506,170	Oct. 3	604	154	65	117
Ettenger, George W., Barrow-in-Furness, assignor of one-half to G. E. Church, London, England. Metallic under frame for railway-carriages	506,652	Oct. 10	1449	363	65	290
Ettenger, George W., Barrow-in-Furness, assignor of one-half to G. E. Church, London, England. Buffing and draw gear for cars	510,334	Dec. 5	811	196	65	1564
Ettien, James, Utica, Mont. Land-irrigating system	501,245	July 11	1132	287	64	221
Ettling, Alice M. (See Catley, Shepard W., assignor.)						
Eubank Car Door Company. (See Eubank, Thomas, assignor.)						
Eubank, Thomas, assignor to Eubank Car Door Company, Little Rock, Ark. Car-door	509,570	Nov. 28	2675	647	65	1305
Eucker, Louis A., Hoboken, N. J. Machine for forming ornaments and cutting their shanks	500,480	June 27	2862	705	63	1931
Eudaly, William A., Cincinnati, Ohio. Downdraft brick-kiln	508,003	Nov. 7	37	11, 12	65	765
Eugen, Ole L. (See Wyman and Eugen.)						
Eureka Cash and Credit Register Company. (See Beck, Warren F., assignor.)						
Eureka Process Lusting Company. (See Norwood, Benjamin A., assignor.)						
Eureka Tempered Copper Company. (See Coffman, John R., assignor.)						
Eustis, William E. C., Milton, Mass. Electric locomotive	501,246	July 11	1134	288	64	221
Ewuer, James N., New Castle, Pa. Sash-fastener	499,913	June 20	1954	474	63	1760
Eva, Addison H., Austin Tex. Adjustable mosquito-canopy	496,252	Apr. 25	2744	686	63	556

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Evans, Albert, and B. Hollenback, Spring Hill, Kans. Program alarm-clock	497,019	May 9	1017	261	63	820
Evans, Caleb S., Union City, Ind. Magazine-gun	505,757	Sept. 26	2433	614	64	1766
Evans, David E., <i>et al.</i> (See Darley, John W., Jr., assignor.)						
Evans, Elmer O., Cincinnati, Ohio, assignor to Johnson Company, Johnstown, Pa. Joint box for the joints of street-railways	492,885	Mar. 7	180	43, 44	62	1304
Evans, Evan, Chicora, Pa. Fluid-pressure regulator	504,973	Sept. 12	1098	280	64	1491
Evans, Evan, and J. Davies, Llanrwst, England. Clip or fastening	498,509	May 30	3430	851	63	1295
Evans, George F., Somerville, Mass. Mechanism for transmitting motion	493,859	Mar. 21	1752	446	62	1731
Evans, George H., St. John, Canada. Steam-engine governor	498,006	May 23	2614	653	63	1135
Evans, George R., assignor of one-half to B. Zehnder, San Francisco, Cal. Amalgamation of precious metals	502,902	Aug. 8	1118	275	64	787
Evans, Harry C., Bristol, Pa. Clasp for pencils, pens, &c	508,096	Nov. 7	195	52	65	795
Evans, Henry C., Brooklyn, N. Y., assignor to Johnson Company, Johnstown, Pa. Rail-way-rail and chair	492,464	Feb. 28	2232	558 559	62	1241
Evans, James H. (See Johnson, Frederick A., assignor.)						
Evans, John, Philadelphia, Pa. Hot-air furnace	496,193	Apr. 25	2643	665	63	538
Evans, John, Philadelphia, Pa. Shaking and dumping furnace-grate	496,194	Apr. 25	2647	665	63	539
Evans, John, Bridgeport, Conn. Toy	502,709	Aug. 8	808	195	64	728
Evans, John H., <i>et al.</i> (See Evans, William, assignor.)						
Evans, John T., Utica, N. Y. Rail-joint	508,004	Nov. 7	40	13	65	765
Evans, Louis C., Springfield, Ohio. Corn-planter	489,182	Jan. 3	304	84, 85	62	69
Evans, Louis C., Springfield, Ohio. Corn-planter	508,568	Nov. 14	973	239	65	954
Evans, Nathan A., Spartanburg, S. C. Railway-track tamping-machine	504,063	Aug. 29	2992	748	64	1177
Evans, Nelson, and W. A. Henry, Ukiah, Cal. Wagon-jack	489,157	Jan. 3	265	73	62	61
Evans, Oliver M. (See Park, Evans, Turner, and Morris.)						
Evans, Powell, Philadelphia, Pa. Electrically-operated railway-switch	493,918	Mar. 21	1848	471	62	1749
Evans, Robert, <i>et al.</i> (See Evans, William, assignor.)						
Evans, Robert D., <i>et al.</i> (See Knight and Steele, assignors.)						
Evans, Robert K., U. S. Army. Hose-coupling	494,918	Apr. 4	620	158	63	120
Evans, Samuel, assignor of one-half to C. L. Rawson, Chicago, Ill. Preparing glass, &c., for the sand-blast process	494,998	Apr. 4	728	186	63	140
Evans, Samuel, assignor of one-half to C. L. Rawson, Chicago, Ill. Chipping glass	494,999	Apr. 4	731	186	63	140
Evans, Samuel, assignor of one-half to C. L. Rawson, Chicago, Ill. Ornamenting glass	495,000	Apr. 4	733	187	63	140
Evans, Samuel W., Jr. (See Gaskill, William H., assignor.)						
Evans, Samuel W., New Orleans, La. Car-ventilator	506,987	Oct. 17	2008	496	65	405
Evans, Taylor, <i>et al.</i> (See Beaver, William G., assignor.)						
Evans, Thomas S., assignor to Jackes-Evans Manufacturing Company, St. Louis, Mo. Valve	508,377	Nov. 7	651	159	65	879
Evans, William. (See Riley and Evans.)						
Evans, William, Birmingham, Conn. Rise-and-fall Jacquard mechanism	498,912	June 6	293	67	63	1444
Evans, William, Philadelphia, Pa., assignor to himself, J. H. and R. Evans. Leather-dressing machine	507,314	Oct. 24	2600	640	65	526
Evans, William A., Zanesville, Ohio. Brick-kiln	498,050	May 23	2677	669 670	63	1146
Evans, William H. (See Bramlette and Evans.)						
Evans, William H., Gainesville, Ga. Churn-dasher	502,180	July 25	2631	663	64	526
Evans, William J., assignor to McKesson & Robbins, New York, N. Y. Atomizer	503,837	Aug. 22	2630	658	64	1092
Evans, William W., Salt Lake City, Utah Ter. Label-holder	496,931	May 9	888	233	63	798
Even, Louis, Jeffriesburg, Mo. Bootjack	503,838	Aug. 22	2631	658	64	1093
Everett, Joseph D., Belfast, Ireland. Vehicle-wheel	509,883	Dec. 5	64	16	65	1422
Everett, Mary S., Brooklyn, N. Y. Stand for sad-irons	503,410	Aug. 15	1945	483	64	950
Everhart, Martin, Austin, Tex. Clock winding mechanism	505,704	Sept. 26	2350	595	64	1751
Everhart, Theodore L., Bakersville, Ohio. Spring-motor	502,288	Aug. 1	43	11	64	575
Everitt, Charles, Oshkosh, Wis. Collar-fastener	489,796	Jan. 10	1245	326	62	273
Everitt, Percival, London, England. Automatic gas lighting or extinguishing apparatus	504,447	Sept. 5	216	56 57 58	64	1310
Everitt, Walter E., Buffalo, N. Y. Earth boring and drilling machine	502,958	Aug. 8	1219	300	64	804
Everitt, Fritz, Hamburg, Germany. Device for forming cigarettes	496,475	May 2	133	37	63	643
Eversdyk, Herman A., Grand Rapids, Mich. Clothes-drier	499,663	June 13	1530	368	63	1671
Evershed, Sydney, London, England. Electric-measuring apparatus for alternate currents	503,589	Aug. 22	2245	562	64	1020
Everson, Ever, Mankato, Kans. Windmill	506,483	Oct. 10	1205	299	65	242
Evertz, Carl R., Brooklyn, N. Y. Razor	493,075	Mar. 7	466	118	62	1451
Evlar, August K. M. H. (See Zschernig, Friedrich E., assignor.)						
Ewery, William H., Brooklyn, N. Y. Plumber's tack	508,892	Nov. 14	1344	333	65	1026
Ewald, Leo, Minneapolis, Minn. Hot-air register	511,296	Dec. 19	2509	611	65	1903
Ewart Manufacturing Company. (See Howe, Glenn G., assignor.)						
Ewart, William D., Chicago, Ill., assignor to Dodge Coal Storage Company, Philadelphia, Pa. Apparatus for handling coal	502,250	July 25	2756	697	64	549
Ewell, Luther J., San Francisco, Cal. Vehicle running-gear	499,288	June 13	896	217	63	1560
Ewig, John, Philadelphia, Pa. Moistening attachment for hot-air registers	489,296	Jan. 3	479	132	62	104
Ewig, Robert J., Morton, Pa. Pattern-file	498,541	May 30	3488	863	63	1305
Ewing, Andrew, Ashbury Park, N. J. Wagon-body	494,133	Mar. 28	2228	567	62	1835
Ewing, Benjamin, Brighton, Canada. Milk-agitator	503,951	Aug. 29	2821	704	64	1146
Ewing, Edwin C. (See Grafton, Ewing, and Glass.)						
Ewing, Robert, London, England. Earthenware-sewer-pipe joint	506,484	Oct. 10	1206	299	65	242
Excelsior Elevator Guard and Hatch Cover Company. (See Elliott, Abraham, assignor.)						
Excelsior Horse Shoe Company. (See Bouchard, Eli, assignor.)						
Excelsior Iron Works Company. (See Long, Timothy, assignor.)						
Excelsior Needle Company. (See Dayton, William H., assignor.)						
Ey, John von, Chicago, Ill. Gas-regulator for calcium lights	498,897	June 6	263	61	63	1439
Eyanson, George T., Philadelphia, Pa., assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Cock or faucet	508,211	Nov. 7	383	94	65	829
Eybouler, Jules F. (See Frenot and Eybulet.)						
Eynon-Evans Manufacturing Company. (See Eynon, Thomas M., assignor.)						
Eynon, Thomas M., Philadelphia, Pa., assignor to Eynon-Evans Manufacturing Company, of Pennsylvania. Pyrometer	497,268	May 9	1400	354	63	888
Eynon, Thomas M., Philadelphia, Pa., assignor to Eynon-Evans Manufacturing Company, of Pennsylvania. Injector	497,269	May 9	1401	354 355	63	888
Eynon, William D., Philadelphia, Pa. Machine for rolling and bending metal into spiral forms	491,341	Feb. 7	467	120	62	837
Eyre, Clarence P., assignor to Nutriment Company, Chicago, Ill. Milk-coagulating product	491,416	Feb. 7	585		62	860
Eyre, George L. P., London, and T. J. Hopkins, Trowbridge, England. Apparatus for treating and scouring, &c., wool, &c.	498,250	May 30	2997	747	63	1218

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F. P. Little Electrical Construction and Supply Company. (See Kester, Jesse F., assignor.)						
F. Wesel Manufacturing Company. (See Lomer, Louis L., assignor.)						
Fabbrini, Egisto, assignor of one-half to W. Uffreduzzi, New York, N. Y. Apparatus for cleaning Malaga grapes, &c.	494,192	Mar. 28	2324	588 589 590 320	62	1853
Faben, Thomas H., Toledo, Ohio. Globe-holder for arc lights	495,318	Apr. 11	1280	320	63	255
Faber, Alice. (See Faber, John P., assignor.)						
Faber, Charles, Riverside, N. J. Ore-washer	489,797	Jan. 10	1246	326	62	273
Faber, Eberhard. (See Fornander, Alfred, assignor.)						
Faber, Eberhard. (See Mussinan, Oscar, assignor.)						
Faber, Eberhard, West New Brighton, N. Y. Penholder	511,602	Dec. 26	3030	739	65	2011
Faber du Faur, Adolph, Jr., Newark, and W. H. Bristol, Hoboken, N. J. Game apparatus.	496,195	Apr. 25	2649	665	63	539
Faber, George W. (See Harmon and Faber.)						
Faber, John P., assignor to A. Faber, Rochester, N. Y. Sully	510,248	Dec. 5	682	163	65	1539
Faber, Lothar W., Port Richmond, N. Y. Holder for pens, pins, &c.	505,823	Oct. 3	33	9	65	9
Faber, William A., Brooklyn, N. Y. Adjustable holder	509,884	Dec. 5	66	16	65	1422
Fabricius, Carl, Vienna, Austria-Hungary. Hydrocarbon-vapor burner	501,496	July 18	1530	384	64	309
Faestli, Annie L., Milwaukee, Wis. Tailor's drafting device	503,741	Aug. 22	2502	623	64	1067
Faestli, Joseph W., Troy, Wis. Hoof-cleaner	490,474	Jan. 24	2380	616	62	525
Fahey, John. (See Cox and Fahey.)						
Fahlberg, Constantin, Salbke-Westerhausen, Germany. Making pure saccharin	496,112	Apr. 25	2530		63	517
Fahlberg, Constantin, Salbke-Westerhausen, Germany. Purifying saccharin	496,113	Apr. 25	2531		63	517
Fahrig, Ernst, Marseilles, Ill. Process of and apparatus for manufacturing ozone gas	511,330	Dec. 26	2570	625	65	1927
Fahringer, Samuel. (See Stoessel and Fahringer.)						
Fahrney, Carlo, Polo, Ill. Road-cart	490,278	Jan. 24	2070	541	62	464
Fahrney, William H., Chicago, Ill. Means for telegraphing	495,030	Apr. 11	786	199	63	165
Fahys Watch Case Company. (See Rutts, Charles W., assignor.)						
Fahys Watch Case Company. (See Eaton and Fargo, assignors.)						
Failor, Ezra K., assignor of one-half to G. R. Sanderson, Des Moines, Iowa. Scriptoscope for type-writing machines	490,189	Jan. 17	1905	496	62	420
Fair, William F., London, assignor to I. L. Berridge, Leicester, England. Buttonhole sewing-machine	500,708	July 4	280	76, 77	64	52
Fairbank Canning Company. (See Gregg, Robert, assignor.)						
Fairbanks, Albert C., Somerville, Mass. Banjo	489,470	Jan. 10	760	201	62	175
Fairbanks, Albert C., assignor to A. C. Fairbanks Company, Boston, Mass. Mandolin	510,335	Dec. 5	812	197	65	1564
Fairbanks, Albert C., Somerville, and P. J. Berlo, assignors to E. T. Fairbanks, Boston, Mass. Rim for bicycle-wheels	496,971	May 9	942	247	63	807
Fairbanks, Crawford M., Central Falls, assignor of one-half to G. E. Cranston, Riverside, R. I. Vegetable-slicing machine	501,928	July 25	2236	558	64	451
Fairbanks, Emma T. (See Fairbanks and Berlo, assignors.)						
Fairbanks, Henry. (See Parker, Cushman, and Fairbanks.)						
Fairchild, Adoniram, deceased, New York, N. Y.; B. D. Fairchild, administrator. Hydraulic excavator	495,791	Apr. 18	2041	517	63	410
Fairchild, Adoniram, deceased, New York, N. Y.; B. D. Fairchild, administrator. Floating support for drilling devices	496,729	May 2	538	143	63	716
Fairchild, Benjamin D., administrator. (See Fairchild, Adoniram.)						
Fairchild, Frank A. (See Lundy, John C., assignor.)						
Fairchild, Frank J., assignor of one-half to J. J. Wall, Saginaw, Mich. Fire-escape	502,070	July 25	2452	616	64	491
Fairchild, Heman, Derby, Vt. Wick-threader	510,014	Dec. 5	301	67	65	1467
Fairfax, Joseph S., et al. (See Teague, Francis, assignor.)						
Fairfield, Hadley P., West Medford, assignor to J. W. Brooks, trustee, Petersham, Mass. Rotary cutter	498,745	May 30	3854	950	63	1369
Fairfield, John M., assignor to Type Writing Machine Company, Hartford, Conn. Ink-roller supporting device for printing-machines	491,046	Jan. 31	3331	849	62	727
Fairman, Alfred N., assignor of one-half to F. Fairman, Montreal, Canada. Machine for making stovepipe-elbows	496,354	Apr. 25	2920	729 730	63	590
Fairman, Frederick. (See Fairman, Alfred N., assignor.)						
Fairman, Gibson W., New York, N. Y. Car wheel and axle	507,265	Oct. 24	2506	618	65	507
Fairman, Harry E., Bakersfield, Cal. Watering-cart	495,792	Apr. 18	2043	517	63	410
Fairman, Michael M., Limestone, Pa. Apparatus for handling stock in herds	506,680	Oct. 17	1497	376 377	65	310
Fairweather, Alfred W., Waterloo, N. Y. Loom	499,456	June 13	1205	287 288	63	1616
Faisant, John B., and J. Eicher, Paterson, N. J. Tension device for loom-shuttles	492,395	Feb. 28	2119	529	62	1218
Faisant, James I. (See Crews, Dayton H., assignor.)						
Faith, Lewis, assignor of one-half to J. T. Bridges, Hancock, Md. Machine for packing cement in barrels	505,758	Sept. 26	2438	615	64	1767
Falascioni, Luigi, Pernignano, Italy. Brick or tile kiln	491,995	Feb. 21	1496	373	62	1078
Falco, Henry L., Brooklyn, N. Y. Electrically-operated railway-switch	510,384	Dec. 5	886	214	65	1578
Falcon, Joseph G., Evanston, Ill. Ball-and-socket joint	497,373	May 16	1604	405	63	940
Falconer, Ernest J. (See Booth and Falconer.)						
Falconer, William, Selma, Cal. Land-leveler	500,874	July 4	542	140	64	98
Fales, Edward, Boston, Mass. Grate	494,371	Mar. 28	2613	656	62	1906
Fales, Edward, Boston, Mass. Grate	494,372	Mar. 28	2615	657	62	1906
Fales, Edward, Boston, Mass. Grate	494,373	Mar. 28	2616	657	62	1907
Fales, Edward, Boston, Mass. Damper-controlling mechanism for heating apparatus	498,251	May 30	3000	747 748	63	1218
Fales, Edward, Boston, Mass. Grate	499,914	June 20	1976	475	63	1760
Fales, Edward, Boston, Mass. Stove or furnace	505,448	Sept. 26	1875	482	64	1662
Fales, Edward, Boston, Mass. Stove or furnace	505,449	Sept. 26	1876	483	64	1662
Fales, Edward, Boston, Mass. Grate	505,450	Sept. 26	1877	483	64	1663
Fales, Edward, Winthrop, Mass. Shaking mechanism for grates	505,451	Sept. 26	1878	483	64	1663
Fales, Edward, Winthrop, Mass. Furnace	505,452	Sept. 26	1879	484	64	1663
Fales, Edward, Winthrop, Mass. Stove or furnace	505,453	Sept. 26	1881	484	64	1663
Fales, Lewis F., Walpole, Mass. Paper-box machine	503,907	Aug. 22	2731	685 686	64	1113
Fales, Orange B., Canfield, Ohio. Stallion-shield	505,824	Oct. 3	34	9	65	10
Falkenau, Arthur. (See Freeman, Stuart E., assignor.)						
Falkenrath, Julius. (See Falkenrath, Rudolph and J.)						
Falkenrath, Rudolph and J., St. Louis, Mo. Whip-socket	493,579	Mar. 14	1297	331	62	1627
Falkner, William. (See Werner and Falkner.)						
Falkner, Victor, Sydney, New South Wales. Corn-busker	490,429	Jan. 24	2305	598	62	510
Falkenburg, Percy, Atlantic Highlands, N. J. Flush-tank for closets	495,611	Apr. 18	1751	441	63	360

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Falkinburg, Percy, assignor of one-half to N. H. Roberts, Atlantic Highlands, N. J. Trap for basins, sinks, &c.	510,503	Dec. 12	1092	263	65	1631
Faller, Ernst. (See Oberle and Faller.)						
Falletti, Eduardo, Rome, Italy. Instrument for measuring distances and solving trigonometrical problems	504,869	Sept. 12	923	238	64	1459
Fallon, John W., Baltimore, Md. Metallic roofing	503,789	Aug. 22	2569	639	64	1081
Fallows, Joseph, 2d, Southbridge, Mass. Slicing mechanism for bread, &c.	504,429	Sept. 5	194	50	64	1307
Falls, Alonzo, Lowell, Mass. Stop-motion device for drawing-frames	494,558	Apr. 4	34	8	63	8
Falls, Alonzo, assignor to Lowell Machine Shops, Lowell, Mass. Stop-motion device for drawing-frames	494,673	Apr. 4	227	57	63	46
Falls, Alonzo, assignor of one-half to A. G. Cumnock, Lowell, Mass. Evening mechanism for drawing-heads	500,120	June 27	2289	556	63	1829
Falls Rivet and Machine Company. (See Babcock and Schmitt, assignors.)						
Falls Rivet and Machine Company. (See Schmitt and Hinchman, assignors.)						
Falvey, Cornelius, Sprague, Conn. Shedding mechanism for looms	490,106	Jan. 17	1771	461	62	394
Famous, James P., Norristown, Pa. Spirit-level and inclinometer	508,294	Nov. 7	513	124	65	853
Fancher, Alexander R., Hillsborough, Tex. Plow	510,125	Dec. 5	480	109	65	1500
Fancher, Alton H., Brooklyn, N. Y. Pencil-sharpener	491,996	Feb. 21	1493	374	62	1078
Fanckboner, William, Schoolcraft, Mich. Umbrella-support	504,717	Sept. 12	663	168	64	1407
Fane, Thomas. (See Lavender, Charles F., assignor.)						
Fane, Thomas, and C. F. Lavender, Toronto, Canada. Velocipede	507,114	Oct. 24	2226	549 } 550 }	65	458
Fanning, David H. (See Henius, Max W., assignor.)						
Fanning, James W., assignor of one-half to G. H. and W. H. Quinn, Chicago, Ill. Hoof-pad	489,896	Jan. 10	1387	360	62	302
Fanning, John J., assignor of one-half to J. Bairstow, Chicago, Ill. Insulating compound	507,678	Oct. 31	3226		65	657
Faranowski, Wladimir, and F. Guniewicz, Podhajce, Austria-Hungary. Switch-operating device	506,218	Oct. 10	719	180	65	147
Farbenfabriken, vormals Fr. Bayer & Co. (See Bammann and Ulrich, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Duisberg, Carl, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Goldmann, Felix, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Hassencamp, Hugo, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Janssen, Hermann, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Kothe, Reingruber, and Hassencamp, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Kothe, Ulrich, and Dressel, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Krekeler and Kraiss, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Lauch, Richard, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Lauch and Krekeler, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Messinger, Vortmann, and Janssen, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Meyer, Emil, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Nactvogel, Oscar, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ott, Philipp, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Pitzinger, William, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Runkel, Friedrich, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Schmidt, Robert E., assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Schmidt and Tust, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich, Moritz, assignor.) (Reissue.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich and Bammann, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich and Lauch, assignors.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Boedeker, Hermann, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Herrmann, Albert, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Liebrecht, Arthur, assignor.)						
Fargo, Edwin A. (See Eaton and Fargo.)						
Faris, Herman P., Clinton, Mo. Thill-coupling	495,697	Apr. 18	1891	476	63	382
Farjasse, Maurice H. C. W., Neuilly-sur-Seine, France. Clutch	510,532	Dec. 12	1172	282	65	1644
Farland, Antoine, Southbridge, Mass. Adjustable staging or scaffolding	499,826	June 20	1811	441	63	1733
Farley, Ozias A., et al. (See Regester, Thomas L., assignor.)						
Farley, Ozias A., Craig, Nebr. Windmill-governor	509,074	Nov. 21	1787	440	65	1125
Farlow, James, Greencastle, Ind. Washing-machine	507,532	Oct. 31	2967	727	65	608
Farmer, Charles H., New York, N. Y. Paper-file	497,538	May 16	1868	471	63	956
Farmer, Elkin. (See Mayr, George, assignor.)						
Farmer, Frank T., Richmond, Ind. Pawl-and-ratchet mechanism	497,467	May 16	1751	441	63	965
Farmer, George R., Carbondale, Ill. Combined pulverizer and roller	510,166	Dec. 5	542	126	65	1512
Farmer, James S., Salford, H. L. and I. H. Storey, Lancaster, England. Machine for the manufacture of linoleum or other floor-cloths	508,925	Nov. 21	1555	380 } 381 }	65	1079
Farmer, John, Glasgow, Scotland, assignor to Charles Lennig & Company, Limited, Philadelphia, Pa. Manufacture of acetic acid	507,895	Oct. 31	3569	879	65	721
Farmer, John N., et al. (See Vernon, William E., assignor.)						
Farmer, John R., assignor of one-half to C. W. Heeg, St. Louis, Mo. Coin-controlled apparatus	509,845	Nov. 23	3112	751 } 752 }	65	1388
Farmer, Luther C., assignor to Plymouth Manufacturing Company, Minneapolis, Minn. Pendulum weighing-scale	499,378	June 13	1059	257	63	1590
Farmer, Luther C., assignor to Farmer's Autographic Register Company, Minneapolis, Minn. Autographic register	503,532	Aug. 15	2138	537	64	984
Farmer's Autographic Register Company. (See Farmer, Luther C., assignor.)						
Farmers Friend Manufacturing Company. (See Fisher, Andrew J., assignor.)						
Farnham, Charles H., assignor of one-half to A. W. Crossley, Boston, and C. F. Brown, Reading, Mass. Gage for counting tickets	491,800	Feb. 14	1200	300	62	1003
Farnham, Frank G. (See Jarskouw, Wilhelm, assignor.)						
Farnsworth, Ebenezer B., Oakfield, N. Y. Cultivator	506,171	Oct. 3	605	154	65	117
Farnsworth, George. (See Savage, James S., Jr., assignor.)						
Farnsworth, George J. (See Scherer, John, assignor.)						
Farquhar, A. B. (See Eisenhart, Morton, and Waltman, assignors.)						
Farquhar, Arthur B. (See Eisenhart, Henry W., assignor.)						
Farquhar, Arthur B., York, Pa. Holder for harrow-teeth	492,326	Feb. 21	2006	499	62	1183
Farquharson, Henry C., New York, N. Y. Railway-car step	490,344	Jan. 24	2180	568	62	487
Farr, Charles W., Chicago, Ill. Ear-phone attachment	501,600	July 18	1696	422	64	341
Farr, Eli W., Cedar Springs, Mich. Land-roller	495,933	Apr. 18	2257	568	63	450
Farrall, George A., assignor to Johnston Harvester Company, Batavia, N. Y. Land-roller	498,252	May 30	3001	748	63	1218
Farrall, George A., assignor to Johnston Harvester Company, Batavia, N. Y. Beet-harvester	499,782	June 20	1733	419	63	1720
Farrall, George A., assignor to Johnston Harvester Company, Batavia, N. Y. Beet-harvester	509,571	Nov. 28	2677	648	65	1305

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Farrand, Oliver M. (See Skinner and Farrand.)						
Farrar, Frank W., St. Paul, Minn. Combined hinge and hanger for storm-sashes	492,791	Mar. 7	31	8	62	1365
Farrar, Fred, Bangor, Me. Carrier for grapples	489,226	Jan. 3	379	105	62	85
Farrar, William S. (See Nevin and Farrar.)						
Farrel Foundry and Machine Company. (See Moore, Charles, assignor.)						
Farrel, John H., Camden, N. J., assignor to H. W. Maybaum, Philadelphia, Pa. Pocket-lamp. (Reissue)	11,299	Jan. 10	1414	366	62	306
Farrell, James J., Brooklyn, N. Y. Fruit or vegetable stand	494,850	Apr. 4	525	132	63	102
Farrell, John, <i>et al.</i> (See Pugh, Cortez V., assignor.)						
Farrell, Joseph P., assignor to O'Brien & Sons, San Francisco, Cal. Gear connection for platform-springs	501,411	July 11	1414	354	64	271
Farrell, Thomas F., Paterson, N. J. Steam rock-drill	489,471	Jan. 10	761	201	62	175
Farrell, Thomas F., Niagara Falls, N. Y. Tripod	497,779	May 23	2354	565	63	1072
Farrington, Mattie Z., San Francisco, Cal. Tap and faucet	496,301	Apr. 25	2819	705	63	571
Farrington, William S. (See Hill, William R., assignor.)						
Farwell, Fay O., assignor of one-half to Adams Company, Dubuque, Iowa. Stove-damper	493,548	Mar. 14	1234	316	62	1614
Farwell, Fay O., assignor of one-half to Adams Company, Dubuque, Iowa. Stove-back	501,412	July 11	1415	354	64	272
Farwell, Frederic E., assignor of one-half to H. A. Hawley, Fitchburg, Mass. Machine for cutting pockets in window-jamb	497,070	May 9	1095	281	63	834
Fasching, Elias E., assignor of one-half to J. A. Le Claire and A. W. Vander Veer, Davenport, Iowa. Sliding-door lock	509,025	Nov. 21	1703	421	65	1109
Fasoldt, Ernest C. (See Thacher and Fasoldt.)						
Fassett, Francis K., and G. Rein, assignors to St. Louis Register Company, St. Louis, Mo. Street-car register	490,345	Jan. 24	2182	568	62	487
Fate, John D., Plymouth, Ohio. Brick or tile machine	505,975	Oct. 3	269	71	65	53
Fathers, Fred, Detroit, Mich. Overgaiter	499,419	June 13	1145	275	63	1604
Fatka, John, Racine, Wis. Stuffing-machine	503,952	Aug. 29	2822	705	64	1146
Fauber, William H., Chicago, Ill. Chair	508,690	Nov. 14	1148	283	65	990
Fauber, William H., Chicago, assignor of one-half to H. W. Norton, Wellington, Ill. Velocipede	492,959	Mar. 7	295	75	62	1417
Faucett, Solomon F., Saybrook, Ill. Sliding gate	503,040	Aug. 8	1343	331	64	828
Faucompre, Xavier G. E. de, Paris, France. Photographic roll-holder	500,875	July 4	544	141	64	99
Faulds, James G., Glasgow, Scotland. Mason's tool	491,997	Feb. 21	1500	374	62	1078
Faulhaber, John L., Fostoria, Ohio. Eaves-trough hanger	506,874	Oct. 17	1823	456	65	370
Faulhaber, William, St. Louis, Mo. Car-coupling	507,896	Oct. 31	3572	879	65	732
Faulkner, John S., Bay View, Wis. Tongue-support	510,249	Dec. 5	683	163	65	1539
Faulks, John. (See Sweetland and Faulks.)						
Faunce, Albert B., Quincy, Ill., assignor to C. E. Whitmore, Boston, Mass. Device for preventing boiler incrustation	505,942	Oct. 3	216	56	65	43
Faussereau, Urbain, La Bernerie, France. Bicycle or tricycle	509,122	Nov. 21	1876	459	65	1142
Faust, Daniel H., Stockton, Cal. Vehicle-wrench	496,355	Apr. 25	2925	730	63	592
Faust, Henry H., Jr., Chicago, Ill. Road-crossing	509,855	Dec. 5	67	16, 17	65	1423
Faust, Jacob N., Rockford, Ill. Buckle	491,241	Feb. 7	291	73	62	804
Faust, Jacob N., Rockford, Ill. Suspender-end	500,324	June 27	2641	646	63	1892
Fauteux, Edouard, Montreal, Canada. Clothes-line pulley	491,998	Feb. 21	1501	374	62	1078
Fauvel, Charles J., London, England. Furnace for the treatment of refractory ores	493,076	Mar. 7	468	118	62	1452
Fauvel, Charles J., London, England. Treating refractory ores	502,181	July 25	2632	663	64	526
Fauvel, Charles J., London, England. Treating refractory ores	503,839	Aug. 22	2632	658	64	1093
Faville, George C., assignor of one-half to D. E. Curran, Baltimore, Md. Stock-car	501,413	July 11	1416	355	64	272
Favre, Louis, Cormoret, Switzerland. Stem winding and setting watch	491,242	Feb. 7	292	73	62	804
Fawcett, Isaac L. (See Coffield, Jesse M., assignor.)						
Fawcett, John W., Rastrick, and E. Jones, Whitcliffe, assignors to Samuel Law & Sons, Limited, Cleckheaton, England. Card-flat-clothing fastener	504,572	Sept. 5	431	106	64	1356
Fawcett, Lindley, Eureka, Cal. Lubricator	510,779	Dec. 12	1591	396	65	1722
Fawcett, Richard, assignor to W. H. Clark, Salem, Ohio. Thill-coupling	492,327	Feb. 21	2007	397	62	1182
Fawell, Joseph. (See Hemphill and Fawell.)						
Fay, Alpheus, assignor to C. C. Reakirt, J. H. Curley, E. Geis, Cincinnati, Ohio, and J. Prounsitzer, Nashville, Tenn. Running gear for vehicles	492,762	Feb. 28	2715	674	62	1338
Fay, Edgar E., Worcester, Mass. Machinery for making metal shoe-shank stiffeners	493,860	Mar. 21	1754	447	62	1731
Fay, Edmund S., <i>et al.</i> (See Hayes, John W., assignor.)						
Fay, Frank T., Boston, Mass. Oil-delivery appliance	488,991	Jan. 3	23	6, 7	62	7
Fay Gas Fixture Company. (See Gratiaa, Simeon D., assignor.)						
Fay, Henry R., Boston, Mass. Engine-valve	494,194	Mar. 28	2325	590	62	1854
Fay, Josiah C., Southborough, Mass. Cow-milking machine	510,964	Dec. 19	1962	481	65	1802
Fay, Rimmon C., assignor to Remington Arms Company, Ilion, N. Y. Vehicle-wheel	492,578	Feb. 28	2424	482	62	1282
Fay, Thomas J., New York, N. Y., assignor to J. L. Doolittle, Brunswick, Me. Electric-fuse block	499,664	June 13	1531	369	63	1672
Fay, Thornton E. W., Philadelphia, Pa. Car-coupling	491,839	Feb. 14	1253	312	62	1015
Fay, Thornton E. W., Philadelphia, Pa. Guide attachment for railway rolling-stock	494,418	Mar. 28	2687	674	62	1920
Fay, Waldo G., Columbus, Ohio. Combined coasting-pedal and lock for bicycles	491,342	Feb. 7	468	121	62	837
Fay, William H., assignor of one-half to F. G. Mitchell, Kansas City, Mo. Wine-cooler	502,114	July 25	2523	632	64	513
Fayette, Henry C. (See Brush and Fayette.)						
Fear, Frederic, Brooklyn, N. Y. Display-box	495,949	Apr. 18	2279	574	63	455
Fearn, William R., assignor of one-half to D. Jones, Camden, N. J. Pocket-lamp	491,963	Feb. 14	1446	360	62	1053
Fearon, James J. (See Mott and Fearon.)						
Featherston, Charles L., Ada, Minn. Ventilating-ring for heating-stoves	506,310	Oct. 10	881	217	65	179
Featherstone, Alfred, Chicago, Ill. Adjusting device for chain-wheels of bicycles	504,870	Sept. 12	926	238	64	1459
Featherstone, Henry F., West New Brighton, N. Y. Trousers stretcher and shaper	492,279	Feb. 21	1937	483	62	1168
Fechner, Albert, Posen, Germany. Horseshoe	499,976	June 20	2042	495	63	1775
Fechner, William R. (See Hecht and Fechner.)						
Fecht, Hermann, Trochtaefingen, assignor to Württembergische Uhrenfabrik Schwenningen, Schwenningen, Germany. Watchman's time-recorder	506,988	Oct. 17	2009	496	65	406
Federmann, Peter, Berlin, Germany. Casing for electric-arc lamps	508,926	Nov. 21	1556	381	65	1080
Federschmidt, Franz, Philadelphia, Pa. Boring-tool	496,253	Apr. 25	2745	686	63	556
Fedewa, Adam P., Belding, Mich. Stovepipe-fastener	508,874	Nov. 14	1433	355	65	1043
Feeney, Mary E., St. Paul, Minn. Kettle-lid clamp	508,005	Nov. 7	41	13	65	765
Fefel, Henry H., New York, N. Y., assignor to Union Special Sewing Machine Company, of Illinois. Trimming mechanism for sewing-machines	511,603	Dec. 26	3031	739	65	2011
Fehn, John E., Philadelphia, Pa. Door-stop	506,681	Oct. 17	1502	377	65	311

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Febrenbatch, John, assignor of two-thirds to F. C. Weir, Cincinnati, Ohio. Furnace for making gas.	505,759	Sept. 26	2441	615	64	1768
Feicker, Frederick C., Northampton, Mass. Fork-guard.	489,414	Jan. 3	651	176	62	140
Feicker, Frederick C., assignor to Northampton Cutlery Company, Northampton, Mass. Fork-guard.	490,430	Jan. 24	2306	599	62	511
Feindel, John T., Somerville, assignor of one-third to L. C. Garretson, Newark, N. J. Tie-dog for railway-rails.	496,254	Apr. 25	2745	636	63	556
Feiner, Adolph, Lexington, Ky. Trousers-hanger.	490,646	Jan. 31	2672	688	62	598
Feitel, Isaac. (See Rickey and Feitel.)						
Felbel, Jacob. (See Lykke, John, assignor.)						
Feldkamp, Fritz A., Newark, N. J. Dynamo-electric machine.	506,774	Oct. 17	1665	418 419 419	65	342
Feldkamp, Fritz A., Newark, N. J. Dynamo-electric machine.	506,775	Oct. 17	1668	420 421	65	342
Feldman, Michael, New York, N. Y. Suspenders.	493,990	Mar. 21	1984	506	62	1774
Feldmann, Frank J., Detroit, Mich. Flooring or other lumber.	502,289	Aug. 1	44	11	64	575
Feldmeyer, Joseph, <i>et al.</i> (See Smith, Levi W., assignor.)						
Felix, Numa J., Brooklyn, N. Y. Receptacle for feeding animals.	491,702	Feb. 14	1044	263	62	974
Felix, Numa J., Brooklyn, N. Y. Rake.	491,703	Feb. 14	1045	264	62	974
Felix, Numa J., Brooklyn, N. Y. Watchcase-spring.	493,260	Mar. 14	764	195	62	1526
Felix, Numa J., Brooklyn, N. Y. Watchcase-spring.	495,628	Apr. 18	1779	447	63	364
Felix, Numa J., Brooklyn, N. Y. Watchcase-spring.	500,325	June 27	2641	646	63	1892
Fell, Amos C., Newville, Ind. Churn.	491,677	Feb. 14	1003	253	62	965
Fellheimer, August. (See Fellheimer, Willey J., assignor.)						
Fellheimer, Willey J., assignor to A. Fellheimer, New York, N. Y. Signal-lantern.	489,798	Jan. 10	1348	327	62	274
Fellner, Christian, Bockenheim, Germany. Revolving roasting-furnace.	491,704	Feb. 14	1346	264	62	974
Fellner, Therese. (See Beer, Ludwig, assignor.)						
Fellowes, Ernest T., Englewood, N. J., assignor to American Cordage Company, New York, N. Y., and Xenia, Ohio. Manufacture of hammock-spreaders.	498,542	May 30	3490	863	63	1306
Fellows, Clarence A., Three Rivers, Mich. Furniture-caster.	492,624	Feb. 28	2501	620	62	1295
Fellows, Edwin R., Springfield, Vt. Apparatus for turning irregular shapes.	499,977	June 20	2043	495	63	1775
Felt, Howard A., Oshawa, Canada. Watch.	494,919	Apr. 4	621	158	63	120
Felt, Vanderlyn H., assignor of one-half to C. D. Jones, Kendall, N. Y. Fire-escape.	493,490	Mar. 14	1134	320	62	1595
Felthousen, Barrent, Milwaukee, Wis. Device for heating water in bath-tubs.	500,802	July 4	430	113	64	79
Felthousen, Edward G., Buffalo, N. Y. Valve.	506,846	Oct. 17	1780	448	65	363
Felthousen, William H., Baltimore, Md. Window-screen.	510,336	Dec. 5	813	197	65	1564
Feltman, George, New York, N. Y. Bottling-machine.	503,240	Aug. 22	2633	659	64	1093
Felton, William, <i>et al.</i> (See Whitzel, Russel B., assignor.)						
Feltrow, Henry P., assignor of one-half to R. K. Brown, Columbus, Ohio. Conduit electric railway.	493,695	Mar. 21	1485	380	62	1679
Fender, John M., assignor to Columbia Drill Company, Liberty, Ind. Spring device for grain-drills.	492,465	Feb. 28	2233	559	62	1241
Fender, John M., assignor to Columbia Drill Company, Liberty, Ind. Beading-machine for sheet metal.	506,989	Oct. 17	2011	497	65	406
Fenner, George P., New London, Conn. Sheet-splitting attachment for printing-presses.	505,352	Sept. 19	1709	441	64	1617
Fenner, George P., New London, Conn. Sheet-guide for printing-machines.	505,353	Sept. 19	1710	441	64	1618
Fenner, George P., New London, Conn. Sheet-delivery apparatus.	506,990	Oct. 17	2012	497 498	65	406
Fenner, George R., London, England. Bicycle.	510,167	Dec. 5	544	126	65	1513
Fenner, Marvin M., assignor of one-half to J. B. Shea, Waupun, Wis. Fountain-pen.	503,763	Aug. 22	2533	640	64	1073
Fenton, Gerald H., Bangalore, India. Vehicle for transporting horses and other animals.	510,416	Dec. 12	948	228 229	65	1604
Fenton Metallic Manufacturing Company. (See Hine, James W., assignor.)						
Fenton Metallic Manufacturing Company. (See Kelley, Manley S., assignor.)						
Fenzel, Casper, <i>et al.</i> (See Maxon, Oscar, assignor.)						
Fereday, John, Logan City, Utah Ter. Smoke-consumer.	491,879	Feb. 14	1322	327	62	1023
Fereva, Antony, Nelson, Cal. Self-cleaning screen.	493,886	Mar. 21	1790	457	62	1738
Ferguson, Orlando. (See Warren, Edward B., assignor.)						
Ferguson, Alvah P., Ann Arbor, Mich. Road-cart.	501,776	July 18	1990	492	64	392
Ferguson, Arthur C., Saratoga Springs, N. Y. Phototype-machine.	497,914	May 23	2470	617	63	1109
Ferguson Brothers. (See Campbell, James W., assignor.)						
Ferguson, Calvin D. (See Albuck and Ferguson.)						
Ferguson, George J., Greenville, Tex. Car-brake.	493,491	Mar. 14	1135	291	62	1595
Ferguson, George J., Greenville, Tex. Car-brake.	499,725	June 20	1629	393	63	1704
Ferguson, Georgiana, Mount Vernon, N. Y. Window-cleaner.	490,431	Jan. 24	2308	599	62	511
Ferguson, John A., Ferguson, Mo. Belt.	499,978	June 20	2045	496	63	1775
Ferguson, Robert, St. Paul, Minn. Hydrocarbon-furnace.	502,710	Aug. 8	809	196	64	729
Ferguson, Robert G., Lakewood, N. J. Dish-cleaner.	493,261	Mar. 14	765	195	62	1526
Ferguson, Robert G., Lakewood, N. J., assignor of two-thirds to W. A. Williams, Scarborough, N. Y. Packing.	490,107	Jan. 17	1773	462	62	394
Ferguson, Samuel, Cedar Rapids, Iowa. Hay-loader.	510,965	Dec. 19	1966	482 483	65	1803
Ferguson, Thomas, Hawksburn, Victoria. Apparatus for injecting sirup to and filling with aerated waters internal-stoppered bottles.	511,267	Dec. 19	2454	599	65	1893
Ferguson, Thomas H., Rockwood, Tenn. Water carrier.	494,951	Apr. 4	526	132	63	102
Ferguson, William L., Philadelphia, Pa. Attachment for cycle-pedals.	493,696	Mar. 21	1487	340	62	1680
Fernald, Charles F., assignor of one-half to A. J. Ochs, Boston, Mass. Cyclometer.	503,953	Aug. 29	2824	705	64	1147
Fernald, John, Wellington, Ill. Tile machine and cutter.	493,077	Mar. 7	471	119	62	1452
Fernando, Manuel D., Philadelphia, Pa. Finishing wood surfaces.	508,875	Nov. 14	1434		65	1043
Fernholtz, Emil, assignor of one-half to J. Stocke and H. C. Beckmann, St. Louis, Mo. Brick-machine.	509,302	Nov. 21	2182	524 525	65	1200
Ferrall, Thomas R., assignor of two-thirds to A. and G. Krouse, Bridgeport, Conn. Hoisting-block.	492,550	Feb. 28	2383	591	62	1273
Ferrand, Georges, Brussels, Belgium, and G. Göttl, Carlsbad, Austria-Hungary. Siphon for aerated liquids.	490,742	Jan. 31	2828	726	62	628
Ferrell, Alexander F. (See Preston, Ferrell, and Schiffbauer.)						
Ferrell, Frank J., New York, N. Y. Valve.	501,497	July 18	1531	384 385	64	309
Ferrell, Frank J., New York, N. Y., assignor to Ferrell Manufacturing Company, of New Jersey. Valve.	490,227	Jan. 17	1972	517	62	433
Ferrell Manufacturing Company. (See Ferrell, Frank J., assignor.)						
Ferris, David A., Spencer, N. Y. Picture-hanger.	506,682	Oct. 17	1503	377	65	312
Ferris, Fred H., Ketchum's Corners, N. Y. Seeding-machine.	507,796	Oct. 31	3412	536 537	65	692

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Ferris, Henry L., Harvard, Ill. Spring-hinge	496,476	May 2	133	37	63	643
Ferris, Henry L., Harvard, Ill. Door-sanger	498,467	May 30	3359	837	63	1283
Ferriss, Charles H., Sherwood, Tenn. Kitchen-cabinet	509,466	Nov. 28	2511	606	65	1274
Ferrin, Frank M. (See Miranda, Abraham R., assignor.)						
Ferry, Henry M., Detroit, Mich. Capsule-mold	495,406	Apr. 11	1420	357	63	280
Ferry, Henry M., Detroit, Mich. Capsule-stripping machine	495,407	Apr. 11	1420	357	63	280
Ferry, Orlando N., Cleveland, Ohio. Preparing cheese compounds	507,897	Oct. 31	3574	880	65	722
Fessenden, Reginald A., Pittsfield, Mass. Molding for electrical conductors	506,211	Oct. 10	882	217	65	179
Fête, Alfred, Horton, Kans. Veterinary ceraseur	495,668	Apr. 18	1847	462	63	375
Fetner, George W., Columbia, S. C. Steam-packing	491,539	Feb. 14	781	199	62	919
Fetzer, Jacob F. (See Wilson and Fetzer.)						
Fetzer, James J., Columbiana, assignor to Herbrand Company, Fremont, Ohio. Fifth-wheel coupling for vehicles	492,719	Feb. 28	2642	{ 654 655 }	{ 62 63 }	{ 1324 1325 }
Fetherherd, Emma, Coswig, Germany. Pot for preserving provisions on ice	509,572	Nov. 28	2680	648	65	1306
Ferguson, Albert M., Millport, N. Y. Extension-ladder	502,200	Aug. 1	45	11, 12	64	575
Fiala, Andrew H. (See Hedbavny and Fiala.)						
Fiber Conduit Company. (See Bradley, Stephen R., assignor.)						
Fichter, Fredrick, Rockaway, N. J. Valve	509,211	Nov. 21	2017	489	65	1169
Fichtner, John D., Uniontown, Pa. Nut-lock	506,485	Oct. 10	1207	300	65	243
Fick, William. (See Burns, Henry B., assignor.)						
Fidler, James. (See Platt and Fidler.)						
Fiedler, Bohuslav, Prague, Austria-Hungary. Match-safe	510,906	Dec. 19	1854	456	65	1781
Fiedler, George J., and A. C. Prohl, Milwaukee, Wis. Car-fare holder	504,026	Aug. 29	2940	735	64	1168
Fieger, John, New York, N. Y. Dumping-wagon	511,518	Dec. 25	2333	584	64	469
Field, Albert D., assignor to Metal Goods Manufacturing Company, Bridgeport, Conn. Shoe-fastening	495,408	Apr. 11	1421	357	63	280
Field, Benjamin F., Elmira, N. Y. Combination-tool	491,840	Feb. 14	1255	312	62	1015
Field, Benjamin F., Los Angeles, Cal. Gas-burner attachment	511,518	Dec. 26	2855	702	65	1986
Field, Benjamin F., and E. P. Clark, Los Angeles, Cal. Feed-water heater and purifier	502,035	July 25	2398	{ 603 604 }	{ 64 65 }	{ 481 482 }
Field, Charles C., New York, N. Y. Wagon-seat	503,411	Aug. 15	1946	484	64	950
Field, Edward, London, England. Gas and air engine	506,486	Oct. 10	1208	{ 300 301 302 }	{ 65 66 67 }	{ 243 244 245 }
Field, Frank. (See Stafford and Field.)						
Field, Frank E. D., New Market, N. H., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	510,851	Dec. 12	1744	431	65	1750
Field, Hardin G., Denver, Colo. Car-coupling	491,999	Feb. 21	1501	{ 374 375 }	{ 62 63 }	{ 1078 1079 }
Field, Horace T., Boston, Mass. Car-fender	494,524	Mar. 28	2856	715	62	1951
Field, Jesse A., Buffalo, N. Y. Screw-cutting machine	499,979	June 20	2047	{ 496 497 }	{ 63 64 }	{ 1776 1777 }
Field, John H. (See Bergh, Thorwald H., assignor.)						
Field, John S., Chicago, Ill. Making ice-tongs	491,540	Feb. 14	783	200	62	919
Field, Linus S., Storm Lake, Iowa. Cash-register	490,647	Jan. 31	2673	688	62	598
Field, Millard F., Taunton, Mass. Car-fender	502,959	Aug. 8	1221	{ 300 301 }	{ 64 65 }	{ 805 806 }
Field, Millard F., Taunton, Mass., assignor to Automatic Railway Track Sander Company, of Maine. Sanding device for railway-cars	505,976	Oct. 3	270	71	65	53
Field, Stephen D., Yonkers, N. Y. Vibratory telegraphy	491,163	Feb. 7	166	43	62	780
Field, Stephen D., Yonkers, N. Y. Vibratory telegraphy	496,513	May 2	191	52	63	654
Field, Stephen D., Yonkers, N. Y. Electric signaling apparatus	496,602	May 2	325	89, 90	63	678
Field, Stephen D., Yonkers, N. Y. Telegraphy	503,560	Aug. 22	2246	{ 563 564 565 }	{ 64 65 66 }	{ 1020 1021 1022 }
Field, Stephen D., Stockbridge, Mass. Telephone	507,728	Oct. 31	3296	{ 506 507 }	{ 65 66 }	{ 670 671 }
Field, Stephen D., Stockbridge, Mass. Electric-railway trolley	508,539	Nov. 14	924	227	65	945
Field, Thaddieus S., Atlanta, Ga. Vehicle-axle	508,876	Nov. 14	1435	356	65	1043
Field, Walter D., Millburn, N. J. Compound of blown oils	491,880	Feb. 14	1324	62	62	1028
Field, Walter D., Millburn, N. J. Producing sulphureted oils and products thereof	498,162	May 23	2838	64	63	1175
Field, Walter D., Wyoming, N. J. Manufacture of varnish	504,064	Aug. 29	2995	64	64	1178
Fielden, Eli, Britannia, near Bacup, assignor to E. T. Whitelow, Manchester, England. Slate-cleaner	505,787	Sept. 26	2482	626	64	1776
Fielder, James W. (See Kern and Fielder.)						
Fielding, John. (See Tweddell, Platt, and Fielding.)						
Fielding, John, Gloucester, England. Means for starting gas or oil motor engines	505,760	Sept. 26	2444	615	64	1768
Fields, Charles C., assignor to Bristol Novelty Company, Bristol, Tenn. Game-counter	499,218	June 13	791	188	63	1512
Fields, Jacob F. (See Widmeyer and Fields.)						
Fields, John C., Meadville, Pa. Puzzle	498,639	May 30	3652	903	63	1334
Fietsch, Herman, Jr., assignor to D. W. Ryan, Chicago, Ill. Base for stereotype or electrotype plates	509,075	Nov. 21	1789	440	65	1125
Fifield, Charles S., Revere, Mass. Friction-clutch	496,603	May 2	329	90	63	679
Fifield, Charles S., Revere, Mass. Skiving-machine	505,198	Sept. 19	1463	378	64	1572
Fileppi, Domenico, Paterson, N. J. Loom for weaving endless and jointless fabrics	502,182	July 25	2632	664	64	536
Filley, Giles F., St. Louis, Mo. Cooking-stove	497,270	May 9	1403	355	63	889
Filley, Giles F., St. Louis, Mo. Range	497,271	May 9	1405	{ 355 356 }	{ 63 64 }	{ 889 890 }
Filley, Giles F., St. Louis, Mo. Cooking stove or range	497,272	May 9	1406	356	63	889
Fillinger, John C., assignor of one-half to W. H. McDowell, Baltimore, Md. Confectionery-machine	494,559	Apr. 4	37	8	63	8
Fillman, Julius, Melrose, Ohio. Combined barrel truck and stand	508,097	Nov. 7	195	52	65	795
Filstrup, Lars L., Chicago, Ill. Tuning-neg for musical string-instruments	508,098	Nov. 7	197	52	65	795
Filstrup, Larsen, Chicago, Ill. Electric-light fixture	508,006	Nov. 7	42	13	65	766
Finch, Charles M., Toledo, Ohio. Combined washstand and table	492,530	Feb. 28	2347	582	62	1264
Finch, Ernest, Wellsville, Ohio. Chimney-top	491,678	Feb. 14	1004	253	62	965
Finch, John M., Marysville, Cal. Separator	499,915	June 30	1958	475	63	1760
Finch, Lewis H. (See Allen, William, assignor.)						
Fincher, Francis W., Pentwater, Mich. Metallic calking-strip	491,417	Feb. 7	586	147	62	860
Finck, Nicholas, Elizabeth, N. J., assignor to P. L. B. Coombs, St. Joseph, Mo. Carbureting-lamp	502,251	July 25	2757	697	64	549
Findlater, George W. (See Smith and Findlater.)						
Findlay, John L., Somerville, Mass. Perspectograph	496,558	May 2	265	71	63	667
Finfrock, George, and G. Veessenmeyer, assignors to Finfrock & Veessenmeyer Patent Journal Oiler Company, Chicago, Ill. Lubricator	499,186	June 6	743	177	63	1520

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Finfrock & Veesenmeyer Patent Journal Oiler Company. (See Finfrock and Veesenmeyer, assignors.)						
Fink, Joseph H. (See George, Albert F., assignor.)						
Fink, Joseph H., <i>et al.</i> (See George, Albert F., assignor.)						
Fink, Joseph H., <i>et al.</i> (See Ward, Frank D., assignor.)						
Finkbinder, U. S. G., <i>et al.</i> (See Manderfield, George J., assignor.)						
Finke, August T., Good Thunder, Minn. Traction-engine tender	509,886	Dec. 5	68	17	65	1423
Finke, Fidelio. (See Gay and Finke.)						
Finke, Louis. (See Gross, John B., assignor.)						
Finlayson, Alexander W., and E. Popkins, Detroit, Mich. Steam-generator	500,803	July 4	432	113	64	80
Finlayson, Christopher T., Denver, Colo. Wire-rope tramway	505,397	Sept. 19	1781	462	64	1631
Finletter, Robert W., <i>et al.</i> , administrators. (See Bradford, Hezekiah.)						
Finley, Gipson, Grand Ridge, Ill. Bicycle-support	499,457	June 13	1207	288	63	1616
Finley, James, Clarion, Iowa. Fly-net for horses	495,730	Apr. 18	1949	490	63	393
Finley, James H., <i>et al.</i> (See Hunt, Edward P., assignor.)						
Finnegan, Peter H., Austin, Ill. Revolver	504,154	Aug. 29	3142	785 786	64	1206
Finney, Jasper, and G. Davidson, Goulding, assignors of one-third to E. E. Reese, Pensacola, Fla. Means for guiding floating logs, &c.	505,039	Sept. 12	1205	310	64	1511
Finney, Joseph R., Randolph, Wis. Cultivator	499,187	June 6	744	177	63	1520
Finney, Walter A., Hillsborough, Ill. Safety-catch for elevators	505,289	Sept. 19	1611	418	64	1600
Firchau, Paul J. G., West Plains, Mo. Machine for working candy	511,011	Dec. 19	2040	504	65	1815
Firnstein, George A., Cincinnati, Ohio. Folding confessional	490,873	Jan. 31	3026	778	62	668
Firth, Joseph K. (See Gould and Firth.)						
Fischbach, Jules H. (See Leroux and Fischbach.)						
Fischbach, Louis, New York, N. Y. Opening attachment for tin cans	495,669	Apr. 18	1848	462	63	375
Fischer, Bernhard E., Defiance, Ohio. Combined grain huller, scourer, and polisher	498,510	May 30	3431	851	63	1395
Fischer, Emil, Hallsville, Ill. Tire-tightener	510,473	Dec. 12	1048	251	65	1623
Fischer, Engelbert, Chicago, Ill. Boring-machine	510,595	Dec. 12	1279	310 311	65	1664
Fischer, Frank X., Oakland, Cal. Boiler attachment	508,007	Nov. 7	43	13	65	766
Fischer, Frederick J. W., assignor to Eagle Pencil Company, New York, N. Y. Pen	498,746	May 30	3855	950	63	1369
Fischer, George F., Rochester, N. Y. Rake attachment for wagons	497,172	May 9	1251	318	63	862
Fischer, George F., Rochester, N. Y. Self-loading vehicle	499,102	June 6	606	146	63	1496
Fischer, George F., Rochester, N. Y. Car-truck	503,412	Aug. 15	1947	424	64	950
Fischer, Hermann C., New York, and L. A. Schmidt, Brooklyn, N. Y. Cover for boxes	505,943	Oct. 3	217	56	65	43
Fischer, Johann F., and O. Peters, assignors to Wormser Filterplatten Werk, Peters, Bittel & Co., Worms, Germany. Artificial-stone filter	509,887	Dec. 5	69	17	65	1423
Fischer, John, assignor of one-half to J. R. Stauffer, Scottsdale, Pa. Car-coupling	502,711	Aug. 8	811	196	64	729
Fischer, Therese R., Baltimore, Md. Tea or coffee pot	501,648	July 18	1772	441	64	355
Fischer, Therese R., Baltimore, Md. Skewer for closing fowls	504,777	Sept. 12	775	196	64	1429
Fischer, Walther, Solingen, Germany. Shears	491,679	Feb. 14	1005	253	62	966
Fiset, Michel, Albany, N. Y. Station-indicator	493,763	Mar. 21	1603	407 408	62	1702
Fish, Charles E., <i>et al.</i> (See Wallace, Victor, assignor.)						
Fish, Horace W., <i>et al.</i> (See Brooks, John, assignor.)						
Fish, Samuel H., Hinsdale, assignor of one-half to H. C. Middaugh, Clarendon Hills, Ill. Potato-planter	505,877	Oct. 3	118	30, 31	65	24
Fish, Warren L., Newark, N. J. Bicycle or velocipede saddle	499,379	June 13	1060	257	63	1590
Fishburn, John, assignor to himself, J. A. Cameron, and J. H. Watson, Walla Walla, Wash. Safety-valve for water-gages	490,955	Jan. 31	3176	813	62	696
Fishel, Henry W., New York, N. Y. Boutonnière	499,671	Jan. 10	1048	273	62	234
Fishel, Henry W., New York, N. Y. Boutonnière	497,407	May 16	1656	418	63	949
Fishel, Henry W., New York, N. Y. Boutonnière	500,195	June 27	2430	593	63	1854
Fishel, Henry W., New York, N. Y. Boutonnière	502,852	Aug. 8	1035	253	64	771
Fishel, Henry W., New York, N. Y. Boutonnière	502,853	Aug. 8	1036	254	64	771
Fishel, Henry W., New York, N. Y. Boutonnière	502,854	Aug. 8	1036	254	64	771
Fishel, Henry W., New York, N. Y. Boutonnière	502,855	Aug. 8	1037	254	64	772
Fishel, Henry W., New York, N. Y. Boutonnière	507,533	Oct. 31	2969	728	65	609
Fishel, Henry W., New York, N. Y., assignor to himself and L. D. Nessler. Boutonnière. (Reissue)	11,329	May 2	715	190	63	747
Fisher, Alfred A., (See Nelson, William G., assignor.)						
Fisher, Alfred A., and W. G. Nelson, Brooklyn, N. Y. Mechanism for transmitting power	511,415	Dec. 26	2727	660	65	1956
Fisher, Almon H., Worcester, Mass. Railway step-ladder	502,099	Nov. 7	198	53	65	795
Fisher, Alonzo, and G. H. Prestley, Stockton, Cal.; said Fisher assignor of one-sixth to said Prestley. Horse-hitching device	490,874	Jan. 31	3028	779	62	669
Fisher, Andrew J., assignor to Farmers Friend Manufacturing Company, Dayton, Ohio. Grain-drill	495,670	Apr. 18	1849	462	63	375
Fisher, Andrew J., assignor to Farmers Friend Manufacturing Company, Dayton, Ohio. Corn-planter	496,114	Apr. 25	2532	639 640	63	517
Fisher, Andrew J., assignor to Farmers Friend Manufacturing Company, Dayton, Ohio. Corn-planter	498,954	June 6	359	86, 87	63	1455
Fisher, Andrew S., Bedford, assignor of one-half to J. C. Houser, Milroy, Pa. Cuff-holder	499,219	June 13	793	188	63	1543
Fisher, Ansel W., Charlotte, Me. Thill-coupling	502,620	Aug. 1	623	149	64	621
Fisher, Charles J., Chicago, Ill. Burglar-alarm	501,777	July 18	1991	492	64	392
Fisher, Charles N., Houston, Tex. Box-fastener	490,228	Jan. 17	1974	517	62	434
Fisher, Daniel C., Allston, Mass. Feeding mechanism for wool-carding engines	506,487	Oct. 10	1211	302	65	243
Fisher, David H., Mount Carmel, Pa. Ventilating-fan for mines	511,519	Dec. 26	2885	702	65	1926
Fisher, Edwin C., Claremont, N. H. Bicycle-tool	494,051	May 23	2678	670	63	1146
Fisher, Edmendorf C., Port Richmond, N. Y., assignor to Universal Street Sweeping Machine Company. Street-sweeper	503,928	Aug. 22	2764	692	64	1119
Fisher, Edmendorf C., Port Richmond, N. Y., assignor to Universal Street Sweeping Machine Company. Street-sweeper	509,303	Nov. 21	2183	525	65	1200
Fisher, Emma C., Centre, Wis. Steam-cooker	506,219	Oct. 10	720	181	65	148
Fisher, George P., Bucyrus, Ohio. Wheel	492,280	Feb. 21	1938	424	62	1169
Fisher, George W., assignor of one-half to B. De Mond, Paulding, Ohio. Spike	511,236	Dec. 19	2401	585	65	1884
Fisher, Harry A. (See Lyon, Charles D., assignor.)						
Fisher, Henry W., assignor to Standard Underground Cable Company, Pittsburg, Pa. Electric cable	508,295	Nov. 7	515	125	65	853
Fisher, John, Matlock, England. Signal-wire compensator	506,106	Oct. 3	477	124	65	93
Fisher, John, Matlock, England. Signal-wire support	511,132	Dec. 19	2238	549	65	1854
Fisher, Joseph, Powell, Ohio. Car-replacer	494,806	Apr. 4	453	112	63	87

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Fisher, Lewis H., Walpole, Mass. Heat-regulating device for stoves or other heaters.....	509,152	Nov. 21 1920	469	470	65	1150
Fisher, Lewis H., Walpole, Mass. Heat-regulating device for stoves or furnaces	509,153	Nov. 21 1922	470		65	1150
Fisher, Michel J. (See Snyder and Fisher.)						
Fisher, Robertson J. (See Eisengart, William L., assignor.)						
Fisher, William C., Middletown, Conn., assignor to G. R. Bidwell, New York, N. Y. Pneumatic tire	498,777	June 6 42	9		63	1396
Fisher, William N., Gloucester, Mass. Making anchors	503,591	Aug. 22 2253	564	565	64	1021
Fishing, William A. (See Whittington and Fishing.)						
Fisk, Earls L., Almena, Mich. Wheel-felly attachment	503,927	Nov. 21 1557	381		65	1080
Fisk, George L., Ellisville, Ill. Eaves-trough attachment	493,697	Mar. 21 1487	381		62	1680
Fiske, Annette, Bridgeport, Conn. Fastening for wearing-apparel	498,913	June 6 296	68		63	1445
Fiske, Bradley A., U. S. Navy. Telescopic sight for ships' guns	504,337	Sept. 5 39	12		64	1278
Fiske, Bradley A., U. S. Navy. Range-indicator	510,417	Dec. 12 950	299		65	1605
Fiske, Bradley A., U. S. Navy. Position-finder	510,418	Dec. 12 952	299	230	65	1605
Fiske, Daniel A., Sioux City, Iowa. Churn	497,643	May 16 2030	505		63	1015
Fiske, Jonathan P. B. (See Reist and Fiske.)						
Fiske, Jonathan P. B., Lynn, assignor to General Electric Company, Boston, Mass. Brush for dynamo-electric machines and motors	501,060	July 11 831	216		64	167
Fiske, Jonathan P. B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-contact apparatus	501,206	July 11 1073	273		64	211
Fiske, Jonathan P. B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-elevator controller	508,691	Nov. 14 1155	285		65	991
Fiske, Jonathan P. B., Lynn, assignor to General Electric Company, Boston, Mass. Rheostat for controlling electrically-operated dental apparatus	508,692	Nov. 14 1157	285		65	991
Fitch, Charles L., Brooklyn, assignor to W. P. Watson, New York, N. Y. Manufacturing gas	489,472	Jan. 10 763	202		62	176
Fitch, Charles M., South Norwalk, Conn. Railway-switch	490,190	Jan. 17 1906	496		62	421
Fitch, Charles M., South Norwalk, Conn. Railway-switch	493,991	Mar. 21 1984	506		62	1774
Fitch, Charles M., and A. B. Kingsland, Burlington, Vt. Portable baking-oven	492,541	Feb. 28 2366	587		62	1268
Fitch, Derrick H., Cazenovia, N. Y. Galvanic battery	494,852	Apr. 4 527	132		63	102
Fitch, Francis E. (See Horton and Fitch.)						
Fitch, George, Millvale, Pa. Electric light	506,488	Oct. 10 1214	303		65	244
Fitch, Jenny B., Utica, N. Y. Salad-mixing device	501,649	July 18 1773	441	442	64	355
Fitch, Thaddens S., Alameda, Cal. Knockdown egg or fruit carrier	503,313	Aug. 15 1805	448		64	923
Fitch, William E., Louisville, Ky. Fireplace-grate	501,061	July 11 832	216		64	167
Fitch, W. & E. T. (See Hubbard, George M., assignor.)						
Fittler, Edward E., Philadelphia, Pa. Garment-protector	503,841	Aug. 22 2635	659		64	1093
Fitts, George C., Durham, N. C. Chamber-vessel	501,601	July 18 1697	423		64	341
Fitts, James H., and W. E. Anderson, Blacksburg, Va. Condenser	500,196	June 27 2430	593		63	1854
Fitts, Norman V., Worcester, Mass. Safety device for elevators	500,876	July 4 546	141	142	64	99
Fitz, Amos C., Worcester, Mass. Chuck for screw-machines	507,315	Oct. 24 2601	640		65	526
Fitz Henry, William, W. P. Bolles, and A. McKee, Bloomington, Ill. Whiffletree attachment	497,496	May 16 1813	455		63	975
Fitz Gerald, Augustine F., Brooklyn, assignor to Automatic Can Opening Attachment Company, New York, N. Y. Seal for vessels and means for opening same	489,183	Jan. 3 309	86		62	70
Fitz Gerald, Julia L., Terra Alta, W. Va. Refrigerator	493,262	Mar. 14 766	196		62	1526
Fitz Roy, Robert, Bridgeport, Conn. Dumping-wagon	491,343	Feb. 7 470	121		62	837
Fitz Water, Marshall V., assignor of one-half to M. W. Gass, Cross Anchor, Tenn. Rotary fly-pan	492,596	Feb. 28 2452	610		62	1286
Fitzgerald, Edward E., West Duluth, assignor, by mesne assignments, of one-half to F. W. Merritt, Duluth, Minn. Band-saw mill	491,047	Jan. 31 3332	850		62	727
Fitzgerald, Ira A. (See Fitzgerald, William H., assignor.)						
Fitzgerald, James H., Winston, N. C. Railway-gate	504,974	Sept. 12 1099	281		64	1492
Fitzgerald, James W., Maysville, Ky. Crupper	494,195	Mar. 28 2328	590		62	1854
Fitzgerald, James W., Maysville, Ky. Stallion-shield	508,100	Nov. 7 200	53		65	796
Fitzgerald, John. (See Haynes, John I., assignor.)						
Fitzgerald, John H., Houston, Tex. Apparatus for washing and scrubbing gas	493,156	Mar. 7 598	150		62	1477
Fitzgerald, Mathew, assignor of one-half to W. E. Hagan, Troy, N. Y. Metal tie for railway-tracks	497,954	May 23 2530	632		63	1120
Fitzgerald, Michael J., Aravaipa, Ariz. Ter. Tire-tightener	492,667	Feb. 28 2569	636		62	1308
Fitzgerald, Peter J., Hyde Park, Mass. Letter-box	501,270	July 11 1170	297		64	227
Fitzgerald, Peter J., Hyde Park, and D. F. Barry, Boston, Mass. Car-heater	499,017	June 6 489	113	114	63	1476
Fitzgerald, Robert B. (See McMullen, Peter, assignor.)						
Fitzgerald, Thomas, and E. T. White, Baltimore, Md. Locomotive or other boiler.....	509,800	Nov. 28 3045	736		65	1375
Fitzgerald, Thomas L. (See Thomas and Fitzgerald.)						
Fitzgerald, William H., Monroe, assignor to I. A. Fitzgerald, Sapona, N. C. Bed-brace	502,115	July 25 2526	633		64	505
Fitzgerald, William J. (See Edge and Fitzgerald.)						
Fitzgerrell, James J., Denver, Colo. Combined ore-separator and amalgamator	501,879	July 18 2147	532		64	419
Fitzgibbon, Thomas, Grove Centre, Ky. Combined reel-support and wire-stretcher	492,000	Feb. 21 1503	375		62	1079
Fitzhugh, Charles L., Allegheny, and S. S. Babbitt, Pittsburg, Pa. Metal railway-tie	493,492	Mar. 14 1136	291		62	1595
Fitzhugh, Charles L., Allegheny, J. Z. Speer, and S. S. Babbitt, Pittsburg, Pa. Rolling-mill	496,084	Apr. 25 2490	629	629	63	508
Fitzmaurice, James S., assignor to Electric Brand Company, Limited, Sydney, New South Wales. Auto-calorific branding-tool	493,078	Mar. 7 474	119		62	1453
Fitzpatrick, Benjamin, and H. C. Boatright, Wetumpka, Ala. Bale-press	494,920	Apr. 4 622	158		63	120
Fitzsimmons, James A., Wheeling, W. Va. Grapple or grip-tongs	490,866	Jan. 31 3015	775		62	666
Fitzsimmons, Thomas J. (See Moore and Fitzsimmons.)						
Fives Lille Company. (See Duval, Martin L. E., assignor.)						
Fjellman, Peter P., Willmar, Minn. Sack-holder	497,870	May 23 2401	599		63	1098
Flach, Adam, Philadelphia, Pa. Trimmer for reeds for musical instruments	492,668	Feb. 28 2570	636		62	1309
Flack, John G., et al. (See Flack, Mortimer C., assignor.)						
Flack, Mortimer C., Lake Geneva, assignor of one-half to J. G. Flack, Elkhorn, and D. Gross, Lake Geneva, Wis. Line-ring for harness	509,026	Nov. 21 1704	421		65	1109
Flagg, Eli W., assignor to Nichols & Shepard Company, Battle Creek, Mich. Automatic grain-measurer	504,155	Aug. 29 3144	786		64	1206
Flagg, George C., Lewistown, Ill. Wagon end-gate	504,448	Sept. 5 218	58		64	1311
Flagg, George C., and E. T. Gaymon, Lewistown, Ill. Grain-elevator	495,698	Apr. 18 1893	476		63	382

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Flagg, George H. P. (See Stiles, George A., assignor.)						
Flagg, George H. P. (See Webster, Harold A., assignor.)						
Flagg, George H. P. (See Wilbur, Henry A., assignor.)						
Flagg, Orrin H., New Bedford, assignor to C. H. Hall, Boston, Mass. Apparatus for watering live stock	507,534	Oct. 31	2969	728	65	609
Flagg, Samuel H., Providence, R. I. Conduit for electric railways	504,676	Sept. 5	594	151	64	1382
Flake, John G. F., Cincinnati, Ohio. Combined knife and pencil and eraser holder	501,225	July 11	1104	281	64	217
Flanagan, Denis, Clayton-le-Moors, England. Sewing-machine	497,644	May 16	2031	505 506 507	63	1015
Flanagan, Denis, Clayton-le-Moors, England. Feeding mechanism for sewing-machines	497,645	May 16	2034	507	63	1016
Flanagan, Denis, Clayton-le-Moors, England. Take-up for sewing-machines	497,646	May 16	2035	507	63	1016
Flanagan, James I., Philadelphia, Pa. Handle for covers of milk-cans, &c	510,780	Dec. 12	1594	397	65	1723
Flanders, Brown S., Boston, Mass. Portable telephone	502,398	Aug. 1	247	59	64	611
Flanders, Calvin, Brantford, Canada. Washing-machine	493,919	Mar. 21	1851	471	64	1749
Flanders, David, Watertown, Mass. Fender for street-cars	511,604	Dec. 26	3033	739	65	2012
Flanegin, Francis A., assignor to L. A. Bailey and M. E. Flanegin, Washington, D. C. Lamp-collar	508,296	Nov. 7	516	125	65	854
Flanegin, Mary E., et al. (See Flanegin, Francis A., assignor.)						
Flanigan, Stephen A., Watervliet, N. Y. Hand-strap for street-cars	490,191	Jan. 17	1907	497	62	421
Flanner, Frank. (See Brazelle, Benjamin, assignor.)						
Flanner, Frank W., Indianapolis, Ind. Fluid-fuel burner	508,130	Nov. 7	248	63	65	804
Flather, Frederick A., Newton, Mass. Coiler for carding-engines	491,209	Feb. 7	239	60, 61	62	793
Flather, Joseph, Nashua, N. H. Taper attachment for lathes	509,212	Nov. 21	2019	490	65	1170
Flechtner, Albin, Metz, Germany. Damper for household-stoves	493,500	Mar. 14	1298	331	62	1627
Flegal, Aaron C. (See Smith, Daniel H., assignor.)						
Fleischer, Johannes, Frankfort-on-the-Main, Germany. Safety gas-pressure regulator	498,253	May 30	3003	748 749	63	1219
Fleischmann & Bloedel. (See Simonot, Claude J., assignor.)						
Fleming, Clifford A., Huntsville, Mo. Hay rake and loader	504,975	Sept. 12	1101	281 282	64	1492
Fleming, George E., Elgin, Ill. Sweeper for railway-tracks	496,049	Apr. 25	2437	615	63	498
Fleming, Hiram W., and J. A. Mack, Cleveland, Ohio. Oiler	506,312	Oct. 10	883	217	65	180
Fleming, James H., Newark, N. J. Watchcase-spring	503,314	Aug. 15	1806	448	64	923
Fleming, Peter F., Huntsville, Mo. Hay-stacker	501,650	July 18	1774	442	64	355
Flesher, Addison B. (See Harksen, Alfred J., assignor.)						
Fletcher, Benjamin L., Cincinnati, Ohio, assignor to Fletcher Fire Mat Company, Newport, Ky. Fire-mat	504,156	Aug. 29	3146	786	64	1207
Fletcher, Charles R., Boston, Mass. Production of alloys by electro-deposition	499,726	June 20	1631	393	63	1704
Fletcher, Ernest R., St. Albans, Vt. Box-lifter	497,780	May 23	2255	565	63	1072
Fletcher Fire Mat Company. (See Fletcher, Benjamin L., assignor.)						
Fletcher, Frank F., U. S. Navy. Gun-mounting	499,530	June 13	1324	312 313	63	1636
Fletcher, Frank F., U. S. Navy. Breech mechanism for breech-loading guns	499,531	June 13	1325	313 314	63	1637
Fletcher, Frank F., U. S. Navy. Apparatus for sighting guns	499,532	June 13	1328	314	63	1637
Fletcher, James W., Knoxville, Tenn. Washer-fastener for hose-couplings, &c	503,344	Aug. 15	1855	459	64	933
Fletcher, John R., Dayton, Ohio. Locking device for suspending-lines	491,541	Feb. 14	784	200	62	919
Fletcher, John R., Dayton, Ohio. Register for packages	498,254	May 30	3005	749	63	1219
Fletcher, Louis S., Beatrice, Nebr. Dust-collector	505,977	Oct. 3	272	72	65	53
Fletcher, Theodore, Macdonia, Tex. Wrench and cutter	495,793	Apr. 18	2044	517	63	411
Fletcher, Wendell C., St. Louis, Mo., assignor to N. P. Willard, trustee, Chicago, Ill. Electric car-brake	492,492	Feb. 28	2290	569	62	1251
Fletcher, Wendell C., St. Louis, Mo., assignor to N. P. Willard, trustee, Chicago, Ill. Automatic speed indicator and recorder	492,493	Feb. 28	2291	569	62	1252
Fletcher, Wendell C., St. Louis, Mo., assignor to N. P. Willard, trustee, Chicago, Ill. Railway-crossing	492,770	Feb. 28	2726	679	62	1340
Fletcher, William J., assignor of one-half to Twin City Iron Works, Minneapolis, Minn. Liquid-cooler	491,964	Feb. 14	1447	360	62	1053
Fleurant, Antoine, Macon, France. Chuck or holder for tools, &c	494,631	Apr. 4	166	40	63	34
Fliege, Henry C. (See Friedrichs and Fliege.)						
Flierboom, Anton, Elizabeth, N. J. Fan attachment for chairs	495,319	Apr. 11	1281	320	63	255
Flint, Alvin S., assignor of one-half to F. R. Slocum, Hartford, Conn. Vehicle-wheel	498,255	May 30	3006	749	63	1219
Flint, Austin L., Watertown, N. Y. Spindle for paper-rolls	494,329	Mar. 28	2338	639	62	1893
Flint, Benjamin F., Cincinnati, Ohio. Electric-light fixture	505,097	Sept. 19	1809	337	64	1544
Flint, Benjamin F., Cincinnati, Ohio. Revolving electric light	505,098	Sept. 19	1810	338	64	1544
Flint, Cyrus W., St. Louis, Mo., and J. Rose, Memphis, Tenn. Spring-bed	511,691	Dec. 26	3167	774	65	2036
Flint, Edwin H., Cincinnati, Ohio. Stem winding and setting watch	510,393	Dec. 5	913	219	65	1584
Flint, Edwin H., Cincinnati, Ohio, assignor to G. S. Prindle, Washington, D. C. Stem winding and setting watch. (Reissue)	11,323	Apr. 11	1525	382	63	302
Flint, Edwin H., Cincinnati, Ohio, assignor to G. S. Prindle, Washington, D. C. Stem winding and setting watch	503,533	Aug. 15	2139	537	64	985
Flint, George. (See Brill, William H., assignor.)						
Flint, Henry, assignor of one-half to L. A. Steber, St. Louis, Mo. Portable combined steam and hot-air radiator	510,852	Dec. 12	1745	431	65	1751
Flint, John B., Chelsea, Mass. Machine for grinding cutters	497,313	May 16	1511	380 381	63	923
Flint, Joseph A., San Francisco, Cal. Tile construction for walls, arches, &c	497,234	May 9	1339	341	63	879
Flocke, Robert, Newark, N. J., assignor to G. Bernheim, New York, N. Y. Satchel or bag frame. (Reissue)	11,315	Mar. 21	2194	560	62	1814
Flockhart, James, Newark, N. J., assignor of one-half to E. Maher. Molder's flask	501,414	July 11	1417	355	64	272
Floerckey, Dorothea M., Philadelphia, Pa. Garment-fastener	502,432	Aug. 1	307	73	64	622
Flohr, Otto, Buffalo, N. Y. Car-coupling	502,413	Aug. 1	275	65	64	616
Flohr, Otto, assignor of two-thirds to H. Altman and G. E. Mann, Buffalo, N. Y. Combined car truck and coupling	502,411	Aug. 1	271	64	64	616
Flohr, Otto, assignor of two-thirds to H. Altman and G. E. Mann, Buffalo, N. Y. Car-coupling	502,412	Aug. 1	273	65	64	616
Flood, James H., Bridgeport, Pa. Burner attachment for lighting lamps	504,477	Sept. 5	261	68	64	1319
Flora, Ellsworth E., Chicago, Ill., assignor to G. B. Hoit. Coin-operated phonograph	494,778	Apr. 4	400	98, 99	63	78
Flora, Ellsworth E., Chicago, Ill., assignor to G. B. Hoit. Coin-operated phonograph	494,807	Apr. 4	454	112 113	63	87
Florence Machine Company. (See Robertson, James, assignor.)						
Flory, John, Grand Rapids, Mich. Combined folding bed and dressing-case	504,778	Sept. 12	776	196	64	1429

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Flower, Alfred H., <i>et al.</i> (See Gates, Matthias, assignor.)						
Flower, Augustus F. (See Flower and Cousins.)						
Flower, George K., Pittsburg, Pa., assignor, by mesne assignments, to J. S. Auerbach, New York, N. Y. Type-writing machine. (Reissue.)	11,391	Nov. 28	3137	758	65	1393
Flower, John W. and A. F., and R. J. Cousins, Shaftesbury, England. Barrel-washer	502,414	Aug. 1	276	66	64	617
Flower, Walter C. (See Le Gresley-Cox, Ernest, assignor.)						
Flowers, John S., Three Oaks, Mich., assignor of one-half to M. H. Nye, Washington, D. C. Paper-cutter	502,415	Aug. 1	278	66	64	617
Flowers, Phillip, St. Louis, Mo. Folding bed	502,291	Aug. 1	47	13	64	575
Floyd, Charles M., Ida Grove, Iowa. Bed	494,560	Apr. 4	39	8	63	9
Floyd, Edward A., Paola, Kans. Bee-swarmers	497,518	May 16	1838	463	63	981
Floyd, Frederick W., <i>et al.</i> (See Parish and Meyer, assignors.)						
Floyd, Henry E., <i>et al.</i> (See Parish and Meyer, assignors.)						
Floyd, Hezekiah, and W. H. Douty, assignors of one-third to J. M. Gaskins, Shamokin, Pa. Block-signaling system and apparatus for railways	490,192	Jan. 17	1908	{ 497 498 }	{ 62 62 }	421
Floyd, James R., <i>et al.</i> (See Parish and Meyer, assignors.)						
Floyd, James R., New York, N. Y. Lazy-tongs valve-operating mechanism	497,871	May 23	2402	599	63	1098
Floyd & Sons, James R. (See Beal, William R., assignor.)						
Fludder, Alexander J., and F. M. Sisson, Newport, R. I. Brush for cleaning chimneys or flues	505,761	Sept. 26	2445	615	64	1768
Fluent, Nelson P., Sand Creek, Wis. Combined bee swarmer, catcher, and separator	500,197	June 27	2432	594	63	1855
Flynn, Frank B., Chicago, Ill. Oil-drip pan	496,403	May 2	23	6, 7	63	623
Flynn, James. (See Devers, William J., assignor.)						
Flynn, Jeremiah, Syracuse, N. Y. Composition for architectural purposes	503,592	Aug. 22	2255		64	1021
Flynn, John W., Bordentown, N. J. Car-coupling	501,929	July 25	2237	558	64	451
Flynn, Peter H., Syracuse, N. Y. Case for type-writers	495,130	Apr. 11	963	{ 246 247 }	{ 63 63 }	201
Flynn, Thomas H., <i>et al.</i> (See Allis, Abram Q., assignor.)						
Flynt, Samuel B., Amory, Miss. Combined harrow and clod-crusher	510,126	Dec. 5	482	{ 109 110 }	{ 65 65 }	1501
Focer, Daniel. (See Hand, Samuel S., assignor.)						
Fogarty, Thomas B., Long Island City, assignor of one-twentieth to E. Cowen, New York, N. Y. Apparatus for and process of obtaining combined nitrogen and fuel gases	500,650	July 4	184	48	64	36
Fogarty, Thomas B., Long Island City, assignor of one-twentieth to E. Cowen, New York, N. Y. Method of and apparatus for producing cyanides and ammonia	500,651	July 4	186	48, 49	64	37
Fogg, Charles F., New York, N. Y. Air-compressor	493,263	Mar. 14	768	196	62	1527
Fogg, Mary, Beaver Dam, Wis. Thread-cutting attachment for thimbles	502,036	July 25	2400	604	64	481
Fogle, H. C. (See Wilson, George E., assignor.)						
Foisv, Arsène, West Gardner, Mass. Rein-holder	491,542	Feb. 14	785	200	62	919
Foland, George, and S. F. Carey, Wilmington, Ohio. Pad-fastener	490,743	Jan. 31	2831	727	62	628
Foley, James. (See Schneider and Foley.)						
Foley, James S., London, England. Type-writing machine	511,416	Dec. 26	2729	661	65	1956
Foley, Jerry, Syracuse, N. Y. Wrench	505,513	Sept. 26	1997	511	64	1684
Foley, John B., New Haven, Conn. Gas-store	507,652	Oct. 31	3190	781	65	650
Foley, John P., Phillipsburg, Mont. Sluice-box	510,474	Dec. 12	1049	251	65	1623
Foley, Nicholas W. (See Naylor and Foley.)						
Folger, Charles H., assignor to Cincinnati Novelty Manufacturing Company, Cincinnati, Ohio. Electrical appliance	494,098	Mar. 21	2157	550	62	1807
Folk, Jesse E., Brooklyn, N. Y., assignor to Aktiebolaget Separator, Stockholm, Sweden. Centrifugal creamer	504,430	Sept. 5	196	50	64	1307
Follett, Charles E., and G. Simpson, Oshkosh, Wis. Bridge-gate	502,664	Aug. 1	693	167	64	694
Folmer & Schwing Manufacturing Company. (See Rich, Geary, assignor.)						
Fombuena, Valentin S., Madrid, Spain. Cigarette-machine	501,498	July 18	1532	{ 485 486 487 }	{ 64 64 64 }	310
Fontaine, Eugene, Detroit, Mich. Actuating mechanism for railway devices	508,928	Nov. 21	1558	382	65	1080
Fontaine, Eugene, Detroit, Mich. Winter bridge	508,929	Nov. 21	1560	382	65	1080
Fontaine, Eugene, assignor to Fontaine Safety Signal Company, Detroit, Mich. Block-sig- nal system for railways	494,525	Mar. 28	2857	{ 715 716 }	{ 62 62 }	1951
Fontaine, Eugene, assignor to Unique Novelty Company, Detroit, Mich. Self-heating curl- ing-iron	511,297	Dec. 19	2511	611	65	1903
Fontaine, Patrick H., Elmo, assignor of one-half to C. G. Holland and E. Blair, Danville, Va. Apparatus for carbureting air	493,992	Mar. 21	1985	{ 506 507 }	{ 62 62 }	1775
Fontaine, Patrick H., Elmo, assignor of one-half to C. G. Holland and J. D. Blair, execu- tors of E. Blair, deceased, Danville, Va. Apparatus for carbureting air	501,778	July 18	1993	493	64	392
Fontaine Safety Signal Company. (See Fontaine, Eugene, assignor.)						
Foos, John, and C. F. Endter, Springfield, Ohio; said Endter assignor to said Foos. Gas-engine	494,134	Mar. 28	2229	568	62	1835
Foos Manufacturing Company. (See Winchell, James F., assignor.)						
Foot, Charles H., Kansas City, Kans. Combined washer and nut-lock	505,454	Sept. 26	1863	485	64	1664
Foot, Charles H., assignor to R. Jenkins, deceased; J. B. Jenkins, executor, Chicago, Ill. Wall for circular structures	489,415	Jan. 3	652	{ 176 177 }	{ 62 62 }	140
Foot, Edward N. (See Range and Foot.)						
Foot, Edward N., assignor to Boston Cash Register Company, Northampton, Mass. Money-drawer for cash-registers	495,934	Apr. 18	2258	568	63	450
Foot, Frank, Mystic, Conn. Coin-actuated vending-machine	496,730	May 2	539	{ 143 144 145 }	{ 63 63 63 }	716
Foot, George L., Brooklyn, N. Y. Galvanic battery	489,559	Jan. 10	901	235	62	204
Foot, John B., Hamilton, Ohio. Can-heading machine	494,674	Apr. 4	229	57	63	47
Foot, John B., Hamilton, Ohio. Vegetable-peeling machine	501,613	July 18	1716	428	64	345
Foran, John R., <i>et al.</i> (See Wilson, William C., assignor.)						
Forbes, Alexander G. (See Kemp, George W., assignor.)						
Forbes, Charles, Rochester, N. Y. Portable coin holder and ejector	508,101	Nov. 7	200	53, 54	65	796
Forbes, Charles S., London, England. Magnetic telephone	500,481	June 27	2865	705	63	1931
Forbes, George H., assignor of one-fourth to G. P. Parker and L. A. Henberg, San Francisco, Cal. Device for enabling moving bodies to pass obstructions	506,037	Oct. 3	364	96	65	71
Forbes, Groves C., Marysville, and B. Prickett, Homer, Ga. Churn	506,107	Oct. 3	479	124	65	94
Forbes, Harvey F., <i>et al.</i> (See Titman, James R., assignor.)						
Forbes, Horace B., Ogden, Utah Ter. Breast-strap attachment	497,647	May 16	2036	507	63	1016
Forbes, Jesse P., Coshocton, Ohio. Compen-book	508,212	Nov. 7	384	94	65	830
Forbes, John A., Dover, Del. Sash-fastener	509,304	Nov. 21	2184	525	65	1201
Forbes, John S. (See Adams and Forbes.)						
Forbes, Walter T., Atlanta, Ga. Apparatus for treating fibrous plants, &c	510,168	Dec. 5	545	{ 126 127 }	{ 65 65 }	1513

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Forbes, William H. (See Clark, Dwight S., assignor.)						
Forbes, William H., and G. B. Shepley, Brooklyn, N. Y. Gear-casing	504,338	Sept. 5	42	12	64	1279
Forbes, Wilson H., Jeannette, Pa. Method of and apparatus for propelling producer-gases	503,842	Aug. 22	2636	659	64	1094
Forbes, Wilson H., Chicago, Ill., assignor of one-half to P. P. Smith, Jeannette, Pa. Glass or other furnace	498,640	May 30	3653	904	63	1334
Forbis, Harbert K. (See Peters and Forbis.)						
Force, William A. (See Dodge, Edwin H., assignor.)						
Ford, Archibald, Golden Gate, Cal. Gas-governor	498,543	May 30	3491	863	63	1306
Ford, Charles S., Sr., assignor to H. Duffield, Eden, Pa., and M. Clair, Bound Brook, N. J. Gas-regulating burner	701,459	July 11	1477	371	64	284
Ford, David, Litchfield, Mich. Adjustable hammock-support	506,776	Oct. 17	1670	421	65	343
Ford, Eugene A., assignor to G. Holl, New York, N. Y. Type-writing machine. (Reissue.)	11,339	May 16	2219	555 556	63	1050
Ford, Hamilton E., assignor to Johnson Company, Johnstown, Pa. Railway rail and chair and uniting same	495,967	Apr. 25	2307	583	63	474
Ford, Hamilton E., Johnstown, Pa., assignor, by mesne assignments, to Johnson Company, of Pennsylvania. Railway-joint and support, &c.	505,978	Oct. 3	273	72	65	54
Ford, Henry W., assignor to Eclipse Wind-Engine Company, Beloit, Wis. Hoop-coupling.	504,677	Sept. 5	595	151	64	1352
Ford, Jesse S., and C. F. Westerfield, Westerfield, Ky. Tobacco-frame	507,797	Oct. 31	3413	837	65	692
Ford, John B., Creighton, Pa. Machinery for polishing plate-glass	496,731	May 2	541	145 146	63	717
Ford, John F., Cambridge, Mass. Testing-band	508,609	Nov. 14	1033	254	65	966
Ford, Johnson & Co. (See Dunlap, Henry G., assignor.)						
Ford, Lauren M., Mill Village, Pa. Deep-well pump	490,142	Jan. 17	1835	479	62	407
Ford, Pierce, Chicago, Ill. Slicing-machine	501,779	July 18	1995	493	64	393
Ford, Thomas P., Brooklyn, N. Y. Valve	499,799	Jan. 10	1250	327	62	274
Ford, Thomas P., Brooklyn, N. Y. Valve	503,843	Aug. 22	2637	660	64	1094
Ford, William H. (See Perky and Ford.)						
Ford, William S., Chelsea, and B. A. Lenfest, Wakefield, assignors to American Bell Telephone Company, Boston, Mass. Distributing-frame for electric wires	507,424	Oct. 24	2773	679 680	65	560
Foreham, John M., Brooklyn, N. Y. Match-box or like receptacle	495,320	Apr. 11	1382	321	63	256
Foreman, Albert M. (See Foreman, Lord, and Foreman.)						
Foreman, Samuel E., E. M. Lord, and A. M. Foreman, Randolph, Kans. Door-check	509,305	Nov. 21	2186	525	65	1201
Forest City Furniture Company. (See Johnson, Andrew C., assignor.)						
Forest City Furniture Company. (See Snyder, William D., assignor.)						
Forgie, William, Washington, Pa. Gudgeon	489,733	Jan. 10	1147	297	62	253
Forgie, William, Washington, Pa. Construction of tanks	492,001	Feb. 21	1504	375	62	1079
Forker, William, Pittsville, Pa. Means for handling drill-bits for oil or Artesian wells	491,164	Feb. 7	170	43, 44	62	780
Forman, John, Pottstown, Pa. Coal-chute	492,281	Feb. 21	1939	484	62	1169
Fornander, Alfred, New York, N. Y. Lead, crayon, or other holder	499,191	June 6	750	178	63	1521
Fornander, Alfred, New York, N. Y., assignor to E. Faber. Pencil-sharpener	501,043	July 4	800	209	64	146
Fornander, Alfred, assignor to E. Faber, New York, N. Y. Pencil-sharpener	508,693	Nov. 14	1158	286	65	991
Forney, Matthias N., New York, N. Y. Reversible back for car or other seats	482,992	Jan. 3	24	7, 8	62	7
Forney, Matthias N., New York, N. Y. Counterbalance and guide for reciprocating mechanisms	490,648	Jan. 10	1018	265	62	227
Forney, Matthias N., New York, N. Y. Steam-boiler	510,636	Dec. 12	1351	331	65	1678
Forney, Henry C., Philadelphia, Pa. Freight or parcel carrier	505,705	Sept. 26	2354	595	64	1752
Forrest, John H., Marion, Ind. Stopper-fastener for fruit-jars	493,698	Mar. 21	1488	381	62	1620
Forrester, Abraham M., Washington, D. C. Gearing	494,741	Apr. 4	339	86	63	67
Forrester, Isaac N., et al. (See Wilson, Milton M., assignor.)						
Forsberg, Charles A., Rockford, Ill. Clamp	498,778	June 6	44	9	63	1396
Forslund, Hugo W., assignor to Standard Elevator Company and W. H. Wells, Jr., Chicago, Ill. Automatic stop-valve	505,514	Sept. 26	1998	512	64	1685
Forsburg, John G., and P. Burkland, Lancaster, Pa. Ammonia-expansion valve	506,991	Oct. 17	2013	498	65	407
Forster, Francis E., New York, N. Y. Making transparent photographs on glass	494,526	Mar. 28	2466		62	1952
Forstner, Thomas, New Ulm, Minn. Drilling-machine	494,632	Apr. 4	167	40	63	34
Forsyth, Daniel M., Franklin, Ind. Corn-planter	508,930	Nov. 21	1562	383	65	1081
Forsyth, Henry C., assignor of one-ninth to B. F. Purdy and F. M. Towner, Viroqua, Wis. Combined wooden sheathing and lath	510,015	Dec. 5	302	67	65	1467
Forsyth, Henry H., Jr., Chicago, Ill. Beater for railway-car seats	500,595	June 20	2176	530	63	1798
Forsyth, Robert C., Chicago, Ill. Device for protecting steam-pipes	504,871	Sept. 12	927	239	64	1459
Forsyth, William, Fresno, Cal. Paper box	503,077	Aug. 8	1394	344 345	64	837
Fortin, Benjamin P., assignor of one-half to E. J. Davey, Bridgeport, Conn. Surface gage	508,213	Nov. 7	386	94	65	830
Fortney, Neil J. (See Potter and Fortney.)						
Foss, Edgar B., et al. (See Church, Dwight M., assignor.) (Reissue.)						
Fossick, George E., Sheffield, Ala. Stone-sawing machine	507,357	Oct. 24	2669	656	65	539
Foster, Albert W., Cape May, N. J. Pneumatic shoe-sole	510,504	Dec. 12	1093	263	65	1632
Foster, Alfred F., Alton, Ill. Pipe-turner	510,169	Dec. 5	546	127	65	1513
Foster, Arthur L. (See Loree, Manfred U., assignor.)						
Foster Bros. (See Foster, William S., assignor.)						
Foster, Charles H., New York, N. Y., assignor to Singer Manufacturing Company of New Jersey. Guide for sewing-machines	501,930	July 25	2239	559	64	451
Foster, Charles I., assignor of one-half to G. A. Foster, Meriden, Conn. Ice-lowering apparatus	506,777	Oct. 17	1671	421	65	343
Foster Engineering Company. (See Foster, John M., assignor.)						
Foster, Finley M., New York, N. Y. Hand-power attachment	491,418	Feb. 7	587	147	62	860
Foster, Frank W. (See Howes, Albert P., assignor.)						
Foster, George A. (See Foster, Charles I., assignor.)						
Foster, George C. H., assignor to Crown Electric Manufacturing Company, Bridgeport, Conn. Incandescent-lamp socket	489,158	Jan. 3	266	74	62	62
Foster, Harry S., Albany, N. Y. Printer's chase	506,992	Oct. 17	2015	498	65	407
Foster, James, Starkville, Miss. Ice-cream freezer	498,163	May 23	2239	710	63	1175
Foster, James D. (See Kelly, Isaac V., assignor.)						
Foster, James D., Ironton, and C. A. Hammel, Findlay, Ohio. Oil-stove	505,244	Sept. 19	1533	400	64	1585
Foster, James D., Ironton, and C. A. Hammel, Findlay, Ohio. Oil-stove	505,245	Sept. 19	1534	400	64	1585
Foster, John K., Greenville, Ohio. Horse-measuring device	491,733	Feb. 14	1090	275	62	982
Foster, John M., Cranford, N. J. Beacon or buoy	498,256	May 30	3007	750	63	1220
Foster, John M., Cranford, assignor to Foster Engineering Company, Newark, N. J. Pump-regulator	489,297	Jan. 3	480	133	62	105
Foster, John W., assignor to Foster Machine Company, Westfield, Mass. Stop-motion for spooling-machines	499,665	June 13	1532	369	63	1672
Foster, John W., assignor to Foster Machine Company, Westfield, Mass. Twisting attachment for winding-machines	499,666	June 13	1533	369	63	1672

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Foster, John W., assignor to Foster Machine Company, Westfield, Mass. Tube-holder for spooling-machines.	499,667	June 13	1535	370	63	1672
Foster, John W., assignor to Foster Machine Company, Westfield, Mass. Spooling-machine.	499,668	June 13	1536	370	63	1673
Foster, Jonas R., Stoneham, assignor to E. I. Smith, Waltham, Mass. Pencil-sharpener.	492,669	Feb. 28	2571	636	62	1309
Foster, Lebbens H., Adrian, Mich. Clamp for interlocking wires.	504,157	Aug. 29	3146	786	64	1207
Foster Machine Company. (See Foster, John W., assignor.)						
Foster, Matthew H. (See Chase and Foster.)						
Foster, Oscar S., Utica, N. Y. Spring-bed.	493,581	Mar. 14	1299	332	62	1628
Foster, Oscar S., Utica, N. Y. Spring-bed.	496,404	May 2	24	7	63	623
Foster, Oscar S. and W. S., Utica, N. Y. Spring-setting machine.	490,845	Jan. 31	2984	765	62	659
Foster, Oscar S. and W. S., Utica, N. Y. Spring-bed.	493,427	Mar. 14	1026	266	62	1576
Foster, Oscar S. and W. S., Utica, N. Y. Machine for forming springs.	493,428	Mar. 14	1028	266	62	1576
Foster Pump Works. (See Mistic, Michael, assignor.)						
Foster, Stephen A., assignor of one-half to O. B. Clark, Toledo, Ohio. Extensible car-step.	494,949	Apr. 4	657	169	63	127
Foster, Thomas J. (See MacEachen, Samuel, assignor.)						
Foster, William S. (See Foster, Oscar S. and W. S.)						
Foster, William S., assignor to Foster Bros., Utica, N. Y. Wheel.	496,405	May 2	25	7	63	623
Foudray, Thomas E., Sedalia, Mo. Gate.	489,604	Jan. 10	966	251	62	216
Fougeirol, Edouard, Paris, France. Apparatus for winding silk, &c.	495,479	Apr. 18	1544	388	63	324
Foulis, William. (See Arrol and Foulis.)						
Foulis, William, Glasgow, Scotland. Apparatus for stirring and drawing gas-retorts.	498,779	June 6	44	10	63	1396
Foulks, John P., Verde, Nev. Air-motor.	500,877	July 4	547	142	64	100
Fountain, Charles E., Port Townsend, Wash. Easel.	510,250	Dec. 5	684	163 164	65	1540
Fouque, Lucien. (See Kehlberger and Fouque.)						
Foust, Nathaniel, St. Mary's, Pa. Link-motion for engines.	497,648	May 16	2037	508	63	1017
Fouts, T. M. (See La Chance, Walter W., assignor.)						
Fovan, John R., et al. (See Wilson, William C., assignor.)						
Fowden, Robert A. (See Davis and Fowden.)						
Fowden, Robert A., Philadelphia, Pa., assignor to International Printing Telegraph Company, Camden, N. J. Printing-telegraph.	509,430	Nov. 28	2421	586 587 511 512 513	65	1255
Fowler, Alfred B., and G. E. Warren, Exeter, N. H. Heel-trimming machine.	503,475	Aug. 15	2053	512 513	64	968
Fowler, Charles M., Salem, Mass. Door-securer.	504,207	Aug. 29	3241	808	64	1224
Fowler, Charles M., Salem, Mass. Fire-escape.	505,706	Sept. 26	2357	595	64	1753
Fowler, Charles S., Minneapolis, Minn. Binder for sheet-music.	500,482	June 27	2566	706	63	1932
Fowler, Charles S., Brooklyn, and L. A. Rockwell, New York, N. Y. Cracker-machine.	498,641	May 30	3656	904 905	63	1334
Fowler, Charles W., Baltimore, Md. Worm-gearing.	493,493	Mar. 14	1137	291	62	1595
Fowler, Charles W., Baltimore, Md., assignor, by mesne assignments, to Standard Screw Elevator Manufacturing Company, Chicago, Ill. Elevator.	511,417	Dec. 26	2733	661	65	1957
Fowler, Chester F., St. Helen, Oreg. Gage for saws.	503,281	Aug. 15	1740	430	64	913
Fowler, Frank P., Phoenix, Ariz. Ter. Hay-press.	507,425	Oct. 24	2778	680 681	65	560
Fowler, George H., Weedsport, N. Y. Hay-carrier.	508,102	Nov. 7	203	54	65	796
Fowler, John W., and J. Hutton; said Hutton assignor to Lewis & Fowler Manufacturing Company, Brooklyn, N. Y. Electric street-railway sweeper.	495,321	Apr. 11	1283	321 322 323 660 662	63	256
Fowler, Joinville F., Alliance, Ohio. Twine-binder.	503,844	Aug. 22	2639	661 662	64	1095
Fowler, Joseph C., Washington, D. C. Spacer for type-matrices.	498,425	May 30	3287	821	63	1270
Fowler, Joseph C., Washington, D. C. Spacer for type-matrices.	498,426	May 30	3290	821 431	63	1270
Fowler, Joseph C., assignor of one-half to L. G. Hine, Washington, D. C. Machine for producing type-bars.	510,853	Dec. 12	1747	432 433 434	65	1751
Fowler, Lewis D., Nixon, assignor of one-half to H. H. and H. O. Hinkle, Savannah, Tenn. Mop.	505,897	Oct. 3	154	39	65	30
Fowler Nail Company. (See Yarrington, Charles H., assignor.)						
Fowler, Rufus B., et al. (See Eastman, Sylvester, assignor.)						
Fowler, Samuel B., Chicago, Ill., assignor to Standard Underground Cable Company, Pittsburgh, Pa. Junction box for electric cables.	506,688	Oct. 17	1504	377 378	65	312
Fowler, Samuel P. (See Dasher, Hiram D., assignor.)						
Fowler, W., et al. (See Shepard, Walter R., assignor.)						
Fowler, William, Colorado Springs, Colo. Odor-arresting lid for vessels.	511,692	Dec. 26	3168	774	65	2037
Fowler, William E. (See Caverno and Fowler.)						
Fowler, William M., Milford, Conn. Liquid measuring and recording apparatus.	490,823	Jan. 31	2951	758	62	652
Fowler, William M., Milford, Conn. Liquid measuring and dispensing apparatus.	491,705	Feb. 14	1049	265	62	975
Fowler, William M., Milford, Conn. Electric alarm-clock.	498,468	May 30	3361	837 838	63	1283
Fowler, William M., Milford, Conn. Liquid-dispensing apparatus.	507,316	Oct. 24	2603	640	65	529
Fowler, William R., Baltimore, Md. Cash register and indicator.	494,374	Mar. 28	2617	657 658	62	1907
Fowler, William R., assignor to M. Ingram & Co., Baltimore, Md. Fly-fan.	491,476	Feb. 7	632	172	62	879
Fowler, Zack T., Santa Rosa, Cal. Carriage or buggy top enamel.	504,339	Sept. 5	43		64	1279
Fownes Brothers & Co. (See Smellie, Ernest, assignor.)						
Fox, Charles, Hinsdale, Ill. Autographic register.	502,924	Aug. 8	1163	287	64	795
Fox, Charles E., assignor to himself and T. J. Junkin, Natchez, Miss. Auxiliary mold-board, &c.	503,413	Aug. 15	1953	485	64	951
Fox, Charles H., Delano, assignor to J. M. Gilstrop, Daunt, Cal. Refrigerator.	504,804	Sept. 12	820	208	64	1437
Fox, Clarence W., Saugus, Mass. Funnel.	502,881	Aug. 8	1077	266	64	779
Fox, Clarence W., Saugus, Mass. Machine for making suppositories.	509,154	Nov. 21	1924	470	65	1151
Fox, Edward B., et al. (See Northrup, Edwin F., assignor.)						
Fox, Edward B., et al. (See Stevenson, Edward W., assignor.)						
Fox, Edward B., et al. (See Willyoung, Elmer G., assignor.)						
Fox, Elijah J., Broadway, Ohio. Wire-stretcher.	502,813	Aug. 8	976	238	64	760
Fox, Frank A. (See Dale and Fox.)						
Fox, George M., et al. (See Green, Ira L., assignor.)						
Fox, Henry, Jr. (See Miner, John C., assignor.)						
Fox, Hugh L., St. Louis, Mo. Cotton-seed delinter.	495,167	Apr. 11	1045	260 261	63	212
Fox, James S., Detroit, Mich. Railway-tie plate.	496,115	Apr. 25	2534	640	63	517

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Fox, John. (See Coffin, Zebulon E., assignor.)						
Fox, John H. (See Harder and Fox.)						
Fox, John H., Boston, Mass. Device for automatically stopping railway-trains	507,976	Oct. 31	3704	920	65	746
Fox, Joseph P., Providence, R. I. Drawer	497,235	May 9	1340	341 342	63	879
Fox Machine Company. (See Dosch, Peter, assignor.)						
Fox Machine Company. (See Fox, William R., assignor.)						
Fox, Samuel L., et al. (See Northrup, Edwin F., assignor.)						
Fox, Samuel L., et al. (See Stevenson, Edward W., assignor.)						
Fox, Samuel L., et al. (See Willyoung, Elmer G., assignor.)						
Fox, Samson, Harrogate, England. Bogie-truck for railway carriages	505,159	Sept. 19	1406	360 361 362	64	1561
Fox Solid Pressed Steel Company. (See Barnes, David L., assignor.)						
Fox Solid Pressed Steel Company. (See Davidson, Francis P., assignor.)						
Fox Solid Pressed Steel Company. (See Mackenzie-Hughes, Edward W., assignor.)						
Fox, Truman V. (See Lisk, David A., assignor.)						
Fox, William R., assignor to Fox Machine Company, Grand Rapids, Mich. Metal-planing machine	489,734	Jan. 10	1148	297	62	253
Fox, William R., assignor to Fox Machine Company, Grand Rapids, Mich. Mitering-machine	493,494	Mar. 14	1139	291 292	62	1595
Fox, William R., assignor to Fox Machine Company, Grand Rapids, Mich. Shaping-machine	502,621	Aug. 1	623	149 150	64	681
Fox, William R., assignor to Fox Machine Company, Grand Rapids, Mich. Pulley	504,208	Aug. 29	3242	808	64	1225
Fox, William R., assignor to Fox Machine Company, Grand Rapids, Mich. Wood-trimmer	504,209	Aug. 29	3242	808 809	64	1225
Fox, William R., assignor to Fox Machine Company, Grand Rapids, Mich. Sash-pulley	506,684	Oct. 17	1506	378 379	65	312
Foxlee, Edward W., London, England, assignor, by mesne assignments, to Eastman Kodak Company, Rochester, N. Y. Treating films	495,458	Apr. 11	1503		63	295
Foy, Martin H. (See Klahr, Petty, and Foy.)						
Fozard, Harry. (See Brogan, Thomas J., assignor.)						
Frackmann, Henry W., Scranton, Pa. Water-tube safety-boiler	503,130	Aug. 15	1501	369	64	870
Fraley, John, McKeesport, Pa. Support for curtains or blinds	507,266	Oct. 24	2508	618	65	507
Frame, Asa B., Boyden, Iowa. Water-wheel	499,533	June 13	1330	315	63	1638
Frame, Robert, Newport, R. I. Water-closet	509,519	Nov. 28	2593	627	65	1290
France, Albert L., Milldale, assignor to Kenton Can Company, Covington, Ky. Lens attachment for tubular lanterns	494,185	Mar. 28	2232	563 750	62	1836
France, Joseph R., New York, N. Y. Machine for cutting sheets or films of pyralin	498,257	May 30	3009	751	63	1220
Franchot, Stanislaus P. (See Gibbs and Franchot.)						
Francis, Allan E., Cleveland, Ohio. Spectacle-frame	505,650	Sept. 26	2259	572	64	1735
Francis Fritsch Manufacturing Company. (See Brauer, John, assignor.)						
Francis, George E. (See White, Otis C., assignor.)						
Francis, George T., assignor of one-half to Standard Elevator Company, Chicago, Ill. Guide-post clamp	505,515	Sept. 26	2000	512	64	1685
Francis, Harry H., Madison, N. J. Artificial stem for cut flowers	501,134	July 11	963	246	64	190
Francis, John C., assignor to Echo Telephone Company, New York, N. Y. Telephone-switch	488,993	Jan. 3	26	8	62	8
Francis, Joseph. (See Oxnham, Joyce, and Francis.)						
Francis, William H., and L. F. Gerding, St. Joseph, Mo. Brick-kiln	506,906	Oct. 17	1880	469	65	321
Frank, Emil, assignor, by mesne assignments, to National Automatic Knitter Company, Philadelphia, Pa. Circular-knitting machine	504,417	Sept. 5	170	44 45 46	64	1302
Frank, Emil J., Philadelphia, Pa. Knitting-machine	500,121	June 27	2292	556 557 558	63	1829
Frank, Emil J., Philadelphia, Pa. Circular-knitting machine	502,292	Aug. 1	52	13	64	576
Frank, Emil J., Philadelphia, assignor to National Automatic Knitter Company, Philadelphia and Norristown, Pa. Transfer appliance for knitting-machines	500,122	June 27	2304	558	63	1833
Frank, Emil J., Philadelphia, assignor to National Automatic Knitter Company, Philadelphia and Norristown, Pa. Thread-controlling mechanism for knitting-machines	500,123	June 27	2307	559	63	1833
Frank, Emil J., Philadelphia, assignor to National Automatic Knitter Company, Philadelphia and Norristown, Pa. Circular-knitting machine	508,512	Nov. 14	871	215 216 217 218	65	935
Frank, Albyn L. (See Moody and Smith, assignors.)						
Frank, Frederick W., assignor of one-half to H. Lorenz, Indianapolis, Ind. Caster	499,783	June 20	1736	420	63	1721
Frank, George. (See Vollmar, Jacob C., assignor.)						
Frank H. Clement Company. (See Purdy, Charles H., assignor.)						
Frank, John R., Minneapolis, Minn. Telegraph-key	508,214	Nov. 7	387	94	65	830
Frank, Joseph, and F. H. Frankenberg, Pueblo, Colo. Screw-clamp	490,143	Jan. 17	1836	479	62	407
Frank, Peter, Portland, Mo. Stove	500,878	July 4	549	142	64	100
Frank, Samuel. (See Kalkkuhl, Carl, assignor.)						
Franko, Franz R. A., Berlin, Germany. Bronzing-machine	504,718	Sept. 12	664	168	64	1408
Franko, Johan F., Santa Ana, Cal. Automatic intermittent hydraulic time apparatus	511,075	Dec. 19	2134	527	65	1833
Frankel, Charles, Baltimore, Md. Display-rack	499,420	June 13	1146	275	63	1605
Frankel, Charles, Baltimore, Md. Display-rack	500,879	July 4	550	143	64	100
Frankel, Charles, Baltimore, Md. Display-rack	504,916	Sept. 12	1003	259	64	1474
Franken, Robert. (See Johnson, William L., assignor.)						
Franken, Robert, assignor of one-half to W. L. Johnson, Pomona, Cal. Hose-fastener	498,780	June 6	46	10	63	1396
Frankenberg, Frank H. (See Frank and Frankenberg.)						
Frankenberg, Friedrich, Berlin, Germany. Roller-skate	503,233	Aug. 15	1666	410	64	909
Franklin, Edward A., assignor to Texas Invention Company, Austin, Tex. Siphon-pump for oil-cans	503,232	Aug. 15	1665	409	64	899
Franklin Electric Company. (See Irving, Frank K., assignor.)						
Franklin, Ella F. (See Franklin, Lewis S., assignor.)						
Franklin, Henry H., Brooklyn, N. Y. Electric-railway conduit	506,993	Oct. 17	2016	498	65	407
Franklin, Lewis S., assignor to E. F. Franklin, Parkersburg, W. Va. Horse-checking device	502,092	July 25	2490	626	64	498
Franklin, Nelson G., assignor of two-thirds to C. C. Chadwick and J. S. Snyder, Chicago, Ill. Fastener	498,846	June 6	173	43	63	1423
Franks, Orrin G., assignor to North Western Wire Mattress Company, Kenosha, Wis. Bed	491,243	Feb. 7	293	73	62	804

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Franks, Orrin G., assignor to North Western Wire Mattress Company, Kenosha, Wis. Bed	491,244	Feb. 7	294	73	62	805
Franks, Orrin G., assignor to North Western Wire Mattress Company, Kenosha, Wis. Folding leg for furniture	493,021	Mar. 7	397	99	62	1437
Franks, William, Muskegon, Mich. Steam-valve	496,732	May 2	543	146	63	717
Fransmann, John, New York, N. Y. Ventilator for apartments	500,880	July 4	550	143	64	100
Fransway, Frank W. (See Lightner and Fransway.)						
Frantz, Hiram A., Tamaqua, Pa. Motor for sewing-machines	491,751	Feb. 14	1114	282	62	988
Frantz, William B., assignor to G. E. Mundy, Guthrie, Okla. Ter. Vessel for preserving perishable articles	494,099	Mar. 21	2158	551	62	1807
Franz Clouth, Rhenish Rubber Manufactory. (See Hoffstadt, Joseph, assignor.)						
Franz, Henry, Brooklyn, N. Y. Graphoscope	499,380	June 13	1063	258	63	1591
Franzen, Harm H., Golden, Ill. Broadcast hand-seeder	490,956	Jan. 31	3177	813	62	696
Frasch, Friedrich, <i>et al.</i> (See Smith, Augustus, assignor.)						
Frasch, Herman, Cleveland, Ohio, assignor to Solar Refining Company, of Ohio. Apparatus for refining petroleum	490,144	Jan. 17	1837	479 480	62	407
Frasch, Herman, Cleveland, Ohio, assignor to Solar Refining Company, of Ohio. Furnace for roasting, calcining, and oxidizing metals and their compounds	492,551	Feb. 23	2384	591 592	62	1273
Frasch, Herman, Cleveland, Ohio, assignor to Solar Refining Company, of Ohio. Composition for purifying Canadian or similar petroleum and making such composition	500,252	June 27	2513	614	63	1870
Fraser, Andrew, San Francisco, Cal. Ore-crushing machine	501,999	July 25	2334	585	64	469
Fraser, Arthur C., trustee. (See Herrick, Albert B., assignor.)						
Fraser, Franklin W., Toronto, Canada. Stop-action for organs	501,880	July 18	2150	533	64	419
Fraser, James, London, England. Clutch	492,625	Feb. 28	2502	620	62	1296
Fraser, John, assignor to himself and A. C. Somner, Buffalo, N. Y. Earth-auger	503,078	Aug. 8	1396	345	64	837
Fraser, John W., and J. D. Wilson, London, Canada. Vacuum-pump	496,559	May 2	266	71	63	668
Fraser, Rena A., <i>et al.</i> (See Norton, Charles H., assignor.)						
Frasher, Charles T., assignor of one-half to G. Reed, Mount Pleasant, Mich. Alarm for railway-crossings	504,719	Sept. 12	665	169	64	1408
Frasher, Franklin O., Petersburg, Del. Holdback attachment for vehicles	499,920	June 20	2050	497	62	1776
Frasier, Warren, Lynn, Mass. Lathe attachment	499,289	June 13	897	217	63	1560
Frasier, William E. (See Terrell and Frasier.)						
Frates, Ramond A. (See Combs and Frates.)						
Frawley, John J., president. (See Barrett, Patrick J., assignor.)						
Frayser, Charles A., Keithsburg, assignor to himself, and G. M. Clark, Chicago, Ill. Gasoline-stove	499,220	June 13	795	188	63	1543
Frazee, Edwin and G. P. Holden, Mo. Shoe blacking and polishing machine	496,050	Apr. 25	2439	615	63	499
Frazee, George P. (See Frazee, Edwin and G. P.)						
Frazier, Alexander. (See Munton and Frazier.)						
Frazier, George V., <i>et al.</i> (See Miller, Daniel F., assignor.)						
Frazier, Luther L. (See Hodge, Martin P., assignor.)						
Frazier, Thomas F. (See Grievies and Frazier.)						
Frazier, William W. (See Steffen, Carl, assignor.)						
Frear, Aaron H., Washington, D. C. Manufacture of artificial stone	506,847	Oct. 17	1782		65	363
Freas, Louis, Pittsburg, Pa. Means for operating elevator-doors	503,345	Aug. 15	1856	459	64	933
Frederick, Edward. (See Kem and Frederick.)						
Frederick, George W., Los Angeles, Cal. Self-anchoring suspension-bridge	511,605	Dec. 26	3034	740	65	2012
Frederick Stearns & Company. (See Stearns, Albyn D., assignor.)						
Frederick, William D. (See Krenz and Frederick.)						
Fredick, Edward. (See Nye, George E., assignor.)						
Fredin, Per Johan, assignor of one-half to E. Hewitt, New Haven, Conn. Truss	504,158	Aug. 29	3147	787	64	1207
Frédureau, Jean B. F., Paris, France. Composition of matter for manufacture of crockery-ware, pipes, or other articles	510,065	Dec. 5	380		65	1421
Free, John W. (See Baker and Free.)						
Free, Stanley, New Haven, Conn. Glove-holder	506,038	Oct. 3	366	97	65	72
Freedman, Charles H., <i>et al.</i> (See Sugden and Sandy, assignors.)						
Freel, John, Whiting, Ind. Retort for stills	504,917	Sept. 12	1003	259	64	1474
Freels, James N. (See Scates, William P., assignor.)						
Freeman, Albert A., assignor of one-half to W. D. Shuster, Philadelphia, Pa. Lubricator	497,273	May 9	1407	356	63	889
Freeman, Anthony. (See Lonsdale, William, assignor.)						
Freeman, Arthur W., Newark, N. J. Hame-bending machine	498,469	May 30	3363	838	63	1284
Freeman, Charles H. (See Eckert, Wesley, assignor.)						
Freeman, Clark, and C. B. Emmerich, St. Louis, Mo. Can.	506,559	Oct. 10	1357	340	65	272
Freeman, Claudius G., assignor to W. H. Matlack, Louisville, Ky. Gas-mixer	509,360	Nov. 28	2304	558	65	1234
Freeman, Francis I., assignor to Totten & Hogg Iron and Steel Foundry Company, Pittsburg, Pa. Rolling-mill	492,352	Feb. 21	2051	511 512	62	1191
Freeman, Frank, Horicon, Wis. Set collar or coupling	506,039	Oct. 3	367	97	65	72
Freeman, George B., Racine, Wis. Manufacturing end-gate rods	503,367	Aug. 15	1895	469	64	940
Freeman, George W., Maple Grove, Ala. Marking attachment for plows	502,712	Aug. 8	812	196	64	729
Freeman, Horace L., assignor to B. Shemwell, Lexington, N. C. Furniture-tightening device	505,979	Oct. 3	274	72	65	51
Freeman, James P., assignor to M. C. Stone, Washington, D. C. Magneto-telephone	497,649	May 16	2038	508	63	1017
Freeman, Stuart E., assignor to A. Falkenau, Philadelphia, Pa. Shank for holding rotary cutting-tools or tool-heads	503,656	Aug. 22	2360	589	64	1040
Freeman, Thomas, Dublin, Ireland. Sully	502,093	July 25	2490	626	64	498
Freeman, Wallace E., Long Island City, assignor to L. M. Closs, New York, N. Y. Electric-arc lamp	491,095	Feb. 7	49	13	62	758
Freeman, Wallace E., Long Island City, assignor to L. M. Closs, New York, N. Y. Dynamo-electric machine	492,151	Feb. 21	1741	434	62	1127
Freeman, Walter K., Boston, Mass. Dynamo-electric machine or motor	497,468	May 16	1752	441	63	965
Freeman, William F. (See Welsh, Pierre V. W., assignor.)						
Freese, Diedrick J., Higginsville, Mo. Weight-motor	502,814	Aug. 8	977	238	64	760
Freese, Egbert M., Plymouth, Ohio. Tile or brick machine	496,779	May 2	616	165	63	729
Freese, Egbert M., Galion, Ohio. Brick or tile machine	507,798	Oct. 31	3414	837 838	65	692
Freese, Francis J., Lowell, Mass. Sewing-machine needle	489,800	Jan. 10	1251	327	62	274
Freese, Francis J., Montreal, Canada. Shoe-sewing machine	507,267	Oct. 24	2509	618 619	65	507
Freese, Francis J., Lowell, Mass., assignor to Goodyear Shoe Machinery Company of Canada, New York, N. Y., and Montreal, Canada. Sole-channeling machine	506,630	Oct. 10	1415	354 355	65	283
Freese, Francis J., Lowell, Mass., assignor to Goodyear Shoe Machinery Company of Canada, New York, N. Y., and Montreal, Canada. Sole-channeling machine	506,631	Oct. 10	1416	355	65	284
Frei, Gustav A., Springfield, Mass. Temporary circuit-connector for incandescent electric lamps	497,955	May 23	2531	632	63	1120
Frei, Gustav A., Springfield, Mass. Incandescent lamp	497,956	May 23	2533	632	63	1120

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Frei, Gustav A., Springfield, Mass. Incandescent electric lamp	497,957	May 23	2534	633	63	1120
Frei, Gustav A., Springfield, Mass. Mode of and means for renewing the filaments of electric incandescent lamps	499,916	June 20	1960	476	63	1761
Freir, Samuel P., East Orange, N. J., assignor to Western Union Telegraph Company, of New York. Telegraph-relay	493,620	Mar. 14	1364	346	62	1639
Frelloehr, Julius, New York, N. Y. Knitting-machine	489,801	Jan. 10	1252	327 328	62	274
Fremont, Charles, Paris, France. Machine for sawing or cutting metals	501,135	July 11	964	246	64	190
French, Andrew, Larbert, Scotland. Obtaining gold, silver, and copper from ores	490,193	Jan. 17	1912		62	422
French, Augustus G. (See Carr and French.)						
French, Brooks, Sioux City, Iowa. Transposing-keyboard	490,194	Jan. 17	1913	498	62	422
French, Carlos. (See Yarrington, Charles H., assignor.)						
French, Charles H., Malden, Mass., and D. Heald, Milford, N. H. Duplex mirror	499,630	June 13	1481	356	63	1664
French, David W., Union Hill, N. J. Pipe-cutter	492,579	Feb. 28	2425	604	62	1282
French, Ferdinand F. (See Tucker, Frank W., assignor.)						
French, George B., Fremont, Nebr. Hammock	507,426	Oct. 24	2781	681	65	561
French, George M. (See Atwood, George F., assignor.)						
French, George M., Jr., Chicago, Ill. Metal-drilling machine	505,516	Sept. 26	2001	512	64	1685
French, George W., and E. Einfeldt, Davenport, Iowa. Cultivator	509,027	Nov. 21	1706	422	65	1109
French, Henry A., Lansing, Mich. Pump	491,801	Feb. 14	1202	300	62	1004
French, Henry A., Lansing, Mich. Pump	491,802	Feb. 14	1203	301	62	1004
French, Henry A., Lansing, Mich. Windmill	500,483	June 27	2268	706	63	1932
French, James C., New York, N. Y. Vault or floor light	504,872	Sept. 12	928	239	64	1459
French, James M., et al. (See Nembach, Andrew, Jr., assignor.)						
French, John C., Concord, N. H. Last	499,669	June 13	1538	370	63	1673
French, Lafayette, Cleveland, assignor to I. L. Pitkin, Ravenna, Ohio. Coin-controlled dice-thrower	497,314	May 16	1512	381	63	923
French, Stanley C., Galesville, Wis. Shock-compressor	498,898	June 6	265	62	63	1439
French, William E. P., Fort Snelling, Minn. Shade-holder for candles	510,907	Dec. 19	1855	457	65	1781
French, Zachary T., and W. C. Meyer, Boston, Mass. Channeling-machine	500,060	June 20	2177	530 531	63	1798
French, Zachary T., and W. C. Meyer, Boston, Mass. Welt-making machine	505,598	Sept. 26	2166	548	64	1718
French, Zachary T., and W. C. Meyer, Boston, Mass. Sole-gouging machine	510,127	Dec. 5	483	110	65	1501
Frenot, Louis D., and J. F. Eyboullet, Newark, N. J. Adjustable pattern for drafting garments	492,670	Feb. 28	2572	637	62	1309
Freschl, Alfred, Oshkosh, Wis. Burial-case	497,446	May 16	1720	434	63	960
Fresh, Henry, Frostburg, Md. Store-service ladder	493,861	Mar. 21	1756	447	62	1732
Freshour, Andrew C., Cedar Rapids, Iowa. Sliding gate	492,282	Feb. 21	1940	485	62	1169
Fretwell, John, Providence, R. I. Photographic camera	511,133	Dec. 19	2239	549	65	1825
Fretwell, John A., Gainesville, Ga. Bed-brace	504,210	Aug. 29	3244	809	64	1225
Freund, Frank W., Cheyenne, Wyo. Gun-sight	496,051	Apr. 25	2441	615	63	499
Freund, George, Durango, Colo. Eraser	506,994	Oct. 17	2018	499	65	407
Frey, Andrew, assignor to Wild & Devereux, Utica, N. Y. Combination undergarment	496,302	Apr. 25	2820	705	63	571
Frey, Frank, assignor, by mesne assignments, of two-thirds to C. A. Myers, W. B. Dean, and J. W. Myers, Quincy, Ill. Incubator	488,994	Jan. 3	27	8	62	8
Frey, Henry. (See Grambs, Charles H., assignor.)						
Frey, John, West Berkeley, Cal. Separator	492,720	Feb. 28	2644	655	62	1324
Frey, John A., assignor of one-half to W. J. Krause, Milwaukee, Wis. Composition for the purification and separation of metals and alloys	499,018	June 6	491		63	1476
Frey, John W., Webb City, Mo. Game apparatus	498,781	June 6	47	11	63	1397
Frey, Joseph M., Aurora, Ill. Printing attachment for paper-rolls	494,675	Apr. 4	231	57, 58	63	47
Frey-Sheckler Company. (See Hight, William S., assignor.)						
Frey-Sheckler Company. (See Thompson, John, assignor.)						
Frey-Sheckler Company. (See Thompson and Vaughn, assignors.)						
Freyer, Henry C., Brooklyn, N. Y. Inkstand-base	496,196	Apr. 25	2650	666	63	539
Friant, Thomas, et al. (See Raymond, Silas H., assignor.)						
Frichette, Petar, Sheridan, Cal. Pump-power	495,322	Apr. 11	1286	323	63	256
Frick, Charles E., Norwood, Ohio. Ice-cream freezer	488,995	Jan. 3	30	9	62	8
Fricke, Max, New York, N. Y. Smoke-consuming furnace	494,272	Mar. 28	2453	618	62	1876
Fricke, Max, New York, N. Y. Fuel-feeder for furnaces	497,469	May 16	1753	442	63	965
Fridet, Louis. (See Clifford, Patrick, assignor.)						
Friedberger, Joseph, New York, N. Y. Breastpin	499,356	June 13	1027	248	63	1584
Friedberger, Maurice, Stockton, Cal. Self-timing attachment for bicycles	499,221	June 13	796	188 189	63	1543
Friede, Samuel M., assignor of one-half to I. G. Brown, St. Louis, Mo. Combination hard and soft metal pipe coupler	502,665	Aug. 1	699	167	64	694
Friedel, Robert, Stuttgart, Germany. Machinery for grinding glass plates	496,052	Apr. 25	2443	615 616	63	500
Friederich, Christian, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Cop-winding machine	493,356	Mar. 14	918	236 237	62	1554
Friederich, Philippe, Langley, Kans. Device for loading or unloading cattle	492,002	Feb. 21	1506	376	62	1080
Friederichs, John J., and H. C. Fliege, Calumet, Mich. Inside cover for barrels, &c.	503,414	Aug. 15	1954	485	64	951
Friedheim, J. B. (See Humason, Daniel L., assignor.)						
Friedlander, Eugene H., Philadelphia, Pa. Apparatus for pasting or gumming labels, &c.	509,213	Nov. 21	2020	490	65	1170
Friedlander, Samuel, Memphis, Tenn. Coat-form	497,236	May 9	1342	342	63	879
Friedley, Albert, assignor of one-half to H. Voshardt, Chicago, Ill. Metallic ceiling	495,935	Apr. 18	2259	569	63	450
Friedline, Abraham. (See Brierly, Conant B., assignor.)						
Friedmann, Anton, Jr., Cincinnati, Ohio. Vehicle-shaft	500,283	June 27	2559	625	63	1877
Friedrich, Ludwig, Pittsburg, Pa. Glassware-threading device	509,214	Nov. 21	2021	490	65	1170
Friedrich, Pancratius. (See Schmid, Charles, assignor.)						
Friedrich, William, Ponchatoula, La. Bridle	494,196	Mar. 28	2329	590	62	1854
Friedrichs, Franz, and A. Brede, Cologne, Germany. Machine for forming backs of books	507,115	Oct. 24	2228	550 551	65	458
Fries, Anna W., Pawnee City, Nebr. Garment-supporter	492,396	Feb. 28	2120	529	62	1218
Fries, Charles, and W. H. Richardson, Philadelphia, Pa. Milk-can	504,027	Aug. 29	2941	736	64	1168
Fries, John W., Salem, N. C. Machine for softening cloth	502,903	Aug. 8	1119	275 276	64	788
Friese, Augustus W. (See Hobbs, Horace, assignor.)						
Friese, Augustus W., et al. (See Ramien, Edgar F., assignor.)						
Friess, Peter. (See Decker, Winkler, Friess, and Werner.)						
Frink, George E., assignor to E. Jenckes Manufacturing Company, Pawtucket, R. I. Thickening-thread mechanism for knitting-machines	497,315	May 16	1514	381	63	923
Frink, George E., assignor to E. Jenckes Manufacturing Company, Pawtucket, R. I. Mechanical movement	497,316	May 16	1516	382	63	923

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Frink, Herbert J., Holyoke, Mass. Calender-roll	511,666	Dec. 26	3036	740	65	2012
Frioux, Vincent, Perryville, Mo. Gate	504,829	Sept. 12	858	220	64	1444
Frisbie, Daniel D., Detroit, Mich. Fence	508,297	Nov. 7	517	125	65	854
Frisbie, Hamlin F., Covington, Ky. Valve for pumps	491,543	Feb. 14	786	200	62	920
Frisbie, Henry R., Bridgeport, Conn. Steam-whistle	493,920	Mar. 21	1852	472	62	1749
Frisbie, Samuel, Unionville, Conn. Riveting-machine	501,681	July 18	1829	{ 455 456 }	64	364
Frishen, Johann H., assignor to Siemens & Halske, Berlin, Germany. Switch and signal setting and locking apparatus	497,716	May 16	2144	536	63	1036
Frishen, Johann H., assignor to Siemens & Halske, Berlin, Germany. Semaphore-operating device	501,062	July 11	833	{ 216 217 }	64	167
Frishen, Johann H., assignor to Siemens & Halske, Berlin, Germany. Block-signal indicating mechanism	503,718	Aug. 22	2460	612	64	1059
Frishen, Johann H., assignor to Siemens & Halske, Berlin, Germany. Block-signal apparatus	505,419	Sept. 19	1824	470	64	1639
Frishen, Johann H., assignor to Siemens & Halske, Berlin, Germany. Block-signal apparatus	505,420	Sept. 19	1828	{ 470 471 }	64	1640
Frisen, Malcolm, Paterson, N. J. Fastening device	493,377	Mar. 14	957	246	62	1562
Frisen, Malcolm, Paterson, N. J. Lingo for Jacquard mechanisms	496,972	May 9	943	247	63	807
Frist, John E., Baltimore, Md. Vehicle-wheel	504,340	Sept. 5	44	13	64	1270
Frist, John E., Baltimore, Md. Vehicle-wheel	504,753	Sept. 5	432	110	61	1350
Frith, Arthur J., New York, N. Y. Horizontal boring-machine	494,100	Mar. 21	2158	551	62	1807
Fritsch, Paul, Marburg, Germany. Salicylic ester of acetol	509,520	Nov. 28	2594		65	1290
Fritsche, Waldemar, Berlin, Germany. Armature for dynamo-electric machines	496,514	May 2	193	52, 53	63	654
Fritz, George W. (See Boland and Fritz.)						
Fritz, George W., et al. (See Billings, Alvah G., assignor.)						
Fritz, Louis, Memphis, Tenn. Barrel	496,085	Apr. 25	2492	629	63	509
Frizzell, Charles E., Grand Glaize, Ark. Neck-yoke connection for vehicle-poles	503,657	Aug. 22	2362	589	64	1040
Frøberg, Louis M., New York, N. Y. Shutter-fastener	491,165	Feb. 7	172	44	62	781
Frodingham Iron and Steel Company. (See Mannaberg, Maximilian, assignor.)						
Frøehlich, Amadens A., Brooklyn, assignor of one-half to W. Hodgson, New York, N. Y. Curtain-fastener	490,709	Jan. 31	2777	713	62	610
Frøehlich, Samuel, New York, N. Y. Suspender-end	509,306	Nov. 21	2187	526	65	1201
Frøehling, Henry, Richmond, Va. Apparatus for mixing wet and dry cement materials	495,323	Apr. 11	1288	324	63	257
Frøehlich, Charles C., Pottstown, W. Lorey and H. Guenther, Philadelphia, Pa. Filter	498,544	May 30	3492	864	63	1306
Frøemert, Oscar, Berlin, Germany. Cloth-cutting machine	499,917	June 20	1962	476	63	1761
Frølich, Oscar, assignor to Siemens & Halske, Berlin, Germany. Electric meter	490,279	Jan. 24	2072	541	62	464
Frølich, Oscar, assignor to Siemens & Halske, Berlin, Germany. Electrical measuring-instrument	497,539	May 16	1870	471	63	987
Fromm, Ludwig, Kötzenschenbroda, Germany. Preserving farinaceous products	496,780	May 2	618		63	730
Fronheiser, James J., Johnstown, Pa. Manufacture of pigments	495,197	Apr. 11	1092		63	221
Fronheiser, James J., Johnstown, Pa. Nut-lock	495,198	Apr. 11	1093	{ 271 272 }	63	221
Frontezak, Joseph, Duluth, Minn. Pocket-book	505,040	Sept. 12	1206	311	64	1512
Frosell, Karl A., New York, N. Y. Movable scaffold	508,378	Nov. 7	652	{ 160 161 }	65	879
Frost, Carman, Hewlitt's, N. Y. Car-coupling	510,854	Dec. 12	1768	434	65	1753
Frost, Richard L., Manistee, Mich. Steam-actuated valve	497,470	May 16	1755	442	63	966
Frost, Walter E., Lewiston, Me., assignor to S. W. Jamison Boot and Shoe Crimping Machine Company, New York, N. Y. Crimping-machine	501,044	July 4	802	209	64	146
Frost, Walter E., Lewiston, assignor of three-fourths to L. J. Côté, Waterville, Me. Machine for making paper hoops	505,451	Sept. 19	1833	471	64	1641
Frothingham, George P., Washington, D. C. Collapsible or knockdown vessel	509,155	Nov. 21	1925	471	65	1151
Frotscher, Oscar, Philadelphia, Pa. Window	509,521	Nov. 28	2595	627	65	1290
Frucht, Karl, Berlin, Germany. Machine for finishing washers	504,830	Sept. 12	859	{ 220 221 222 223 }	64	1445
Fry, Henry A., San Francisco, Cal. Envelope or stamp moistener	509,156	Nov. 21	1927	471	65	1151
Fry, John. (See Triplett and Fry.)						
Fry, John C., Larned, Kans. Cinder, dust, and smoke excluder for car-windows	492,671	Feb. 23	2573	637	62	1309
Fry, Michael, Bloomington, Ill. Grass-gathering attachment for lawn-mowers	505,310	Sept. 19	1649	{ 426 427 }	64	1607
Fry, Thomas, Calgary, Canada. Clothes-drier	495,409	Apr. 11	1422	358	63	281
Fry, Thomas E., Nipomo, Cal. Animal-trap	488,996	Jan. 3	31	9	62	9
Fryer, Richard, Waupun, Wis., assignor to C. G. Perkins, Hartford, Conn. Driving-gear for bicycles	506,685	Oct. 17	1507	379	65	312
Fryer, William J., New York, N. Y. Construction of flues	506,108	Oct. 3	479	124	65	94
Frykberg, Johan. (See Johnson and Frykberg.)						
Frykholm, Olof Y., Austin, Ill. Hydrostatic leveling-instrument	505,269	Sept. 19	1568	409	64	1592
Fryling, John W., Sunbury, Pa. Fishway	507,535	Oct. 31	2971	728	65	609
Frysinger, Jesse, Hanover, Pa. Automatic railway-signal	491,061	Jan. 31	3350	855	62	732
Frysinger, Jesse, Hanover, Pa. Automatic railway-train arrester	492,152	Feb. 21	1742	434	62	1127
Frysinger, Jesse, Hanover, Pa. Automatic railway-train arrester	492,153	Feb. 21	1744	{ 434 435 }	62	1128
Frysinger, Jesse, Hanover, Pa. Automatic railway-train arrester	492,154	Feb. 21	1746	435	62	1128
Frysinger, Jesse, Hanover, Pa. Automatic railway-train arrester	492,155	Feb. 21	1748	435	62	1129
Fuchs, Charles, et al. (See Simons, Frank, assignor.)						
Fuchs, Ernst C., Philadelphia, Pa. Apparatus for making ice	497,650	May 16	2039	508	63	1017
Fuchs, Jean, Portoferrajo, Italy. Grafting implement	505,651	Sept. 26	2260	572	64	1735
Fuchs, Rudolph, New York, N. Y. Watch-holder	494,273	Mar. 28	2454	618	62	1876
Fuchs, Rudolph, New York, N. Y. Cluster-setting for gems	505,218	Sept. 19	1495	390	64	1578
Fuel Gas and Manufacturing Company. (See Westinghouse and Ruud, assignors.)						
Fuel Patents Company. (See Nirdlinger, Max, assignor.)						
Fugazzi, John F., Cincinnati, Ohio. Refrigerator-crate	496,644	May 2	403	109	63	692
Fükenwirth, Albert, Peterwitz, Germany. Combined safety-brake and shaft-coupling	489,123	Jan. 3	219	59	62	51
Fulford, Stanley L., Los Angeles, Cal. Gearing for pumps	498,109	May 23	2762	{ 690 691 }	63	1162
Fulghum, Elisha J., and L. Roberts, Traverse City, Mich. Wood-joint	497,915	May 23	2473	617	63	1110
Fulkerson, Hardman E. (See Corrigan and Fulkerson.)						
Fuller, Allen J., Philadelphia, Pa. Rotating fluid-meter	489,124	Jan. 3	220	59	62	51
Fuller, Azariah T. (See Chadwick, James M., assignor.)						
Fuller, Charles D. (See Cannon, Warren B., assignor.)						
Fuller, Charles D., Kalamazoo, Mich. Belt-fastening	499,880	June 20	1907	463	63	1751

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Fuller, Charles D., Kalamazoo, Mich. Belt-fastener	508,931	Nov. 21	1563	383	65	1081
Fuller, Charles S., <i>et al.</i> (See Gilmore, Noble H., assignor.)						
Fuller, Franklin I. (See McLellan, Robert A., assignor.)						
Fuller, Harvey R., Payne, Ohio. Printing-pen	510,966	Dec. 19	1968	483	65	1803
Fuller, Henry C. (See Deming and Fuller.) (Reissue.)						
Fuller, Henry C., assignor of one-half to T. A. Watson, Bentonville, Ark. Weather-strip	500,759	July 4	366	95	64	68
Fuller, Hiram H., Meadville, Pa. Drill-press	505,517	Sept. 25	2003	512	64	1686
Fuller, J. Ensign, New York, N. Y. Apparatus for forming, maintaining, and renewing the ice-floors of skating-rinks	489,227	Jan. 3	380	105	62	85
Fuller, J. Ensign, assignor to Consolidated Refrigerating Company, New York, N. Y. Combined ammonia-distilling and refrigerating apparatus	489,297	Jan. 10	1388	361	62	302
Fuller, James D. (See Bentley and Fuller.)						
Fuller, James T., Calvert, Tex. Trolley mechanism	509,123	Nov. 21	1878	459	65	1142
Fuller, Joseph M., <i>et al.</i> (See Gilmore, Noble H., assignor.)						
Fuller, Joseph W. (See Marble, James E., assignor.)						
Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Reed-organ	502,666	Aug. 1	702	168	64	694
Fuller, Melvin G., assignor to A. M. Howe, Worcester, Mass. Die	508,694	Nov. 14	1159	286	65	992
Fuller, Rodolphus, Detroit, Mich. Combined electric motor and driven machine	495,547	Apr. 18	1647	414	63	342
Fuller, Samuel B. (See Miller, Lee A., assignor.)						
Fuller, Theodore, Glens Falls, N. Y. Cooking-stove	500,569	July 4	50	15	64	11
Fuller, Willard M., Denver, Colo. Amalgamator	504,678	Sept. 5	596	152	64	1382
Fuller, William C. (See Capwell and Fuller.)						
Fullerton, Robert, Martin, Tenn. Steering device for road-engines	496,053	Apr. 25	2445	{ 616 617 }	63	500
Fullerton, Spencer, <i>et al.</i> (See Wilson, Milton M., assignor.)						
Fullum, James F., Everett, Mass., assignor to Fullum Shoe Stretcher Company. Shoe-stretcher	503,742	Aug. 22	2503	623	64	1068
Fullum Shoe Stretcher Company. (See Fullum, James F., assignor.)						
Fulton, David M., Baltimore, Md. Ratchet-brace for bits or drills	500,382	June 27	2727	670	63	1907
Fulton, Harmon H. (See Morrow, Alexander P., assignor.)						
Fulton, James S. (See Talley, William A., assignor.)						
Fulton, Newton Z., Gunnison, Colo. Cube-box	508,298	Nov. 7	518	126	65	854
Fulton, Samuel M., and A. T. Ames, Galt, Cal. Pump	505,599	Sept. 26	2167	548	64	1718
Fulton, William E. (See Lewis, Charles S., assignor.)						
Fulwider, Horace M., Redmon, Ill. Automatic grain-weigher	490,957	Jan. 31	3179	813	62	696
Fulwider, Horace M., Redmon, Ill. Grain-conveyer	506,172	Oct. 3	606	155	65	117
Funcheon, Daniel C., assignor of two-thirds to G. Funcheon and C. E. Olsen, Valverde, Colo. Barbed wire	493,210	Mar. 7	677	173	62	1491
Funcheon, George, <i>et al.</i> (See Funcheon, Daniel C., assignor.)						
Funck, Joseph, New Brighton, N. Y. Lantern	493,495	Mar. 14	1140	292	62	1596
Funk, William R., assignor of one-fourth to W. T. Doughty, Lexington, Nebr. Spike	502,836	Aug. 8	1037	254	64	772
Funke, Franz, Milwaukee, Wis. Injector	501,271	July 11	1172	297	64	228
Furbish, George H., Cambridge, Mass. Combined circular saw and lathe to be operated by foot-power	511,331	Dec. 26	2572	626	65	1928
Furgason, Charles M., Oto, Iowa. Loading device	504,976	Sept. 12	1103	2-2	64	1492
Furgason, Dallas, Topeka, Kans. Water-tight lining	505,041	Sept. 12	1207	311	64	1512
Furiakovics, Johann L., Baden, Austria-Hungary. Apparatus for regulating the speed of turbines	506,220	Oct. 10	722	181	65	148
Furnival, Thomas, Reddish, England. Guillotine for cutting paper	509,522	Nov. 28	2597	{ 628 629 }	65	1290
Furst, Paul, <i>et al.</i> (See Schofield, James D., assignor.)						
Fyrberg, Andrew. (See Johnson and Fyrberg.)						
Fyrberg, Andrew, assignor to C. S. Shattuck, Hatfield, Mass. Breakdown gun	498,427	May 30	3292	821	63	1270
Fyrberg, Andrew, assignor to I. Johnson, Worcester, Mass. Bicycle	507,116	Oct. 24	2230	551	65	458
Gabarro, Ramon, Barcelona, Spain. Electric dry cell	503,415	Aug. 15	1955	485	64	952
Gabel, Edward, Deerfield, N. Y. Dumping-wagon	496,932	May 9	889	233	63	798
Gable, Fred S., and J. S. Detrick, Baltimore, Md. Clutch	507,117	Oct. 24	2231	{ 551 552 }	65	459
Gabler, Ferdinand, Topeka, Kans. Car-brake	490,554	Jan. 24	2506	645	62	550
Gabrieli, Georg T. L., Christiania, Norway. Balloon-ship	500,326	June 27	2642	646	63	1892
Gadd, William, Manchester, England. Machine for cutting the pile of welt pile fabrics	503,658	Aug. 22	2363	590	64	1040
Gaeddke, Hermann, assignor to J. Koeningberg, New York, N. Y. Door-bolt	510,781	Dec. 12	1594	397	65	1723
Gaesser, Theodore T. (See Thompson, Philip B., assignor.)						
Gaff, Thomas T. (See Perry, Nelson W., assignor.)						
Gaffey, William V., Castroville, Cal. Machine for cultivating sugar-beets	495,794	Apr. 18	2046	518	63	411
Gaffney, James P., Cumberland, Md. Gutter-brick	510,016	Dec. 5	303	68	65	1467
Gaffney, John, Atchison, Kans. Brick-kiln	510,967	Dec. 19	1969	{ 483 484 }	65	1803
Gaffney, Thomas F., assignor of one-third to J. J. Kennedy, Worcester, Mass. Power-driving mechanism	500,484	June 27	2869	{ 706 707 }	63	1932
Gage, Charles H. (See Smith and Gage.)						
Gage, Eben A., Jr., Cleveland, Ohio. Corset display-stand	506,875	Oct. 17	1824	457	65	370
Gage, James L., assignor of two-thirds to S. F. Marchant and J. R. Pigman, Chicago, Ill. Railway-spike	508,877	Nov. 14	1435	356	65	1043
Gage, James P., Baxter Springs, Kans. Kitchen-cabinet	508,932	Nov. 21	1564	383	65	1081
Gagnier, Barney J., Detroit, Mich. Suspended railway	495,246	Apr. 11	1178	295	63	236
Gagnon, Gilbert, Pincher Creek, Canada. Chain or cable grip	499,961	June 30	2052	497	63	1776
Gahagan, Giles S., Butler, Pa. Rod-adjuster and clamp for Artesian or oil wells	499,670	June 13	1530	370	63	1673
Gahlau, Emil, Detroit, Mich. Lamp-guard	502,458	Aug. 1	352	84	64	631
Gailbreath, Robert A., near Louisville, Ky. Meat-tenderer	502,355	Aug. 1	178	42	64	598
Gaines, A. L., <i>et al.</i> (See Bryant, William H., assignor.)						
Gaines, George S., Corona, Ala. Car-coupling	490,958	Jan. 31	3180	813	62	696
Gaines, George W., Rockwood, Tenn. Catamenial sack	501,563	July 18	1638	410	64	331
Gaines, Reuben R., <i>et al.</i> (See Smith, John D., assignor.)						
Gair, Robert, Brooklyn, N. Y. Sample-box	493,921	Mar. 21	1853	472	62	1749
Gair, Robert, Brooklyn, N. Y. Memorandum sales-book	493,922	Mar. 21	1854	472	62	1750
Gaisser, Frederick, assignor of one-half to P. Reinschmidt, Rochester, N. Y. Picture-hanger	508,540	Nov. 14	926	227	65	945
Gaither, Ira H. (See Hinkle and Gaither.)						
Galbraith, George W., and J. Taylor, Cincinnati, Ohio. Fire-door for downdraft-furnaces	492,258	May 30	3013	751	63	1221
Galbraith, Robert. (See Warner and Galbraith.)						
Galbraith, William A., Flint, Mich. Sulky	508,415	Nov. 14	718	177	65	905
Galbraith, William H. (See Groves, William P., assignor.)						
Galbreath, Robert H., Cincinnati, Ohio. Ice-holder	490,902	Jan. 31	3096	794	62	680

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Gale, Ansel H., Chicago, Ill. Paper-folding machine.	495,548	Apr. 18	1648	{ 415 416 }	63	342
Gale, Horace B., San Francisco, Cal. Elevator controlling device.	510,638	Dec. 12	1354	332	65	1678
Gale, Horatio, assignor to Gale Manufacturing Company, Albion, Mich. Spring-tooth for harrows	502,488	Aug. 1	408	96	64	642
Gale Manufacturing Company. (See Gale, Horatio, assignor.)						
Gale, Moses F., Brooklyn, N. Y. Dust collector and separator.	502,071	July 25	2453	616	64	491
Gale, Otis, et al. (See Gale, William L., assignor.)						
Gale, Riley, et al. (See Gale, William L., assignor.)						
Gale, William L., Memphis, Mo., assignor of one-half to O. and R. Gale, Santa Rosa, Cal. Compound for welding cast-iron	496,116	Apr. 25	2535		63	517
Galer, Drusilla F., Palmyra, Pa. Heating attachment for cook-stoves	501,499	July 18	1536	387	64	311
Galette, Arthur, Offenbach-on-the-Main, Germany. Machine for sharpening scythes	510,637	Dec. 12	1353	332	65	1678
Galindo, Augustin J., Concord, Cal. Wagon-jack	490,017	Jan. 17	1630	424	62	365
Gall, Henry, Hermes, (Oise,) and A. de Villardy de Montlaur, Paris, France. Manufacture of chlorates of the alkaline metals and metals of the alkaline earths	492,003	Feb. 21	1508	376	62	1080
Gallagher, Bernard, Lynn, and R. A. Johnson, Saugus, Mass. Saw attachment	495,731	Apr. 18	1950	491	63	393
Gallagher, Francis E., et al. (See Ahrens, John T., assignor.)						
Gallagher, George F., Rochester, N. Y. Furnace	493,923	Mar. 21	1855	{ 472 473 }	62	1750
Gallagher, James B. (See Zane, George H., assignor.)						
Gallagher, James R., Buena Vista, N. J. Street-sweeper	505,455	Sept. 26	1883	{ 483 484 486 }	64	1664
Gallagher, John, Jr., Kansas City, Kans. Rocket-holder for railway-cars.	503,234	Aug. 15	1667	410	64	900
Gallagher, Richard D., Jr., Chicago, Ill. Means for transmitting the power of a moving car to a motor thereon	511,520	Dec. 26	2887	702	65	1986
Gallagher, Thomas H., Olean, N. Y. Agitator for oil-well cavities	498,164	May 23	2840	710	63	1176
Galland-Henning Pneumatic Malting Drum Manufacturing Company. (See Giesler, Franklin B., assignor.)						
Galland, Joseph, assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Straw-stacker	499,381	June 13	1063	{ 258 259 }	63	1591
Gallatin, Daniel S., New Berlin, Ohio. Two-wheeled vehicle	493,764	Mar. 21	1606	408	62	1703
Galle, Charles, St. Louis, Mo. Portable water-heater	493,022	Mar. 7	397	99	62	1437
Gallegos, José, Ocos, Guatemala. Device for teaching spelling	502,183	July 25	2635	664	64	536
Gallegos, José, Ocos, Guatemala. Device for teaching arithmetical calculations	502,184	July 25	2636	664	64	537
Galligan, John H., et al. (See Slocum, Orsillus W., assignor.)						
Gallinger, John R., and T. C. De Lisle, Superior, Wis. Carpet-fastener	493,699	Mar. 21	1489	381	62	1680
Gallinowsky, Hugo, assignor to Pacific Compound Stone Company, San Francisco, Cal. Artificial-stone composition	500,485	June 27	2871		63	1932
Gallinowsky, Hugo, assignor of one-half to C. M. Yates, San Francisco, Cal. Ship's paint.	504,211	Aug. 29	3245		64	1225
Galloway, Robert, Macedon, N. Y. Fertilizer-distributor	496,560	May 2	267	71	63	668
Galloway, Robert, Macedon, N. Y. Support for the hoes of agricultural implements	498,165	May 23	2842	711	63	1176
Gallt, William T., Port Byron, N. Y. Rake	498,007	May 23	2615	653	63	1135
Galopin, Henri, Melbourne, Victoria. Apparatus for using liquid fuel for lighting or heating.	509,076	Nov. 21	1790	{ 440 441 442 }	65	1126
Galpin, Lewis A. (See Bowers and Galpin.)						
Gambée, William X., assignor of two-thirds to A. McOwen and J. McCartney, New York, N. Y. Street-sweeper	509,597	Nov. 28	2714	{ 656 657 }	65	1313
Gambino, Gaspara, Atlanta, Ga. Insole	507,490	Oct. 24	2874	705	65	579
Gamble, Andrew, Nordhoff, Cal. Almond or walnut huller	493,887	Mar. 21	1791	457	62	1738
Gamble, James N. (See Strong, George S., assignor.)						
Gamble, Joseph W., Des Moines, Iowa. Draft-equalizer	505,398	Sept. 19	1787	463	64	1633
Gamble, William H., and D. H. Allen, Miamisburg, Ohio. Price-indicating attachment for weighing-scales	489,942	Jan. 17	1495	390	62	338
Gamble, William H., and D. H. Allen, Miamisburg, Ohio. Collapsible and folding boat	495,549	Apr. 18	1651	416	63	343
Gamewell Fire-Alarm Telegraph Company. (See Burns, Michael J., assignor.)						
Gamewell Fire-Alarm Telegraph Company. (See Crosby, James H., assignor.)						
Gamewell Fire-Alarm Telegraph Company. (See Decrow, William E., assignor.)						
Gamewell Fire-Alarm Telegraph Company. (See Gardiner, James M., assignor.)						
Gamewell Fire-Alarm Telegraph Company. (See Kirnan, William H., assignor.)						
Gamewell Fire-Alarm Telegraph Company. (See Mehren, Jacob F., assignor.)						
Gammons, Ferdinand C., assignor to Eagle Cotton Gin Company, Bridgewater, Mass. Seed-cotton conveyor	494,101	Mar. 21	2161	{ 551 552 }	62	1808
Gammons, Ferdinand C., assignor to Eagle Cotton Gin Company, Bridgewater, Mass. Mechanism for automatically operating the air or cut-off valves of pneumatic seed-cotton conveyers	500,804	July 4	433	114	64	80
Gammons, Ferdinand C., assignor to Eagle Cotton Gin Company, Bridgewater, Mass. Seed-cotton conveyor	507,358	Oct. 24	2671	656	65	539
Gandee, George W., and J. Peters, Beipre, Ohio. Grindstone	489,298	Jan. 3	482	133	62	105
Ganon, Henry F., Chicago, Ill. Wheel-guard for vehicles	508,379	Nov. 7	657	161	65	879
Gans, Leo, Frankfort-on-the-Main, and M. Hoffmann, Mainkur, near Frankfort-on-the-Main, assignors to L. Cassella & Co., Frankfort-on-the-Main, Germany. Black dye	501,500	July 18	1538		64	311
Ganson, Prescott, Logansport, Ind. Shirt	510,639	Dec. 12	1357	332	65	1679
Gant, William F. (See Smith, Oliver A., assignor.)						
Ganzfried, Jacob, New York, N. Y. Burglar-alarm	492,792	Mar. 7	33	8	62	1365
Garben, Henry A., Chicago, Ill. Spring protection	489,649	Jan. 10	1020	266	62	228
Garbesi, Joseph, Mountsville, W. Va. Plant-protector	505,354	Sept. 19	1711	441	64	1618
Gard, Ezra C., and C. M. Wing, assignors to M. B. Welcher, G. P. Benton, F. S. Hall, and E. C. Gard, Marcellus, Mich. Adjustable school seat and desk	499,671	June 13	1540	371	63	1673
Gardeen, Oscar S., assignor of one-half to A. M. Magnuson and C. Lindberg, St. Paul, Minn. Rotary engine	490,648	Jan. 31	2675	689	62	599
Gardiner, A. K., et al. (See Denbeigh, Joseph J., assignor.)						
Gardiner, Andrew J., Jr., assignor of one-half to W. B. Gardiner, Watertown, N. Y. Surface-gage	497,071	May 9	1097	282	63	834
Gardiner, C. E., et al. (See Denbeigh, Joseph J., assignor.)						
Gardiner, George, and C. H. Millins, Spokane, Wash. Refrigerator for barreled liquors on tap	493,157	Mar. 7	600	150	62	1477
Gardiner, George W., Bishop-Auckland, England. Spring-frame for bicycles, tricycles, &c.	506,313	Oct. 10	884	218	65	180
Gardiner, James M., Newton, Mass., assignor to Gamewell Fire-Alarm Telegraph Company, of New York. Fire-alarm signal-box	509,573	Nov. 28	2681	649	65	1306
Gardiner, Walter B. (See Gardiner, Andrew J., Jr., assignor.)						
Gardner, Andrew, Atlantic, Iowa. Grain-binding harvester	491,641	Feb. 14	950	{ 238 239 }	62	954

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Gardner, Andrew, Atlantic, Iowa. Elevating and packing mechanism for harvesters.....	491,680	Feb. 14	1006	{ 253 254 }	62	966
Gardner, Frederick N., Beloit, Wis., assignor to C. H. Besly, Chicago, Ill. Grinding or polishing wheel and manufacturing same.....	494,471	Mar. 28	2761	{ 692 693 }	62	1933
Gardner, Frederick N., Beloit, Wis., assignor to C. S. Besly, Chicago, Ill. Grinding or polishing wheel and manufacturing same.....	494,472	Mar. 28	2764	{ 693 694 }	62	1934
Gardner, Fulton, Chicago, Ill. Electric rotary fine-cleaner.....	508,380	Nov. 7	659	161	65	880
Gardner, Fulton, assignor of one-half to S. T. White, Chicago, Ill. Apparatus for boring wells.....	494,779	Apr. 4	403	{ 99 100 }	63	79
Gardner, Fulton, Chicago, Ill., assignor of nine-tenths to D. S. Lowder and W. E. Gardner, Pittsburg, Pa. Apparatus for preventing obstructions to the flow of oil in oil-wells.....	495,936	Apr. 18	2260	569	63	450
Gardner, George W., assignor to himself and E. Putnam, Rossville, Ill. Bottle-stopper extractor.....	491,306	Feb. 7	409	105	62	825
Gardner, John, Manchester, England. Type-writing machine.....	505,547	Sept. 26	2059	525	64	1697
Gardner, John, and D. Marshall, Cheltenham, England, assignors to Overman Wheel Company, Chicopee Falls, Mass. Mud-guard for cycles.....	505,290	Sept. 19	1612	419	64	1600
Gardner, John M., Jr., assignor of one-half to P. Weber, Pittsburg, Pa. Electric-lamp socket.....	505,422	Sept. 19	1834	471	64	1641
Gardner, Lawrence, Manchester, England. Gas-regulator.....	503,131	Aug. 15	1503	{ 369 370 }	64	870
Gardner, Levi S., Detroit, Mich., assignor, by mesne assignments, to B. Wolhaupter, Chicago, Ill. Railway surface stock-guard. (Roissne).....	11,338	May 16	2217	555	63	1050
Gardner, Levi S., assignor of one-half to A. McDermott, New Orleans, La. Joint for artificial limbs.....	509,157	Nov. 21	1928	471	65	1152
Gardner, Oliver H. (See Tilton, Wheelock G., assignor.).....						
Gardner, Oscar F., Pike, N. Y. Door-hanger.....	499,222	June 13	797	189	63	1543
Gardner Sewing Machine Company. (See Levedahl and Yagermann, assignors.).....						
Gardner, Sigmond, Savannah, Ga. Automatic fan.....	508,299	Nov. 7	519	126	65	854
Gardner, William E., et al. (See Gardner, Fulton, assignor.).....						
Gardner, William F., Washington, D. C. Electric time system.....	499,744	Jan. 31	2232	727	62	628
Gardner, William H. (See Pyle, Edwin I., assignor.).....						
Gare, Thomas, Stockport, England. Pegging-machine.....	500,652	July 4	189	49	64	37
Garey, Edwin A., Sciota, Pa. Gearing.....	501,415	July 11	1418	355	64	272
Garey, John H. (See Beekly, Israel B., assignor.).....						
Garfield, Albert G. (See Widerborg and Garfield.).....						
Garfield, Julius D., Springfield, assignor of one-half to H. Emery, Holyoke, Mass. Photographic camera.....	501,931	July 25	2240	{ 559 560 }	64	452
Garford, Arthur L., Elyria, Ohio. Bicycle-pedal.....	503,206	Aug. 15	1620	397	64	892
Garland, Clara G. (See Pennycook, James G., assignor.).....						
Garland, Frank M., New Haven, Conn. Breech-block.....	505,568	Sept. 26	2118	536	64	1709
Garland, John L. (See McKnight and Garland.).....						
Garland, Michael, Bay City, Mich. Conveyor.....	491,344	Feb. 7	471	121	62	828
Garlick, Edward C., Cleveland, Ohio. Car-coupling.....	489,943	Jan. 17	1496	{ 390 391 }	62	338
Garlick, Reuben L., Watertown, S. D. Car-coupling.....	506,314	Oct. 10	885	218	65	180
Garman, Charles O., Bristol, Ind. Hand-planter.....	500,198	June 27	2434	594	63	1855
Garman, John G., Annapolis, Pa. assignor of one-half to C. H. Patterson, Brooklyn, N. Y. Harness.....	510,908	Dec. 19	1856	457	65	1781
Garner, John A., Kansas City, Mo. Type-writing machine.....	502,072	July 25	2455	{ 616 617 }	64	491
Garner, John H., Kingwood, W. Va. Horse-detacher.....	491,734	Feb. 14	1090	276	62	982
Garnett, Carroll, Front Royal, Va. Corn-thinner.....	492,721	Feb. 28	2647	655	62	1325
Garnett, Dexter M., Evanston, and J. H. Garnett, Chicago, Ill. Method of and apparatus for electric perforating.....	498,973	June 6	399	94	63	1462
Garrett, John A., Dalton City, Ill. Washing-machine.....	504,418	Sept. 5	178	46	64	1304
Garnett, John H. (See Garnett, Dexter M. and J. H.).....						
Garrard, Edward J., Franklin, Pa. Hod-elevator.....	491,419	Feb. 7	588	148	62	860
Garrard, Edward J., Franklin, Pa. Chain-gearing.....	491,420	Feb. 7	589	148	62	860
Garrard, Henry H., Cleveland, Ohio. Sully.....	493,582	Mar. 14	1300	332	62	1628
Garrard, Jephtha, and W. W. Lewis, Cincinnati, Ohio. Valve-gear.....	510,128	Dec. 5	484	{ 110 111 }	65	1501
Garraux, Frederick, assignor to Winship Machine Company, Atlanta, Ga. Saw cotton-gin.....	490,745	Jan. 31	2837	728	62	629
Garraux, Frederick, assignor to Winship Machine Company, Atlanta, Ga. Cotton condenser and flue.....	491,013	Jan. 31	3265	834	62	713
Garraux, Frederick, assignor to Winship Machine Company, Atlanta, Ga. Cotton-press.....	498,052	May 23	2680	{ 670 671 672 }	63	1146
Garret, Robert, Freedom, Pa. Brick-kiln.....	492,642	May 30	3658	905	63	1335
Garretson, Charles F., Knoxville, Iowa. Dental articulator.....	497,122	May 9	1181	302	63	840
Garretson Lyman C. (See Feindel, John T., assignor.).....						
Garretson, Oliver S., Buffalo, N. Y., and W. S. Shipe, Minerva, Ohio. Stovepipe.....	490,649	Jan. 31	2678	{ 689 690 }	62	599
Garretson, William H., Dallas, and S. B. Tainter, Gainesville, Tex. Apparatus for burning garbage, &c.....	503,845	Aug. 22	2644	662	64	1095
Garrett, James, Visalia, Cal. Header attachment.....	507,427	Oct. 24	2783	681	65	561
Garrett, Lewis M. (See Lum, William, assignor.).....						
Garrett, William. (See Cochran, Edward J., assignor.).....						
Garrett, William, Joliet, Ill. Rolling-mill plant.....	492,156	Feb. 21	1750	436	62	1120
Garrigus, Charles H., assignor to C. E. McVay and W. H. Plumley, Bloomington, Ill. Trace-holder.....	499,982	June 20	2053	497	63	1777
Garrison, David V., Remington, Ind. Portable hay-derrick.....	494,473	Mar. 28	2767	694	62	1934
Garrison, George H., Sumas City, Wash. Firearm.....	509,727	Nov. 28	2918	706	65	1350
Garrison, John C., et al. (See Beaver, William G., assignor.).....						
Garrison, Theodore M., Hazleton, Pa. Clothes-hanger.....	490,145	Jan. 17	1840	480	62	408
Garrison, William F., Brooklyn, N. Y. Pressure-relief regulator for slide-valves.....	497,020	May 9	1018	261	63	820
Garrison, William F., Brooklyn, N. Y. Pump for moving gaseous bodies.....	501,614	July 18	1718	424	64	346
Garrison, William F., Brooklyn, N. Y. Valve for gas-pumps.....	509,158	Nov. 21	1929	471	65	1152
Garrison, William F., assignor to Guild & Garrison, Brooklyn, N. Y. Lubricator.....	491,477	Feb. 7	684	172	62	879
Garritt, William H. H., Des Moines, Iowa. Combined rule, bevel, and square.....	504,341	Sept. 5	45	13	64	1279
Garside, John E., Peoria, Ill. Shovel-board for wagons.....	489,528	Jan. 10	858	224	62	195
Gartland, Francis X., Philadelphia, Pa. Combined gas and electric light fixture.....	490,903	Jan. 31	3096	794	62	681
Gartner, Adolph. (See Davis and Gartner.).....						
Gartside, Charles W., and R. E. Wood, Baltimore, Md. Double-pole switch.....	504,523	Sept. 5	353	90	64	1335
Garver, Abraham L., Roaring Spring, Pa. Machine for securing backing-strips to and folding books.....	509,215	Nov. 21	2022	{ 490 491 }	65	1171

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Garvie, Robert, Hartford, Conn. Clean-out for drainage-pipes	496,561	May 2	269	72	63	668
Garvin Machine Company. (See Sjöberg, Carl J. A., assignor.)						
Garwood, Spencer, Milford Centre, Ohio. Vehicle	491,544	Feb. 14	787	201	62	920
Garwood, Spencer, Milford Centre, Ohio. Roller-bearing	499,019	June 6	492	114	63	1476
Gary, Prosper, Toulouse, France. Gas-burner	489,802	Jan. 10	1255	328	62	275
Gas Economising Foreign Patents. (See Love, James, assignor.)						
Gas-Motoren-Fabrik-Deutz. (See Schumm, Hermann, assignor.)						
Gas-Motoren-Fabrik-Deutz. (See Stein, Carl, assignor.)						
Gascoigne, Joseph, Worcester, Mass. Fireproof door or shutter	505,518	Sept. 26	2004	513	64	1686
Gaskill, Daniel W. (See Cohen and Gaskill.)						
Gaskill, William H., assignor to S. W. Evans, Jr., Philadelphia, Pa. Ferrule	497,274	May 9	1408	356	63	898
Gasking, Alfred J., London, England. Belt-fastener	496,255	Apr. 25	2746	687	63	556
Gaskins, James M. (See Floyd and Douty, assignors.)						
Gaskins, Thomas, Arcadia, Fla. Link-and-pin coupling	498,643	May 30	3659	905	63	1335
Gaskins, Thomas, Arcadia, Fla. Dough-mixer	504,873	Sept. 12	929	239	64	1459
Gaskins, Thomas, Arcadia, Fla. Window-shutter	506,393	Oct. 10	1032	257	65	209
Gaskins, Thomas, Arcadia, Fla. Car-coupling	507,799	Oct. 31	3417	238	65	693
Gaskins, Thomas, Arcadia, Fla. Paper-serving apparatus	510,782	Dec. 12	1595	{ 397 398 }	{ 65 65 }	{ 1728 1728 }
Gasoline Torch Manufacturing Company. (See Walsh, John C., assignor.)						
Gass, Marion W. (See Fitz Water, Marshall V., assignor.)						
Gasser, Sanford, Trout Creek, Mich. Wrench	489,605	Jan. 10	967	252	62	216
Gassett, Oscar, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Steam- trap	508,300	Nov. 7	522	{ 126 127 }	{ 65 65 }	{ 855 855 }
Gassett, Oscar, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Ther- mostatic pressure-regulator	510,017	Dec. 5	303	68	65	1467
Gaston, John W., et al. (See Darby, Robert J., assignor.)						
Gaston, Walter. (See Webb, George W., assignor.)						
Gastrell, James P. H., Wiesbaden, Germany. Sash-fastener	489,735	Jan. 10	1150	298	62	254
Gateau, Antoine, Chicago, Ill. Vapor-burner	493,079	Mar. 7	476	119	62	1453
Gates, Albert J., assignor to Gates Iron Works, Chicago, Ill. Stone-breaker	491,096	Feb. 7	50	13, 14	62	758
Gates, Albert J., and L. J. Hewes, assignors to Gates Iron Works, Chicago, Ill. Stone breaker or crusher	507,118	Oct. 24	2234	552	65	459
Gates, Charles A., Gloversville, N. Y., assignor to Singer Manufacturing Company of New Jersey. Sewing-machine trimmer	490,846	Jan. 31	2985	765	62	659
Gates, Edwin B., assignor of one-half to D. C. Shaw, Decatur, Ill. Clamp-ear for trolley-wires.	509,616	Nov. 28	2750	663	65	1319
Gates, George, Jackson, Cal. Concentrating-belt	495,795	Apr. 13	2047	518	63	411
Gates Iron Works. (See Gates, Albert J., assignor.)						
Gates Iron Works. (See Gates and Hewes, assignors.)						
Gates Iron Works. (See Hewes, Lewis J., assignor.)						
Gates, Matthias, assignor to J. R. Snively, Wichita, Kans., A. H. Flower, and R. H. Gross, Boston, Mass. Intersecting miter	509,570	July 4	51	15	64	11
Gates, William. (See Marshall, Henry T., assignor.)						
Gathman, Louis, Chicago, Ill. Projectile	502,713	Aug. 8	813	197	64	729
Gathmann, Louis, Chicago, Ill. Projectile	511,418	Dec. 26	2735	662	65	1957
Gatling Gun Company. (See Broderick and Vankeirsbilck, assignors.)						
Gatling, Richard J., Hartford, Conn. Machine for forging and compacting ingots	496,873	May 9	790	{ 208 209 }	{ 63 63 }	{ 789 789 }
Gatling, Richard J., Hartford, Conn. Machine-gun	497,781	May 23	2255	566	63	1072
Gatling, Richard J., Hartford, Conn. Feed for machine-guns	499,534	June 13	1331	315	63	1636
Gatling, Richard J., Hartford, Conn. Machine-gun	502,185	July 25	2636	665	64	527
Gatling, Richard J., Hartford, Conn. Feed for magazine-guns	502,882	Aug. 8	1078	266	64	780
Gatling, Richard J., Hartford, Conn. Machine-gun	504,831	Sept. 12	868	223	64	1448
Gaudé, Emelie, administratrix. (See Gaudé, Leon F.)						
Gaudé, Leon F., deceased; E. Gaudé, Thibodeaux, La., administratrix. Apparatus for bleaching cane-juice	511,608	Dec. 26	3038	740	65	2013
Gaudet, Fred A., East Longmeadow, Mass. Car-coupling	501,416	July 11	1419	355	64	272
Gaudie, William R., Jarrow, England. Pie raising and lidding machine	492,531	Feb. 28	2348	583	62	1264
Gaudron, Edward N., assignor to himself and I. G. Hewison, Portland, Oreg. Funnel	493,993	Mar. 21	1987	507	62	1775
Gaudron, Edward N., assignor to himself and I. G. Hewison, Portland, Oreg. Funnel	493,994	Mar. 21	1989	507	62	1776
Gault, Alexander, Chicago, Ill. Artificial limb	496,645	May 2	404	110	63	693
Gaume, Cecile, administratrix. (See Gaume, Charles J. B.)						
Gaume, Charles J. B., deceased, Brooklyn, N. Y.; C. Gaume, administratrix. Gas-engine.	501,881	July 18	2151	{ 433 434 }	{ 64 64 }	{ 420 420 }
Gaunt, Henry, and S. E. Wild, Woonsocket, R. I., assignors to Knowles Loom Works, Worcester, Mass. Stop-motion for looms	504,832	Sept. 12	869	{ 223 224 }	{ 64 64 }	{ 1448 1448 }
Gause, Benjamin, Brooklyn, assignor to J. C. Calhoun, New York, N. Y. Cotton-har- vester	503,041	Aug. 8	1344	{ 331 332 }	{ 64 64 }	{ 823 823 }
Gawron, Josef, assignor to M. Gawron, Stettin, Germany. Clutch	503,659	Aug. 22	2365	590	64	1041
Gawron, Josef, assignor to M. Gawron, Berlin, Germany. Clutch	511,047	Dec. 19	2085	516	65	1824
Gawron, Marie. (See Gawron, Josef, assignor.)						
Gay, Albert, London, England. Coupling of dynamo-electric machines in parallel.	490,959	Jan. 31	3181	814	62	697
Gay, Chauncey W., West Springfield, assignor of one-half to S. C. Hall, Springfield, Mass. Fixture for toilet paper	497,916	May 23	2473	617	63	1110
Gay, Francis J., Providence, R. I., assignor of one-half to L. S. Starrett, Athol, Mass. Cut- ter for gear-wheels	511,607	Dec. 26	3037	740	65	2013
Gay, George E., and J. H. Parsons, Augusta, Me. Car-brake	501,333	July 11	1276	320	64	245
Gay, Hermann, and F. Finke, Baltimore, Md. Car-coupling	508,695	Nov. 14	1161	286	65	992
Gay, Hermann, and F. Finke, assignors of one-third to A. H. Schulz, Baltimore, Md. Car- coupling	501,710	July 18	1879	467	64	372
Gay, Louis, assignor of one-half to P. Gouraud, Lyons, France. Shoe-fastening	499,983	June 20	2054	498	63	1777
Gay, William A., Corry, Pa. Car-ventilator	490,960	Jan. 31	3182	814	62	697
Gayle, William A., Montgomery, Ala. Compound for preserving wood, &c.	497,471	May 16	1757		63	966
Gaylord, Edward L., Bridgeport, Conn. Picture-mat-cutting device	491,307	Feb. 7	411	{ 105 106 }	{ 62 62 }	{ 825 825 }
Gaylord, Edward L., Bridgeport, Conn. Cigar-holder	508,933	Nov. 21	1566	383	65	1081
Gaylord, Henry S., Armona, Cal. Brush-burner	505,099	Sept. 19	1311	338	64	1545
Gaynor, Thomas F., Brooklyn, N. Y. Coin-carrier	509,888	Dec. 5	70	17	65	1423
Gaynor, Thomas F., Brooklyn, N. Y. Souvenir-holder	509,889	Dec. 5	72	18	65	1424
Gaynor, Thomas F., assignor, by mesne assignments, to New Gaynor Electric Company, Louisville, Ky. Fire-alarm-telegraph repeater	509,216	Nov. 21	2024	{ 491 492 }	{ 65 65 }	{ 1171 1171 }
Gaynor, Thomas F., assignor, by mesne assignments, to New Gaynor Electric Company, Louisville, Ky. Combined electric time-stamp and signal device	509,217	Nov. 21	2036	{ 492 493 }	{ 65 65 }	{ 1173 1173 }
Gaynor, Thomas F., assignor, by mesne assignments, to New Gaynor Electric Company, Louisville, Ky. Electric signal device	509,218	Nov. 21	2040	{ 493 494 }	{ 65 65 }	{ 1174 1174 }

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Gaynor, Thomas F., assignor, by mesne assignments, to New Gaynor Electric Company, Louisville, Ky. Non-interference-signal-box mechanism for fire-alarm telegraphs.....	509,219	Nov. 21	2045	494	65	1174
Gazier, F. P. (See Welch, Allie R., assignor.)						
Gear, Samuel W., Buffalo, assignor of one-half to J. F. Alden, Rochester, N. Y. System of propelling canal-boats by electricity	499,321	June 13	946	229	63	1569
Geary, John E., Syracuse, N. Y. Railway-signal	489,736	Jan. 10	1152	298	62	254
Gebbie, John, Kilmarnock, Scotland. Jacquard mechanism for looms	506,686	Oct. 17	1509	379	65	313
Gebhardt, Henry J., Minneapolis, Minn. Wire-and-picket-fencing machine	503,207	Aug. 15	1621	398	64	892
Gebhardt, William C., assignor of one-half to O. McGaffey, Jr., Luling, Tex. Car-coupling.	496,256	Apr. 25	2747	687	63	557
Gebhardt, William C., assignor of one-half to O. McGaffey, Jr., Luling, Tex. Hose or pipe coupling	503,282	Aug. 15	1741	430	64	913
Gebhardt, William C., assignor of two-thirds to O. McGaffey, Jr., and C. J. Butfield, Luling, Tex. Painting-machine	504,833	Sept. 12	871	224	64	1448
Gecmen, Joseph. (See Sperl and Gecmen.)						
Gedde, Carl C. J. (See Gedde, Charles and C. C. J.)						
Gedde, Charles and C. C. J., assignors of one-half to B. M. Ersler, Brooklyn, N. Y. Swinging support for clothes-lines	490,385	Jan. 24	2244	584	62	500
Gee, Alvah M., Edgar, Nebr. Battery-jar	503,132	Aug. 15	1504	370	64	870
Gee, George E. (See Melvin, Charles H., assignor.)						
Gee, Horace L., Troy, assignor of one-half to W. L. Hermans, Cohoes, N. Y. Ironing-machine	506,428	Oct. 10	1105	273	65	223
Gee, William, New York, N. Y. Fire-extinguisher	502,186	July 25	2638	665	64	527
Gehricke, Otto, Heidelberg, Germany. Child's cycle	501,501	July 18	1538	387	64	311
Gehrt, Albert A. (See Brown and Gehrt.)						
Geiger, Harry M., assignor of one-half to D. E. Corbitt, Grand Rapids, Mich. Manual re-corder and cash-drawer	496,733	May 2	545	146	63	717
Geis, Edward, et al. (See Fay, Alpheus, assignor.)						
Geise, Henry, assignor of one-half to E. J. Sellers and H. Pettit, Philadelphia, Pa. Trolley-wire crossing	511,419	Dec. 26	2736	662	65	1957
Geisel, Theodore, Springfield, Mass. Wagon	505,100	Sept. 19	1312	338	64	1545
Geisenhöner, Henry, assignor of one-half to E. E. Kriegsmann, Schenectady, N. Y. Polishing and grinding machine	492,768	Feb. 28	2724	678	62	1340
Geisler, John, Dayton, Ohio. Nut-wrench	498,782	June 6	48	11	63	1397
Geisler, Otto, Gloversville, N. Y. Carrier's beam	511,521	Dec. 26	2889	703	65	1987
Geisinger, James B., New York, N. Y. Penholder	504,918	Sept. 12	1005	259	64	1474
Geissler, Rudolph, New York, N. Y. Gas lighter or extinguisher	501,780	July 18	1996	493	64	393
Gekeler, Alvin G., Frostburg, Md. Potato-planter	490,555	Jan. 24	2507	645	62	551
Gekeler, Alvin G., Frostburg, Md. Seeder	502,960	Aug. 8	1223	301	64	805
Gekeler, Alvin G., Frostburg, Md. Potato-planter	507,428	Oct. 24	2783	681	65	561
Gelabert, William P., assignor to Nelson & Gelabert, Sweet Springs, Mo. Billet-loop	493,995	Mar. 21	1991	507	62	1776
Geldbrant, Svan, Galesburg, Ill. Coffee-pot	505,042	Sept. 12	1208	311	64	1512
Gelien, Gustave A., San Francisco, Cal. Ore-grinder	508,008	Nov. 7	43	14	65	766
Gem City Manufacturing Company. (See Thies, John B., assignor.)						
Gemmell, Robert, Brookline, Mass. Garment-supporter	502,228	July 25	2710	684	64	541
Gendler & Paeschke Manufacturing Company. (See Wolff, Abraham, assignor.)						
Gendron Iron Wheel Company. (See Gendron, Peter, assignor.)						
Gendron Iron Wheel Company. (See Goodnow, Walter H., assignor.)						
Gendron Iron Wheel Company. (See Harriott, George, assignor.)						
Gendron, Joseph A., assignor to M. H. S. Gendron, Nashua, N. H. Self-threading loom-shuttle	499,784	June 20	1737	420	63	1721
Gendron, Marie H. S. (See Gendron, Joseph A., assignor.)						
Gendron, Peter, Toledo, Ohio. Machine for bending crank-axes	499,020	June 6	493	114	63	1477
Gendron, Peter, Toledo, Ohio. Spoke-bending machine	500,383	June 27	2727	670	63	1907
Gendron, Peter, Toledo, Ohio. Gun-carrier for bicycles	503,315	Aug. 15	1807	448	64	924
Gendron, Peter, Toledo, Ohio. Crank-shaft and bearing for bicycles	503,790	Aug. 22	2570	639	64	1081
Gendron, Peter, Toledo, Ohio. Spoke-swaging machine	503,791	Aug. 22	2571	640	64	1081
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Bicycle-pedal	505,825	Oct. 3	35	10	65	10
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Velocipede drive-wheel	509,801	Nov. 28	3047	736	65	1376
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Vehicle-wheel	510,783	Dec. 12	1597	398	65	1724
General Electric Company. (See Ball and Metzger, assignors.)						
General Electric Company. (See Bassett, Norman C., assignor.)						
General Electric Company. (See Bell, Louis, assignor.)						
General Electric Company. (See Bentley, Edward M., assignor.)						
General Electric Company. (See Blood, John B., assignor.)						
General Electric Company. (See Burnett and Doane, assignors.)						
General Electric Company. (See Demmick, George W., assignor.)						
General Electric Company. (See Ekström, Axel, assignor.)						
General Electric Company. (See Elkins, William H., assignor.)						
General Electric Company. (See Fiske, Jonathan P. B., assignor.)						
General Electric Company. (See Haskins, Caryl D., assignor.)						
General Electric Company. (See Herrick, Albert B., assignor.)						
General Electric Company. (See Hoffman, Joseph, assignor.)						
General Electric Company. (See Johnson and Haskins, assignors.)						
General Electric Company. (See Knight, Walter H., assignor.)						
General Electric Company. (See Libby, Sam H., assignor.)						
General Electric Company. (See Mason, David, assignor.)						
General Electric Company. (See Moody, Walter S., assignor.)						
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General Electric Company. (See Morton, Henry W., assignor.)						
General Electric Company. (See Parshall, Horace F., assignor.)						
General Electric Company. (See Parshall and Darley, assignors.)						
General Electric Company. (See Potter, William B., assignor.)						
General Electric Company. (See Priest, Edward D., assignor.)						
General Electric Company. (See Reist, Henry G., assignor.)						
General Electric Company. (See Rice, Edwin W., Jr., assignor.)						
General Electric Company. (See Southworth, Martin O., assignor.)						
General Electric Company. (See Stearns, Charles K., assignor.)						
General Electric Company. (See Swan, Alfred, assignor.)						
General Electric Company. (See Thomson, Elihu, assignor.)						
General Electric Company. (See Wirt, Herbert C., assignor.)						
General Patents Company. (See Bishop and Down, assignors.)						
Geneste, William, New Orleans, La. Gun-cleaner	489,606	Jan. 10	968	252	62	217

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Genet, William K., New York, N. Y., assignor to D. M. Cooper, Washington, D. C. Air-valve for pneumatic tires	511,693	Dec. 26	3170	775	65	2037
Genevois, Louis, Naples, Italy. Chopping-machine	499,535	June 13	1333	315 316	63	1638
Genez, Joseph J. B. E., Levallois-Perret, France. Apparatus for forging and shaping small articles of metal	507,800	Oct. 31	3418	839 840	65	693
Gengenbach, Eugene, Schenectady, N. Y. Machine for making mica sheets	494,714	Apr. 4	296	74	63	59
Gengenbach, Eugene, Schenectady, N. Y. Voltmeter and ampere-meter	495,066	Apr. 11	870	223	63	181
Gennert, Emil F. (See Locker and Gennert.)						
Gentry, Edward S., Panaca, assignor of two-thirds to W. L. and J. R. Cook, Pioche, Nev. Whittetree-coupling	490,071	Jan. 17	1715	447 137 138 139 130	62	382
Genty, Lucien, Tours, France. Aerothermic motor	508,301	Nov. 7	523	127 128 129 130	65	855
Genung, Joseph E. (See Scoville and Genung.)						
Geo. D. Barnard & Company. (See Stockstrom, Louis, assignor.)						
Geo. F. Blake Manufacturing Company. (See Laval, George de, assignor.)						
George, Aimé, Puteaux, France. Cleansing wool	493,158	Mar. 7	602	151	62	1477
George, Albert F., assignor of one-half to J. H. Fink, Kansas City, Mo. Windmill	508,009	Nov. 7	45	14, 15	65	766
George, Albert F., assignor of one-half to J. H. Fink and W. F. Pease, Kansas City, Mo. Directory holder and operator	500,099	June 20	2231	543 544	63	1808
George, Alexander B., Dallas, Tex. Waffle-iron	491,681	Feb. 14	1010	255	62	967
George, Charles, Berlin, Germany. Artificial stone	507,801	Oct. 31	3426	840	65	695
George, James S., Jr., Philadelphia, Pa. Burner for rolls of burnishing-machines	489,299	Jan. 3	463	134	62	105
George, James S., Jr., Philadelphia, Pa. Push-button	500,199	June 27	2434	594 595	63	1255
George, James S., Jr., Philadelphia, Pa. Push-button cut-out	500,200	June 27	2437	595	63	1856
George, James S., Jr., Philadelphia, Pa. Cut-out for electric-lighting systems	500,201	June 27	2439	595	63	1856
George, Japhus, and C. M. Shortle, Ithaca, N. Y. Glass-annealing furnace	508,934	Nov. 21	1567	384	65	1081
George, Japhus, and C. M. Shortle, Ithaca, N. Y. Furnace for annealing and flattening glass	510,784	Dec. 12	1598	398	65	1724
George N. Buck Manufacturing Company. (See Buck, George N., assignor.)						
George, William M., et al. (See Taylor, Martin M., assignor.)						
Georgeson, Christian H., and W. Konrad, Oshkosh, Wis. Burial-case	498,511	May 30	3432	852	63	1296
Geraldine, Dion, assignor to William Deering & Company, Chicago, Ill. Expense-account book and diary	498,931	June 6	323	76	63	1449
Gérard, Jean M. A., Paris, France. Treatment or desiccation of peat	491,545	Feb. 14	788	201	62	920
Gerard, Walter, Ludlow Grove, Ohio, assignor of one-half to J. Winkel, Covington, Ky. Car-coupling	501,460	July 11	1478	371	64	284
Geraty, George C., Chicago, Ill. Combined sink and dish-drainer	510,129	Dec. 5	488	111	65	1501
Gerbracht, Ernest W., Brooklyn, N. Y. Washing-machine	495,324	Apr. 11	1290	324 325	63	257
Gerdes, August. (See Thoens and Gerdes.)						
Gerdes, Henry G. (See Mammen, John E., assignor.)						
Gerding, Louis F. (See Francis and Gerding.)						
Gerety, Lawrence E., et al. (See Wyman, Charles F., assignor.)						
Gergacsevs, Stefan. (See Wratitch and Gergacsevs.)						
Gerhard, Friedrich L. T., Chicago, Ill. Hand sawing-machine	509,574	Nov. 28	2682	649	65	1307
Gerhard, Henry E. T., Mattapan, Mass., assignor of one-half to E. J. Tucker, New York, N. Y. Mat or similar flexible article	490,556	Jan. 24	2508	646	62	551
Gerhard, Thomas S. (See Cathan, Alonzo, assignor.)						
Gerhardt, Lincoln, assignor of one-half to F. Hume, Washington, D. C. Oar-lock	498,512	May 30	3433	852	63	1296
Gerhardt, Lincoln, assignor of one-half to H. B. Varns, Washington, D. C. Sash-cord fastener	500,760	July 4	367	95	64	68
Gerhardt, Wilhelm, Berlin, Germany. Vise	490,432	Jan. 24	2309	599	62	511
Gerhart, John E. (See Bisbing and Gerhart.)						
Gerhart, William R., assignor of one-half to C. A. Inglis, Lancaster, Pa. Combined rail brace and fastener	510,419	Dec. 12	954	230	65	1605
Gering, Henry R. (See Hubbell, Edwin, assignor.)						
Gerlach, Carl C., Cleveland, Ohio. Refrigerating apparatus	507,729	Oct. 31	3298	807	65	671
Gerland, Frederick J. M., Bayonne, assignor to himself, and W. C. Hespe, Jersey City, N. J. Half-tone negative for photo processes	506,109	Oct. 3	481		65	94
Gerlitz, Gottlieb, Graz, Austria-Hungary. Apparatus for curing spinal curvature	492,903	Mar. 7	208	51, 52	62	1400
German, David P., assignor to J. B. German, New Hartford, N. Y. Spinning mechanism	510,909	Dec. 19	1857	457	65	1782
German, Jerome B. (See German, David P., assignor.)						
German, William M., et al. (See Ripson, John D., assignor.)						
German, John G., Erie, Pa. Reversing-switch for electric motors	510,596	Dec. 12	1281	311 312	65	1664
Geromont, Friedrich, Winkel, assignor to C. F. Boehringer & Soehne, Waldhof, near Mannheim, Germany. Lactyl-paraphenetid and making it	503,743	Aug. 22	2504		64	1068
Gerrard, Charles H., Xenia, Ill. Plow	493,080	Mar. 7	477	120	62	1453
Gerrard, George, assignor to J. C. Wilson & Co., Glasgow, Scotland. Apparatus for burning hydrocarbon or other oils	510,170	Dec. 5	549	128	65	1514
Gerrish, Edward H., San Francisco, Cal. Liquid shaking and cooling machine	494,474	Mar. 28	2768	694	62	1934
Gerry, James H., Brooklyn, N. Y. Electric time signaling system	508,215	Nov. 7	389	95	65	830
Gerry, Seth S., Thomaston, Me. Ship's windlass self-register	508,935	Nov. 21	1568	384	65	1082
Gersdorff, Augustus, Washington, D. C. Funnel	491,421	Feb. 7	590	148	62	861
Gerson, Isidor I., administrator. (See Woodruff, Theodore T.)						
Gersting, Charles H., assignor of two-thirds to J. A. Burns and G. Gladden, Homestead, Pa. Feed-water regulator	500,571	July 4	53	15, 16	64	11
Gerwig, Lewis D., Pottstown, Pa. Musical ring	498,008	May 23	2616	653	63	1135
Gessart, William J., St. Paul, Minn. Oar-lock for self-feathering oars	499,727	June 20	1634	393	63	1704
Gessner, Ernst Ane, Germany. Cloth-napping machine	511,609	Dec. 26	3040	741	65	2013
Gest, Clement W. and E. G. Brazier, Ohio. Cider-mill	502,558	Aug. 1	520	124	64	662
Gest, Enoch G. (See Gest, Clement W. and E. G.)						
Getty, William, et al. (See Schroeder, John, assignor.)						
Getze, Frank F., assignor of one-half to N. D. Mussey, Los Angeles, Cal. Seal-lock	509,077	Nov. 21	1796	442	65	1126
Getz, William E., Quincy, Ill. Gyrating bolt	502,116	July 25	2527	633	64	505
Geyer, Charles F., assignor to Koch Sons & Co., New York, N. Y. Album	500,327	June 27	2643	647	63	1892
Geyler, P. J., et al. (See Cunningham, Richard B., assignor.)						
Geyser, John B. (See Young and Geyser.)						
Ghent, David A., and O. S. Colbran, Burlington, Canada. Sanding device for cars	494,136	Mar. 28	2233	568	62	1836

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Ghere, George. (See Ghere, Howard and G.)						
Ghere, Howard and G., Frankfort, Ind. Straw-carrier	504,212	Aug. 29	3245	809	64	1225
Gholson, William C., Cincinnati, Ohio. Metallic column	492,518	Feb. 28	2329	578	62	1259
Giacomini, Achille, St. Louis, Mo. Machine for graining wood	508,696	Nov. 14	1162	287	65	992
Gibb, Howard. (See Russel and Brady, assignors.)						
Gibbon, William E. (See Hornsby Edwards, and Gibbon.)						
Gibboney, John W., Lynn, Mass. Balance	502,433	Aug. 1	308	74	64	622
Gibbons, James M. (See Livengood Chadbourne, and Gibbons.)						
Gibbons, John A., Toronto, Canada. Advertising device	504,919	Sept. 12	1005	259	64	1474
Gibbons, Willis S., and G. E. Bartholomew, Russell, N. Y. Washing-machine	495,168	Apr. 11	1047	261	63	212
Gibbs, Edmund D., assignor to National Cash Register Company, Dayton, Ohio. Cash-register	509,658	Nov. 28	2813	679	65	1331
Gibbs, Eugene U., Mount Holly, N. J. Boiler for locomotive or other engines	502,117	July 25	2529	634	64	505
Gibbs, Henry W., Sterling, assignor of one-half to R. B. Lamb, Mount Holly, N. J. Upright boiler	501,711	July 18	1880	468	64	372
Gibbs, Henry W., Sterling, assignor of one-half to C. E. Kirby, Fitchburg, Mass. Trunk-hinge	506,632	Oct. 10	1417	355	65	284
Gibbs, Jacob S., assignor to Perkins Electric Switch Manufacturing Company, Hartford, Conn. Electric switch	490,746	Jan. 31	2838	728	62	629
Gibbs, Jacob S., assignor to Perkins Electric Switch Manufacturing Company, Hartford, Conn. Electric switch	510,533	Dec. 12	1174	283	65	1645
Gibbs, James E., assignor of one-half to J. W. Vetter, Chattanooga, Tenn. Churn-dasher	507,612	Oct. 31	3115	761	65	636
Gibbs, James E. A., Raphine, Va. Velocipede	501,712	July 18	1880	468	64	373
Gibbs, Lewis, Canton, Ohio. Lawn-rake	489,672	Jan. 10	1049	273	62	234
Gibbs, Lewis, Canton, Ohio. Post-hole digger	493,700	Mar. 21	1490	381	62	1680
Gibbs, Lewis, Canton, Ohio. Lawn-rake	496,220	Apr. 25	2692	675	63	547
Gibbs, Lucius T., Milwaukee, Wis. Trolley-wire support	505,457	Sept. 26	1886	486	64	1665
Gibbs, Sylvester M., Danville, Pa. Armillary sphere	511,420	Dec. 26	2738	662	65	1958
Gibbs, William H., assignor of one-half to J. P. Graham, Mendon, Ill. Earth-auger	505,456	Sept. 26	1885	486	64	1664
Gibbs, William T., and S. P. Franchot, Buckingham, Canada. Obtaining chlorates of the alkalies or of the alkaline earth metals by electrolysis	493,023	Mar. 7	398		62	1437
Gibson, Theodor, Bremen, Germany. Packing leaf-tobacco, &c.	496,321	Apr. 25	2693	675 676	63	547
Gibson, Andrew K., assignor to T. Agnew, Coshocton, Ohio. Flour bin and sifter	504,342	Sept. 5	47	13	64	1279
Gibson, Charles S., South New Berlin, N. Y. Electric time-alarm	498,710	May 30	3785	934	63	1356
Gibson, Edward, Jersey City, N. J. Grate-bar	509,523	Nov. 28	2602	629	65	1291
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	491,881	Feb. 14	1325	327	62	1028
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	491,882	Feb. 14	1326	328	62	1028
Gibson, Gerolt, St. Louis, Mo. Nut-lock	492,672	Feb. 28	2574	637	62	1310
Gibson, Gerolt, St. Louis, Mo. Nut-lock	492,722	Feb. 28	2648	656	62	1325
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	493,159	Mar. 7	603	151	62	1477
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	496,303	Apr. 25	2822	706	63	571
Gibson, Gerolt, St. Louis, Mo. Nut-lock	510,683	Dec. 12	1435	354	65	1693
Gibson, Harvey V. (See Hines and Gibson.)						
Gibson, Hiram A. H., et al. (See Douthitt, Benjamin F., assignor.)						
Gibson, Houdt D. W., Detroit, Mich. Pressure-reducing valve	502,434	Aug. 1	310	74	64	622
Gibson, James C., San Francisco, Cal. Clutch	505,219	Sept. 19	1495	390	64	1578
Gibson, John H., Bruin, Pa. Trace-fastener	493,264	Mar. 14	769	196	62	1527
Gibson, John H., Bruin, Pa. Horse-checking device	493,882	Mar. 21	1793	457	62	1739
Gibson, John H., Bruin, Pa. Harness	498,326	May 30	3232	804	63	1259
Gibson, John H., Canton, Ohio. Foot-valve for pumps	493,372	Mar. 14	958	247	62	1562
Gibson, John H., Bruin, and T. D. Sutton, Conoquenessing, Pa. Pump for oil-wells	504,679	Sept. 5	598	152	64	1383
Gibson, William H., Washington, Conn. Appliance for teaching botany	496,257	Apr. 25	2750	688	63	557
Gibson, Wyatt, Dodd, Tex. Churn	493,825	Mar. 21	1703	434	62	1721
Giddings, Carl J. and G. W. Rutland, Vt. Guard and reflector	503,955	Aug. 29	2828	706	64	1147
Giddings, George W. (See Giddings, Carl J. and G. W.)						
Giddings, Howard A. (See Olmsted, Warner, and Giddings.)						
Giese, James A., assignor to Adams & Westlake Company, Chicago, Ill. Latch and lock	492,494	Feb. 28	2293	570 580	62	1252
Giese, Carl, Offenbach-on-the-Main, Germany. Sewing-machine for making straw bottle-covers	507,698	Oct. 31	3575	881 882	65	722
Giesecke, Albert, et al. (See Spahmer, Adam A., Jr., assignor.)						
Giesecke, Sophia, St. Louis, Mo. Horse-brush	502,513	Aug. 1	446	108	64	648
Giesler, Franklin B., Milwaukee, Wis. Malting-drum	507,536	Oct. 31	2973	729	65	609
Giesler, Franklin B., Milwaukee, Wis. Malting	507,580	Oct. 31	3061	749	65	625
Giesler, Franklin B., Milwaukee, Wis. Malting apparatus	507,613	Oct. 31	3116	762 763	65	637
Giesler, Franklin B., assignor to Galland-Henning Pneumatic Malting Drum Manufacturing Company, Milwaukee, Wis. Grain-spout	492,004	Feb. 21	1509	377	62	1080
Giesler, Franklin B., assignor to Galland-Henning Pneumatic Malting Drum Manufacturing Company, Milwaukee, Wis. Atomizer	507,581	Oct. 31	3064	749	65	626
Giessenbier, Henry, St. Louis, Mo. Awning-frame	500,741	July 4	335	89	64	63
Giessler, Hermann, Stuttgart, Germany. Coating metallic surfaces	495,629	Apr. 18	1780		63	365
Giessler, William J., et al. (See Sperry, Charles F., assignor.)						
Giffen, James B. (See Blair and Giffen.)						
Giffin, Rollin S., et al. (See Brintnall, Thomas M., assignor.)						
Giffin, Rollin S., et al. (See Brintnall and Bradley, assignors.)						
Gifford, Alenza T., Hopedale, Mass. Incandescent-lamp fixture	501,502	July 18	1539	388	64	311
Gifford, Harry E., Wollaston, assignor to G. H. Richter, Boston, Mass. Memorandum-tablet	506,633	Oct. 10	1418	356	65	284
Gifford, Harry E., Quincy, Mass., assignor to Wyckoff, Seamans & Benedict, of New York. Copy-holder	510,130	Dec. 5	488	111	65	1502
Gilbert & Bennett Manufacturing Company. (See Burton, Matthew, assignor.)						
Gilbert, Edmund J. (See Anger, John E., assignor.)						
Gilbert, Edward T., Detroit, Mich. Nut-tapping machine	507,802	Oct. 31	3426	841 842	65	695
Gilbert, F. M. (See Ostenberg, John A., assignor.)						
Gilbert, Franklin T., Walla Walla, assignor to S. M. R. Gilbert, Seattle, Wash. Gravel washer and separator	489,378	Jan. 3	602	162	62	129
Gilbert, Franklin T., Walla Walla, assignor to S. M. R. Gilbert, Seattle, Wash. Gravel washing and separating machine	489,379	Jan. 3	604	162	62	130
Gilbert, Franklin T., Walla Walla, assignor to S. M. R. Gilbert, Seattle, Wash. Gravel-screening machine	489,380	Jan. 3	606	162	62	130
Gilbert, Frederick, Seymour, Conn. Fountain-pen	511,134	Dec. 19	2240	550	65	1854
Gilbert, George A., Milwaukee, Wis. Bridle-bit	496,222	Apr. 25	2695	676	63	547

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Gilbert, Henry G. (See Nugent and Gilbert.)						
Gilbert, Henry J., Saginaw, Mich. Washboard	504,028	Aug. 29	2942	736	64	1168
Gilcher, Henry J., Cleveland, Ohio. Closet-flushing device	506,221	Oct. 10	724	181	65	148
Gilbert, Henry J., Saginaw, Mich., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	491,546	Feb. 14	790	201 202	62	921
Gilbert, James, Omaha, Nebr. Boiler-furnace	494,137	Mar. 28	2234	569	62	1836
Gilbert, Joshua J., Syracuse, N. Y. Side-spring vehicle	489,673	Jan. 10	1050	273 274	62	234
Gilbert, Susie M. R. (See Gilbert, Franklin T., assignor.)						
Gilbreath, Emmett. (See Cadenhead, Benjamin F., assignor.)						
Gilchrist, Andrew. (See Glafcke, Paul E., assignor.)						
Gilchrist, Peter C. (See Hacker and Gilchrist.)						
Gildemeyer, Charles A., Haddonfield, N. J. Changeable sign and label	498,053	May 23	2684	672	63	1147
Gildemeyer, Charles A., Haddonfield, N. J. Wheel-tire	508,610	Nov. 14	1035	255	65	966
Gildemeyer, Charles A., assignor of one-half to O. Twitchell, Haddonfield, N. J. Railway-tie	491,048	Jan. 31	3336	850	62	728
Giles, Benjamin S., Talladega, Ala. Overflow for bath or laundry tubs	495,480	Apr. 18	1545	388	63	324
Giles, Frederick, South Yarra, Victoria. Draft-hook	507,429	Oct. 24	2785	682	65	561
Giles, Henry T., assignor to A. D. Remington, Watertown, N. Y. Expandible mandrel	509,159	Nov. 21	1931	472	65	1152
Giles, Henry T., assignor to A. D. Remington, Watertown, N. Y. Expandible mandrel	509,160	Nov. 21	1932	473	65	1152
Giles, James P., Harrisburg, Pa. Brush for washing and wiping windows	502,000	July 25	2336	585	64	469
Gillfillan, Essington N. (See Aze and Gillfillan.)						
Gillfillan, Essington N., Chicago, Ill. Spring-scale	498,711	May 30	3788	934	63	1356
Gillfillan, William, New Britain, Conn. Door-check	497,651	May 16	2041	508 509	63	1017
Gilford, Edward, Cowles, Nebr. Rotating grain-meter	496,406	May 2	26	7, 8	63	623
Gilham, Robert J., assignor to M. Gore and C. W. Jacobs, Orlando, Fla. Pocket-rule	500,572	July 4	55	16	64	11
Gilhaus, George E. (See Blake and Gilhaus.)						
Gill, Albert L., Trenton, N. J. Combined thrasher and binder	500,709	July 4	384	77	64	53
Gill, Henry W. (See Ash and Gill.)						
Gill, James B., San Francisco, Cal. Police and fire alarm system	509,524	Nov. 28	2603	629 630	65	1291
Gill, James C. (See Hemingray and Gill.)						
Gillam, Manly M., Philadelphia, Pa. Educational map	492,005	Feb. 21	1511	377	62	1081
Gillespie, Benjamin, et al. (See Henson, Marvin T., assignor.)						
Gillespie, Chester. (See Gillespie, Nelson, assignor.)						
Gillespie, David H., Lockland, Ohio. Bridle-bit	498,644	May 30	3659	906	63	1335
Gillespie, Evander J., San José, Cal. Paper holder and cutter	491,883	Feb. 14	1327	328	62	1028
Gillespie, Evander J., San José, Cal. Roll-paper holder and cutter	492,552	Feb. 28	2388	592	62	1273
Gillespie, Henry B. (See Strepey, Lindsay S., assignor.)						
Gillespie, James, Chicago, Ill. Ticket-punch	498,259	May 30	3014	751	63	1321
Gillespie, John J., Colorado Springs, Colo. Pencil	500,487	June 27	2875	707	63	1933
Gillespie, Nelson, assignor of one-half to C. Gillespie, Hoosick Falls, N. Y. Animal-muzzle	499,184	Jan. 3	310	86	62	71
Gillespie, Richard S., and H. James, New York, N. Y. Pipe-wrench	489,803	Jan. 10	1255	329	62	275
Gillespie, Richard S., and H. James, New York, N. Y. Pipe-wrench	508,302	Nov. 7	530	130	65	856
Gillespie, Robert A., et al. (See Curry, James H., assignor.)						
Gillespie, William W., Stamford, Conn. Apparatus for grading powdered materials	509,728	Nov. 28	2922	707	65	1351
Gillet, Alexis F., assignor to G. W. and J. D. Whiteaker, Kearney, Nebr. Vehicle-wheel	489,300	Jan. 3	485	134	62	106
Gillet, Alexis F., assignor of two-thirds to G. W. and J. D. Whiteaker, Kearney, Nebr. Rotary engine	493,081	Mar. 7	478	120	62	1454
Gillet, Alexis F., assignor of two-thirds to G. W. and J. D. Whiteaker, Kearney, Nebr. Parallel-ruler	496,825	May 2	692	183	63	742
Gillet, Alexis F., assignor of two-thirds to G. W. and J. D. Whiteaker, Kearney, Nebr. Wagon-axle	496,826	May 2	694	183	63	743
Gillet, Frank, et al. (See Schaub, Adolph, assignor.)						
Gillett, Clarence, Gloversville, N. Y. Road-wagon	493,082	Mar. 7	480	120 121	62	1454
Gillette, Arthur C., Jersey City, N. J. Detachable tire	503,846	Aug. 22	2645	663	64	1096
Gillette, George H., New York, N. Y. Bottle-stopper	493,701	Mar. 21	1491	382	62	1680
Gillette, George W. and M. G., New York, N. Y. Power-applying mechanism	500,710	July 4	286	77	64	53
Gillette, George W. and M. G., New York, N. Y. Flexible shafting	504,720	Sept. 12	666	169	64	1408
Gillette, Mott G. (See Gillette, George W. and M. G.)						
Gillies, Alexander. (See Jones and Gillies.)						
Gilligan, John, Chicago, Ill. Pipe-stop or shut-off	509,575	Nov. 28	2684	649	65	1307
Gillis, Duncan, et al. (See Armen, Arakelyan H., assignor.)						
Gillis, John H., Coesfield, Tex. Wire-stretcher	506,995	Oct. 17	2018	499	65	407
Gillmore, Frederick J. (See Whomes and Gillmore.)						
Gillmore, Ross, O. and A. Rapp, Chicago, Ill. Bookbinder's beveling-machine	496,054	Apr. 25	2445	617	63	500
Gillow, Edward. (See Crabtree and Gillow.)						
Gilman, Benjamin F., San Francisco, Cal. Plant or tree protector	502,559	Aug. 1	522	125	64	662
Gilman, Elias, et al. (See Kitton, John C., assignor.)						
Gilman, Willard H., Boston, assignor to W. S. Reed, trustee, Leominster, Mass. Perforated music-sheet	505,878	Oct. 3	121	31	65	24
Gilmartin, Thomas J., Ogden, Utah Ter. Railway-rail joint	504,302	Aug. 29	3387	847	64	1252
Gilmer, William C., assignor of one-half to L. Manning, Stockton, Cal. Combination-tool	492,532	Feb. 28	2349	583	62	1264
Gilmore, Alfred, Stillwater, Minn. Flax-thrashing attachment for thrashing-machines	502,356	Aug. 1	180	42	64	599
Gilmore, Noble H., assignor of three-fourths to J. M. and C. S. Fuller and W. H. Gilmore, Greenville, Mich. Hoisting apparatus	499,536	June 13	1335	316	63	1639
Gilmore, Samuel L. (See Allison, Samuel B., assignor.)						
Gilmore, William H., et al. (See Gilmore, Noble H., assignor.)						
Gilroy, Florence W., Philadelphia, Pa. Drawers-stretcher	497,782	May 23	2258	566	63	1073
Gilstrop, James M. (See Fox, Charles H., assignor.)						
Gindele, Albert H., Jersey City, N. J. Gas-meter connection	506,489	Oct. 10	1216	303	65	244
Gingold, David, New York, N. Y. Horseshoe	500,881	July 4	552	143	64	100
Gingras, Timothy, Buffalo, N. Y. Washer	501,207	July 11	1074	273	64	211
Ginn, William E., assignor of two-thirds to W. K. and H. L. Isaacs, Baltimore, Md. Tool-sharpener	502,459	Aug. 1	352	84	64	631
Ginter, William P., and W. Strous, Hughesville, assignors of one-third to J. H. B. Trainer, Williamsport, Pa. Saw-filing machine	506,222	Oct. 10	726	181 182	65	149
Giovanni, Giovanni G. di, Turin, Italy. Device for illuminating gun-sights by electricity	497,540	May 16	1871	472	63	987
Gipe, Emanuel C., Freeport, Ill. Cash-carrier	508,303	Nov. 7	531	130 131	65	856
Gipe, Emanuel C., assignor to Standard Store Service Company, Freeport, Ill. Cash and package carrier	510,505	Dec. 12	1094	264	65	1632

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Girdany, Morris L. J., Philadelphia, Pa. Machine for milling or forming settings	495,325	Apr. 11	1295	325	63	258
Girnau, Peter, Eau Claire, Wis. Lumber-wagon	505,519	Sept. 26	2004	513	64	1686
Giroux, Joseph L., Jerome, Ariz. Ter. Furnace	499,188	June 6	746	177	63	1520
Giroux, Joseph L., Jerome, Ariz. Ter. Steam-generator and smelting-furnace	500,886	July 4	557	144	64	102
Giroux, Joseph L., Jerome, Ariz. Ter. Smelting-furnace	508,381	Nov. 7	660	162	65	880
Giroux, Joseph L., Jerome, Ariz. Ter. Reverberatory smelting and refining furnace	510,251	Dec. 5	686	164	65	1546
Gitchel, Roland H., <i>et al.</i> (See Woodard, William H., assignor.)						
Gittings, Joseph H., <i>et al.</i> (See Heatley, John, assignor.)						
Givens, Dwight C., Reger, Mo. Steam-engine	501,829	July 18	2063	509	64	405
Gladden, George, <i>et al.</i> (See Gersting, Charles H., assignor.)						
Gladding, Henry C., Providence, R. I. Apparatus for drawing in perspective	497,317	May 16	1518	382	63	924
Gladfelter, Marion E., Cleveland, Ohio. Beam-compass	494,475	Mar. 28	2769	695	62	1934
Gladney, James R., and J. C. Mayfield, Roanoke, Ala. Plow	492,283	Feb. 21	1941	485	62	1169
Gladstone, William, San Francisco, Cal. Feed-water regulator	504,574	Sept. 5	433	110	64	1350
Glaefcke, Paul E., Cheyenne, Wyo. Prison cage or cell	494,252	Mar. 28	2416	609 610	62	1870
Glaefcke, Paul E., assignor of one-half to T. A. Kent, Cheyenne, Wyo. Prison-cell, safe, or other depository	494,253	Mar. 28	2420	610	62	1870
Glaefcke, Paul E., assignor of one-half to H. G. Hay, Cheyenne, Wyo. Spring-hinge	495,031	Apr. 11	789	200	63	166
Glaefcke, Paul E., assignor of one-half to A. Gilchrist, Cheyenne, Wyo. Window	507,653	Oct. 31	3191	781 782	65	650
Glancy, Thomas H., Fairport, N. Y. Vehicle-bolster	493,702	Mar. 21	1493	382	62	1681
Glanton, James A., Columbus, Ind. Extension-table	499,529	Jan. 10	859	224	62	195
Glascock, George, Veedsburg, Ind. Fore-leg spreader for horses	510,337	Dec. 5	815	197	65	1565
Glasgow, Arthur G., Philadelphia, Pa. Oil-heater	504,524	Sept. 5	355	90	64	1336
Glassmann, John H., assignor to J. E. Snell, Denver, Colo. Folding camp-stove	497,275	May 9	1408	357	63	889
Glass, Albert J., assignor to Johnston Harvester Company, Batavia, N. Y. Disk harrow	498,428	May 30	3294	822	63	1271
Glass, Alexander. (See Grafton, Ewing, and Glass.)						
Glass, Alexander, Wheeling, W. Va., and W. S. Grafton, Steubenville, Ohio, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Painting-machine	497,318	May 16	1519	382	63	924
Glass, Charles R. (See Kent and Glass.)						
Glasser, Rudolph. (See Macher, John, assignor.)						
Glassman, Jacob, New York, N. Y. Riding-skirt	508,131	Nov. 7	250	63	65	805
Glawe, Charles, Dayton, Ohio. Awning	501,932	July 25	2244	560	64	552
Gleazier, Cyrus E. (See Lee, Nathan H., assignor.)						
Gleason, Alexander, assignor to Buffalo Electrotype and Engraving Company, Buffalo, N. Y. Time-chart	497,917	May 23	2474	618	63	1110
Gleason, Francis, Philadelphia, Pa. Drive-chain	501,587	July 18	1672	417	64	337
Gleason, Frank H. (See Morrison, Alonzo, assignor.)						
Gleason, James E., Rochester, N. Y. Tool-controlling mechanism for gear-planers	509,467	Nov. 28	2512	607	65	1274
Gleason, Joseph J., New York, N. Y. Safety-envelope	502,560	Aug. 1	523	125	64	663
Gleason, Robert M., assignor of one-half to A. H. Waterson, Grand Rapids, Mich. Sectional feed-roll	501,004	July 4	739	194	64	134
Gleason, Thomas W., <i>et al.</i> (See Armen, Arakelyan H., assignor.)						
Gledhill, Walter, Clifton, Pa., assignor of five-eighths to J. Smethurst, St. Helen's, England, J. F. Buckley, J. Haines, D. W. John, and W. J. Dougherty, Philadelphia, Pa. Nut-lock	506,490	Oct. 10	1217	303	65	244
Gleixner, Joseph A., Fair Haven, and P. Schaff, Baldwin, Pa. Seed-sower	496,515	May 2	195	53	63	654
Glen, Thomas D., W. Purvis, and S. Smith, Glasgow, Scotland. Pneumatic tire	503,660	Aug. 22	2366	590	64	1041
Glenn, Allen, Scranton, Iowa. Calf-weaner	508,216	Nov. 7	392	95	65	831
Glenn, George P., Jacksonville, Fla. Water-lift	506,996	Oct. 17	2020	499	65	408
Glick, John A., V. M. Heim, and A. E. Hafer, Reading, Pa. Washing-machine	501,063	July 11	835	217	64	167
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Petersham, Mass. Nail-sorting machine	498,429	May 30	3295	822	63	1271
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Petersham, Mass. Heeling-machine	498,513	May 30	3434	852 853	63	1296
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Petersham, Mass. Heel-nailing machine	500,486	June 27	2871	707	63	1932
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Cambridge, Mass. Heel-compressing and loading machine	502,667	Aug. 1	706	168 169 170	64	695
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Petersham, Mass. Heel-compressing and loading machine	502,668	Aug. 1	715	171 172	64	697
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Petersham, Mass. Heel-nailing machine	502,669	Aug. 1	719	172 173	64	698
Glidden, Charles W., Lynn, and H. W. Winter, Boston, assignors to J. W. Brooks, trustee, Petersham, Mass. Heel-trimming machine	505,043	Sept. 12	1209	311	64	1512
Glidewell, Alfred. (See Glidewell, John W. and A.)						
Glidewell, John W. and A., Grand Island, Fla. Crate	488,997	Jan. 3	32	9	62	9
Globe Buttonhole Machine Company. (See Dahl, Charles A., assignor.)						
Globe Company. (See Carnahan, Charles M., assignor.)						
Globe Company. (See Dom, Alexander, assignor.)						
Globe Manufacturing Company. (See Brown, Francis R., assignor.)						
Globe Treeing Machine Company. (See Warren, John, assignor.)						
Gloekler, Charles A., Pittsburg, Pa. Hanger for elevated tracks	494,561	Apr. 4	39	8	63	9
Gloekler, Charles A., and R. Munroe, Jr., Pittsburg, Pa. Rendering-kettle	502,714	Aug. 8	815	197	64	730
Glore, W. H. (See Teed, Oliver F., assignor.)						
Glover, Charles, Hartford, Conn. Making wardrobe-hooks	497,783	May 23	2258	567	63	1073
Glover, Charles B., Houston, Tex. Machine for removing mud or sand from rivers or harbors	490,747	Jan. 31	2840	728	62	629
Glover, Edmond C. (See Glover, John W. and E. C.)						
Glover, John W. and E. C. Randall, Ark. Animal-trap	487,004	May 9	995	256	63	216
Glover, Taylor, and T. J. Jean; said Jean assignor to L. P. Bonebrake, Maryville, Mo. Lubricator	490,247	Jan. 17	2007	525	62	440
Gluck, William J. H., Baltimore, Md. Steam-cooker	507,359	Oct. 24	2673	657	65	540
Glydon, George, Birmingham, England, assignor to T. Hill, Jersey City, N. J. Speed-gearing for cycles	510,252	Dec. 5	687	164	65	1540
Glynn, Thomas, Philadelphia, Pa. Combined ice-tongs and weighing-scales	503,042	Aug. 8	1348	333	64	829
Gmelin, Jacob H., West Bay City, Mich. Stove-lid lifter and kettle holder and drainer	506,173	Oct. 3	608	155	65	118
Gnehm, Robert, and J. Schmid, assignors to Society of Chemical Industry in Basle, Basle, Switzerland. Brown dye	491,422	Feb. 7	591		62	861
Gnehm, Robert, and J. Schmid, assignors to Society of Chemical Industry in Basle, Basle, Switzerland. Red dye	493,583	Mar. 14	1301		62	1628
Gnitchel, Guido, Lauter, Germany. Marbling enameled articles	503,661	Aug. 22	2368	591	64	1041
Godbe, Alfred T., assignor of one-half to F. Godbe, Pioche, Nev. Hobby-horse	498,847	June 6	174	43	63	1423

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Godbe, Frank. (See Godbe, Alfred T., assignor.)						
Godbery, Richard J., New Orleans, La. Roller-sprocket for bicycles	511,012	Dec. 19	2041	504	65	1815
Goddard, George B., Brockton, Mass. Handle for bicycle steering-bars	497,519	May 16	1839	464	63	981
Goddard, George B., Brockton, Mass. Handle for bicycles	499,103	June 6	610	146	63	1497
Godding, Milton O., Monrovia, Cal. Combined automatic thrasher, feeder, and separator	489,301	Jan. 3	486	134 135 136	62	106
Goddu, Louis, Winchester, assignor to J. W. Brooks, Petersham, and F. F. Stanley, Swamp-	490,621	Jan. 24	2610	672 673	62	572
Goddu, Louis, Winchester, assignor to J. W. Brooks, Petersham, and F. F. Stanley, Swamp-	490,622	Jan. 24	2619	674 675	62	573
Goddu, Louis, Winchester, assignor to J. W. Brooks, Petersham, and F. F. Stanley, Swamp-	490,623	Jan. 24	2625	675 676	62	574
Goddu, Louis, Winchester, assignor to J. W. Brooks, Petersham, and F. F. Stanley, Swamp-	490,624	Jan. 24	2629	676 677	62	575
Goddu, Louis, Winchester, assignor to J. W. Brooks, Petersham, and F. F. Stanley, Swamp-	490,625	Jan. 24	2632	677 678	62	575
Godfrey, Charles B., Milford, Mass., assignor to Library Bureau, of Massachusetts. Book-	494,950	Apr. 4	658	170	63	127
Godfrey, Charles B., Milford, Mass., assignor to Library Bureau, of Massachusetts. Shelf-	499,672	June 13	1541	371	63	1674
Godfrey, James. (See Johnson, Hamilton, assignor.)						
Godfrey, Mary F., London, England. Button	498,712	May 30	3789	935	63	1356
Godfrey, Wyman H. A., assignor of one-half to A. N. Lampman and D. L. Akey, Colon,						
Mich. Attachment for tobacco-pails	496,477	May 2	134	37	63	643
Godley, George F., Philadelphia, Pa. Car-spring seat	499,338	June 13	982	238	63	1575
Godley, George F., Philadelphia, Pa. Car-spring case	506,907	Oct. 17	1842	499	65	381
Godley, George F., Philadelphia, Pa. Car-spring case	508,103	Nov. 7	204	54	65	797
Godley, John F., et al. (See Seymour, William S., assignor.)						
Godley, Lester M. (See Hardy, Colin F., assignor.)						
Godman, Emory J., assignor to Vibrometer Company, Baltimore, Md. Apparatus for treat-	499,785	June 20	1738	420	63	1721
ing diseases						
Godman, Emory J., assignor to Vibrometer Company, Baltimore, Md. Apparatus for treat-	499,786	June 20	1740	420	63	1721
ing diseases						
Godshaw, Abraham, et al. (See Allan, Edward T., assignor.)						
Goeddeke, Joseph, Detroit, Mich. Washing-machine	502,961	Aug. 8	1225	301 302	64	805
Goehler, George J. H., assignor to Cary Safe Company, Limited, Buffalo, N. Y. Time-						
lock	493,862	Mar. 21	1758	447	62	1732
Goeller, Charles, Elmont, N. Y. Seat for wagons	493,863	Mar. 21	1760	448	62	1732
Goelz, Charles, Mineral Point, Wis. Vehicle-brake	504,343	Sept. 5	48	13	64	1280
Goelze, Frank A., Chicago, Ill. Window frame and sash	508,010	Nov. 7	50	15	65	767
Goertz, August, Newark, N. J. Bag or purse frame	490,433	Jan. 24	2310	599 600	62	511
Goertz, August, Newark, N. J. Purse and frame therefor	490,434	Jan. 24	2311	600	62	512
Goese, Hermann, Milwaukee, Wis. Window-frame	490,108	Jan. 17	1774	462	62	395
Goesel, John G. (See Kletzker and Goesel.)						
Goetz, August C., Milwaukee, Wis. Electric-railway switch	489,944	Jan. 17	1498	391	62	338
Goetz, John J., Covington, and J. A. Smith, Dayton, Ky., assignors to themselves, and H.						
M. Littell, Cincinnati, Ohio. Trolley-wheel	491,014	Jan. 31	3266	834	62	713
Goetz, Joseph, Berlin, Germany. Apparatus for purifying gas	503,133	Aug. 15	1505	370	64	870
Goff, Daniel, Atlantic City, N. J., assignor of one-half to C. T. Wright, Philadelphia, Pa.						
Steam-muffler	503,534	Aug. 15	2141	537	64	985
Goff, Edward, Franklin county, Ind. Door or window screen	493,703	Mar. 21	1494	383	62	1681
Goff, Frank, Camden, and T. H. Joiner, Burlington, N. J. Car-coupling	499,827	June 20	1814	441	63	1734
Goff, Frank C., Denver, Colo. Hot-water valve	510,420	Dec. 12	956	230	65	1606
Goff, George, Iola, Kans. Steam-cooker	499,984	June 20	2055	498	63	1777
Goff, James M. (See Westcott, Nathaniel W., assignor.)						
Goff, Mott P., Mattituck, N. Y., assignor to National Electric Gas Company, of Kentucky.						
Apparatus for the generation of gas	504,303	Aug. 29	3389	847 848	64	1252
Goff, Mott P., Mattituck, N. Y., assignor to National Electric Gas Company, of Kentucky.						
Manufacturing gas	507,491	Oct. 24	2875	705	65	579
Goffett, Joseph T., Dubuque, Iowa. Car-seal	490,018	Jan. 17	1631	425	62	365
Göhrt, Ernst R., Chemnitz, Germany. Core-support	498,848	June 6	175	44	63	1423
Göhrt, Hermann, assignor of one-half to I. Beck, Liverpool, England. Measuring-instru-						
ment	492,826	Mar. 7	181	44	62	1394
Going, William J., Amsterdam, N. Y. Bell-ringing device	504,721	Sept. 12	667	169	64	1408
Gokey, Frank F., Winooski, assignor to Walker Manufacturing Company, Burlington, Vt.						
Horseshoe-calk sharpener	508,903	Nov. 14	1505	368	65	1052
Gold, Edward E., New York, N. Y. Steam-radiator	496,117	Apr. 25	2536	640	63	518
Gold, Edward E., New York, N. Y. Valve for steam-pipes of railway-cars	498,545	May 30	3494	864 865	63	1306
Gold, Edward E., New York, N. Y. Thermostatic steam-trap	507,268	Oct. 24	2512	619 620	65	508
Gold, Edward E., New York, N. Y. Steam-heating system for railway-cars	508,132	Nov. 7	251	63	65	803
Gold, Edward E., New York, N. Y. Pressure-regulator	508,133	Nov. 7	255	63	65	805
Gold, Edward E., New York, N. Y. Steam-radiator	508,134	Nov. 7	258	64	65	806
Gold, Edward E., New York, N. Y. Pressure-regulator	508,135	Nov. 7	261	64	65	806
Gold, Edward E., New York, N. Y. Trap for car-heating systems	508,569	Nov. 14	975	240	65	955
Gold, Egbert H., Chicago, Ill. Valve	491,166	Feb. 7	173	44	62	781
Gold, Egbert H., Chicago, Ill. Steam-trap	492,495	Feb. 28	2295	570	62	1253
Gold, Egbert H., Chicago, Ill. Car-heating system and apparatus	502,513	Nov. 14	883	218	65	937
Gold, Egbert H., Chicago, Ill. Car-heater	508,514	Nov. 14	886	218	65	938
Gold, Joseph S., Columbus, Ohio. Telephone-tablet and arm-rest	506,223	Oct. 10	729	152	65	149
Gold, Samuel F., Englewood, N. J. Valve	501,713	July 18	1832	468	64	373
Goldberg, David. (See Hawes, Richard J., assignor.)						
Goldberg, Julius. (See Abell, Bernard M., assignor.)						
Goldenberg, Benedickt, Sr., Madison, Wis. Press for removable lids or followers for re-						
ceptacles, &c	508,304	Nov. 7	533	131	65	856
Golding, William, New Orleans, La. Evaporating apparatus	489,147	Jan. 3	254	70	62	59
Golding, William, assignor to C. Macintosh & Co., Limited, Manchester, England. Rub-						
ber tire	493,160	Mar. 7	604	151 152	62	1473
Goldkind, Tezak, M. and L. Stirn, assignors to L. Stirn and H. Somborn, New York, N. Y.						
Combined switch and cut-out for electroliers	507,803	Oct. 31	3429	842	65	696

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Goldkind, Isaac, assignor to L. Sturn and J. Somborn, New York, N. Y. Incandescent-electric-lamp socket. (Reissue)	11,341	May 23	2946	733	63	1193
Goldman, Edward, assignor of one-half to I. Lowenthal, Baltimore, Md. Mitered stair-pad	499,728	June 20	1635	394	63	1704
Goldman, Henry, Chicago, Ill. File-fastening	507,899	Oct. 31	3579	8-2	65	722
Goldman, Isaac S., assignor to I. P. Doolittle, Los Angeles, Cal. Hose-band	499,985	June 20	2056	498	63	1777
Goldman, Jacob J., St. Louis, Mo. Device for detaching buttons	496,407	May 2	27		63	624
Goldmann, Felix, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany, Pharmaceutical compound	509,617	Nov. 23	2750		65	1320
Goldschmidt, Emil, Baireuth, Germany. Lengths-dividing scale	495,219	Apr. 11	1119	280	63	226
Goldsmith, Albert, Salem, Mass. Lamp-filling device	502,622	Aug. 1	626	150	64	681
Goldsmith, Albert, Salem, and E. C. Goldsmith, Springfield, Mass. Track-sanding device	500,882	July 4	553	143	64	101
Goldsmith, Byron B., New York, N. Y. Producing nitro-cellulose or celluloid surfaces	490,195	Jan. 17	1916		62	422
Goldsmith, Byron B., New York, N. Y. Lead-pencil	500,061	June 20	2179	531	63	1799
Goldsmith, Byron B., New York, N. Y. Ornamental varnishing	506,394	Oct. 10	1033		65	209
Goldsmith, Edward C. (See Goldsmith, Albert and E. C.)						
Goldsmith, Ferdinand, assignor of one-half to T. Du Bois, Saginaw, Mich. Combination seesaw and merry-go-round	501,005	July 4	740	194	64	135
Goldsmith, Gustavus A., New York, and A. K. Merrill, Brooklyn, N. Y.; said Merrill assignor to said Goldsmith. Machine for making pyroxyline collars	505,399	Sept. 19	1790	463	64	1633
Goldsmith, Jacob M., Chicago, Ill. Gas-generating apparatus	489,737	Jan. 10	1154	299 300 301	62	254
Goldsmith, Leopold. (See Miller, Peter J., assignor.)						
Goldsmith, William H., Berkeley, R. I. Sweeper	501,247	July 11	1136	228	64	222
Goldstein, David, Milwaukee, Wis. Display-rack	499,881	June 20	1909	464	63	1751
Goldstein, Edward M., et al. (See Tiner, John F., assignor.)						
Goldstein, Jacob, assignor to H. Shapiro, New York, N. Y. Oil-stove	497,276	May 9	1410	357	63	890
Goldstein, Jacob D., New York, N. Y. Oil or kerosene stove	490,196	Jan. 17	1919	499	62	422
Goldstein, Philip, Newark, N. J. Apparatus for pointing and punching shoe-laces. (Reissue)	11,385	Nov. 14	1507	368	65	1052
Goldthwait, Abel G. (See Wiles and Goldthwait.)						
Goldthwait, Charles, Weymouth, Mass. Shoe-lace	492,793	Mar. 7	34	8	62	1366
Golfin, John H., et al. (See Smith, Jacob C., assignor.)						
Goll, Edward. (See Vatsky, Carl, assignor.)						
Goller, Charles F., Maquoketa, Iowa. Cash-drawer and record-sheet holder	495,671	Apr. 13	1849	463	63	376
Goloseieff, Michael A., New York, N. Y. Fertilizer	500,100	June 20	2234		63	1808
Goltra, Edward F., and M. B. Schaffer, St. Louis, Mo. Car-truck bolster	504,029	Aug. 29	2944	736	64	1168
Goltra, Edward F., and M. B. Schaffer, St. Louis, Mo. Car-truck bolster	504,267	Aug. 29	3332	833	64	1242
Goltstein, Ewald. (See Guilleaume and Goltstein.)						
Gonder, Philip, Canton, Ohio. Brick-kiln	509,890	Dec. 5	73	18, 19	65	1424
Gong, Wong I., New York, N. Y. Journal-box	508,217	Nov. 7	393	96	65	831
Gong, Wong I., New York, N. Y. Crank-handle	508,218	Nov. 7	395	96	65	832
Gong, Wong I., New York, N. Y. Clothes-wringer	510,171	Dec. 5	551	128	65	1514
Gonne, William H., Chatham, Canada. Knob attachment	510,968	Dec. 19	1972	484	65	1203
Gooch, Elmer E. (See Gooch, George W. and E. E.)						
Gooch, George W. and E. E., Avon, Iowa. Land-marker	492,006	Feb. 21	1512	378	62	1081
Good, David H., Canada, Kans. Sling for holding corn-shocks, hay, &c.	503,043	Aug. 8	1348	333	64	829
Good, Francis H., Philadelphia, Pa. Carpet-cleaner	499,986	June 20	2057	498	63	1777
Good, G. W., et al. (See Kepler, Bertho M., assignor.)						
Good, John, Far Rockaway, N. Y., assignor to John Good Cordage and Machine Company, Jersey City, N. J., and New York, N. Y. Machinery for spreading and drawing fibrous materials	497,237	May 9	1343	342	63	879
Good, John, Far Rockaway, N. Y., assignor to John Good Cordage and Machine Company, Jersey City, N. J., and New York, N. Y. Mechanism for spreading and drawing hemp or other fibrous materials	497,238	May 9	1344	342	63	880
Good, John, Far Rockaway, assignor to John Good Cordage and Machine Company, New York, N. Y., and Jersey City, N. J. Flier for spinning	500,062	June 20	2181	531	63	1799
Good, Robert, Poughkeepsie, N. Y. Jar or bottle receiver	508,697	Nov. 14	1164	287	65	992
Good, William E., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Blowing-engine	490,109	Jan. 17	1775	462	62	395
Good, William E., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Shaft-bearing	506,848	Oct. 17	1783	448	65	363
Good, William E., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Pump	507,537	Oct. 31	2974	729	65	610
Good, William E., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Pump	507,582	Oct. 31	3065	750 751	65	626
Good, William E., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Blowing-engine	511,013	Dec. 19	2041	505	65	1815
Good, William E., and G. B. Petsche, assignors to Southwark Foundry and Machine Company, Philadelphia, Pa. Valve-gear	498,783	June 6	50	11	63	1397
Goodale, Alfred M., et al., trustees. (See Goodale, Stephen L., assignor.)						
Goodale, Stephen L., Saco, Me., assignor to A. M. Goodale, Waltham, Mass., and M. W. A. Spring, Portland, Me., trustees. Treating hydrated phosphates of alumina	493,889	Mar. 21	1794		62	1739
Goodall, Dennis F., Toronto, Iowa. Shutter and slat operator	504,575	Sept. 5	434	110	64	1350
Goode, Francis P. and I. Frederick, Md. Can-capping machine	501,334	July 11	1277	321	64	245
Goode, Ignatius. (See Goode, Francis P. and I.)						
Goodell, Henry C., Atchison, Kans. Refrigerator-car	496,154	Apr. 25	2591	651 652	63	523
Goodell, Jerome W. (See Harding, Thomas G., assignor.)						
Goodenberger, John, and L. Akins, Akron, Ohio. Cash-box	506,997	Oct. 17	2032	499	65	408
Goodenough, Franklin L., Windsor, N. Y. Carpet-beater	499,987	June 20	2059	499	63	1778
Goodenough, Franklin L., Windsor, N. Y. Carpet-beater	499,988	June 20	2059	499	63	1778
Goodfellow, Frank, Vienna Cross Roads, Ohio. Tile-machine	490,110	Jan. 17	1777	463	62	395
Goodfellow, Frank, Springfield, Ohio. Feed-water heater and purifier	491,547	Feb. 14	796	202	62	922
Goodfellow, James, Brooklyn, N. Y. Emergency-brake for cars	493,705	Mar. 21	1496	323	62	1681
Goodfellow, James, New York, N. Y. Switch-mover	509,370	Nov. 28	2306	558	65	1234
Goodfellow, James, and H. A. Newell, New York, N. Y.; said Newell assignor to said Goodfellow. Street-car-track scraper	495,968	Apr. 25	2307	583	63	474
Goodfellow, John H., Troy, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus	493,621	Mar. 14	1366	347	62	1640
Goodfellow, John H., Troy, N. Y., assignor to Lamson Consolidated Store Service Company, Boston, Mass. Store-service apparatus	505,458	Sept. 26	1887	487	64	1665
Goodfellow, John H., Lansingburg, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus	502,293	Aug. 1	61	14	64	577

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Goodhue, Henry M., Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Last- ing-machine	488,998	Jan. 3	33	9,10	62	9
Gooding, Charles S., Brookline, Mass. Button	495,220	Apr. 11	1121	280	63	226
Gooding, Charles S., Brookline, assignor to Seaver Sewing Machine Company, Boston, Mass. Sewing-machine	489,945	Jan. 17	1500	{ 391 392 }	62	339
Gooding, George E., <i>et al.</i> (See Harper, Fred D., assignor.)						
Goodliffe, Walter, Cambridge, England. Bedstead	503,382	Nov. 7	661	162	65	880
Goodline, George, assignor to B. Eastwood, Paterson, N. J. Shuttle-box-operating mech- anism for looms	498,260	May 30	3016	{ 751 752 }	63	1221
Goodman, Edward H. (See Stupakoff, Simon H., assignor.)						
Goodman, Edward H., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Connector for track-circuits	502,929	July 25	2711	684	64	541
Goodman, Isaac. (See Parke and Goodman.)						
Goodman, John, <i>et al.</i> (See Cameron, Joseph, assignor.)						
Goodman, John, Leeds, England. Planimeter	496,562	May 2	270	72	63	668
Goodman, John, Leeds, England. Planimeter	500,202	June 27	2441	596	63	1856
Goodman, Joseph, Pittsburg, Pa. Glass-batch mixer	490,346	Jan. 24	2188	569	62	489
Goodnow, Walter H., assignor to Gendron Iron Wheel Company, Toledo, Ohio. Cushion	509,729	Nov. 28	2924	707	65	1351
Goodrich, Abram. (See Hubbard and Goodrich.)						
Goodrich, Charles E., assignor of one-half to T. J. Osborne, Pioche, Nev. Curtain-fixture	509,078	Nov. 21	1798	442	65	1126
Goodrich, Charles E., assignor of one-half to T. J. Osborne, Pioche, Nev. Curtain-fixture	509,161	Nov. 21	1933	473	65	1153
Goodrich, Charles F., Chicago, Ill., assignor to J. G. Thompson, Milwaukee, Wis. Com- mutator-brush holder	489,185	Jan. 3	311	86	62	71
Goodrich, Edward P., Ypsilanti, Mich. Lamp-extinguisher	496,646	May 2	406	110	63	693
Goodrich Hard Rubber Company. (See Pellinger, George, assignor.)						
Goodrich, John C. (See Carty, Robert F., assignor.)						
Goodridge, Frederick A., St. Louis, Mo. Thread-cabinet	498,784	June 6	52	11	63	1398
Goodridge, William M., Highland Park, assignor to Western Electric Company, Chicago, Ill. Listening and ringing key for telephone-switchboards	493,704	Mar. 21	1495	383	62	1681
Goodridge, William M., Highland Park, assignor to Western Electric Company, Chicago, Ill. Thermal cut-out	504,344	Sept. 5	49	14	64	1280
Goodridge, William M., Highland Park, assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard apparatus	504,345	Sept. 5	49	14	64	1280
Goodson, John W., <i>et al.</i> (See Jasnowski, Philip, assignor.)						
Goodwin, Alvin K., New York, N. Y. Ladder apparatus	509,598	Nov. 28	2716	{ 657 658 }	65	1313
Goodwin, Asahel J., Brookline, Mass. Invalid-bedstead	501,006	July 4	741	{ 194 195 }	64	135
Goodwin, Frank D., Genoa, Nebr. Churn	508,219	Nov. 7	396	96	65	832
Goodwin, George J., Onawa, and J. Polly, Albaton, Iowa. Fence-post	497,872	May 23	2404	599	63	1098
Goodwin, Hannibal, Newark, N. J. Preparing plates for the purpose of utility and orna- ment	509,124	Nov. 21	1879	460	65	1142
Goodwin, Hiram, Kankakee, Ill. Car-brake	496,086	Apr. 25	2493	629	63	509
Goodwin, John H. (See Brunner and Goodwin.)						
Goodwin, Mary E., and S. H. Lewis, Jamaica Plain, Mass. Clasp for holding envelopes, paper, &c	504,213	Aug. 29	3248	810	64	1226
Goodwin, Otis F., Sparks, Ga. Roller cotton-gin	497,652	May 16	2043	509	63	1018
Goodwin, Otis F., Adel, Ga. Smoke, dust, or cinder guard for use on railway-trains	498,166	May 23	2844	711	63	1176
Goodwin, Terence J., Syracuse, N. Y. Pattern for drafting shirt-backs	501,335	July 11	1279	322	64	245
Goodwin, Terence J., Syracuse, N. Y. Pattern for drafting shirt-yokes	501,336	July 11	1283	322	64	246
Goodwin, Terence J., Syracuse, N. Y. Pattern for drafting shirt-sleeves	501,337	July 11	1287	322	64	247
Goodwin, Terence J., Syracuse, N. Y. Pattern for drafting shirt-fronts	501,338	July 11	1291	323	64	248
Goodwin, Terence J., Syracuse, N. Y. Pattern for drafting shirt-bosoms	501,339	July 11	1295	323	64	249
Goodwin, Wendell. (See Sheehy, Robert J., assignor.)						
Goodwyn, George W., assignor of one-third to B. Mann, Petersburg, Va. Coffee or tea pot	491,478	Feb. 7	685	172	62	880
Goodyear, Albert, New Haven, Conn. Grain-binder	496,647	May 2	407	{ 110 111 }	63	693
Goodyear, Charles, Jr., New York, N. Y. Lime-jet and hood for magic lanterns	494,853	Apr. 4	523	133	63	103
Goodyear, Charles, Jr., New York, N. Y. Magic lantern	494,854	Apr. 4	529	133	63	103
Goodyear, Charles, Jr., New York, N. Y. Magic-lantern lens	494,855	Apr. 4	532	134	63	103
Goodyear, George C., Flint, Mich. Furniture-fastener	501,564	July 18	1639	410	64	331
Goodyear, George C., Flint, Mich. Furniture-leg fastening	509,618	Nov. 28	2751	663	65	1320
Goodyear Shoe Machinery Company. (See Briggs and Dancel, assignors.)						
Goodyear Shoe Machinery Company. (See Cole, Horatio E., assignor.)						
Goodyear Shoe Machinery Company. (See Doucet, Felix, assignor.)						
Goodyear Shoe Machinery Company of Canada. (See Freese, Francis J., assignor.)						
Goong, Martin B., Selma, Ala. Cultivator	510,969	Dec. 19	1973	484	65	1804
Goong, Martin B., Bastrop, assignor of one-half to S. H. Puckett, Locharbor, La. Cultivator	490,765	Jan. 31	2866	735	62	635
Gould, Cassius M. (See Tinsman and Gould.)						
Gould, Frederick D., <i>et al.</i> (See Callender, Romaine, assignor.)						
Gould, Frederick D., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Loop-switch	489,674	Jan. 10	1053	274	62	235
Gould, Frederick D., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Electric-arc lamp	491,548	Feb. 14	798	202	62	922
Gould, Frederick D., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Pole-standard for arc lamps	492,008	Feb. 21	1515	378	62	1081
Gould, Frederick D., assignor of one-half to J. Hutchinson, New York, N. Y. Apparatus for distributing mail	490,607	Jan. 24	2581	{ 665 666 }	62	565
Gould, Frederick D., assignor to Edison General Electric Company, New York, N. Y. Electric-arc lamp	498,387	May 30	3233	804	63	1259
Goolden, Walter T., and L. B. Atkinson, London, England. Dynamo-electric machine and motor	489,302	Jan. 3	490	136	62	107
Goolden, Walter T., and L. B. Atkinson, London, England. Electric generator or motor	494,856	Apr. 4	533	134	63	103
Gorden, Eugene M. (See Holden, Cummings M., assignor.)						
Gordon, Alphas M. (See Gordon, Edward C. and A. M.)						
Gordon, Amherst P., San Francisco, Cal. Propeller	508,383	Nov. 7	662	162	65	880
Gordon, Angus C., Rochester, N. Y. Railway time-signal	493,083	Mar. 7	483	121	62	1455
Gordon, Angus C., Rochester, N. Y. Railway time-signal	507,492	Oct. 24	2876	705	65	579
Gordon, David E. (See Berry, William O., assignor.)						
Gordon, Edward C. and A. M., Chetopa, Kans. Hedge-trimmer	498,713	May 30	3791	935	63	1356
Gordon, Edward F., Concord, assignor to Somersworth Machine Co., Dover, N. H. Buzz- planer	499,290	June 13	898	217	63	1561

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Gordon, Elonso J., Greenville, Mich. Blast-pipe for furnace-grates.	491,549	Feb. 14	800	203	62	923
Gordon, Elonso J., Greenville, Mich. Grate	501,064	July 11	836	217	64	168
Gordon, Hamilton S. (See Converse, Frank B., assignor.)						
Gordon, Henry D., Altoona, Pa. Wheel-press	504,030	Aug. 29	2945	736	64	1168
Gordon, Hiram W., Lynn, Mass. Leather-marker	504,031	Aug. 29	2947	737	64	1169
Gordon Hotels. (See Pilbeam, George, assignor.)	509,576	Nov. 28	2685	650	65	1307
Gordon, Isaac N., Bellefonte, Pa. Heating system	499,339	June 13	982	238	63	1575
Gordon, Reuel F., and G. T. Davis, Auburn, Me. Boot or shoe creaser	489,630	Jan. 10	998	260	62	223
Gordon, Thomas W. (See Williams, Alfred, assignor.)						
Gordon, William, Boston, assignor to O. A. Miller, Brockton, Mass. Last	500,711	July 4	287	78	64	53
Gordon, William B., Cold Spring, assignor of one-half to T. R. Morgan, Sr., Alliance, Ohio. Operating ordnance	497,977	May 23	2563	639	63	1126
Gore, Harry W., Washington, D. C. Coin-controlled apparatus for vending liquids	502,561	Aug. 1	524	125	64	663
Gore, James H., Washington, D. C. Parliamentary index	509,891	Dec. 5	76	19	65	1424
Gore, Mahlon, et al. (See Gilham, Robert J., assignor.)						
Goreham, Herbert A., Decatur, Ill. Conduit railway-trolley	508,104	Nov. 7	205	54	65	797
Gorely, Charles P. (See Wiswell, Jacob C., assignor.)						
Gorges, Johannes H. F., assignor to Siemens & Halske, Berlin, Germany. Electrical measuring-instrument	489,249	Jan. 3	418	116	62	93
Gorges, Johannes H. F., assignor to Siemens & Halske, Berlin, Germany. Rotary-current motor	510,534	Dec. 12	1175	283	65	1645
Gorie, Theodore, et al. (See Newell, Frank A., assignor.)						
Görlitz, Gustav, Kitzingen, Germany. Gas-lighting apparatus	501,565	July 18	1640	410	64	331
Gorman, J. Anthony, Memphis, Mo. Portable room for use in symbolic exercises	494,857	Apr. 4	534	134	63	104
Gorman, Thomas. (See Dunn, Dennis, assignor.)						
Gormley, Harry V., Norfolk, Va. Wrench	502,514	Aug. 1	448	108	64	649
Gormley, Thomas. (See McMillan and Gormley.)						
Gormly, Robert W., Troy, N. Y. Barr-wheel	491,345	Feb. 7	472	121	62	898
Gormly, Robert W., Troy, N. Y. Needle-cylinder for circular-knitting machines	499,382	June 13	1065	259	63	1591
Gorringe, Charles R., London, England. Strainer and sieve	490,786	Jan. 31	2902	745	62	642
Gorringe, Charles R., London, England. Automatic weighing-machine	499,223	June 13	797	189	63	1543
Gorrow, Lewis P., Downingtown, Mich. Vehicle-pole tip	490,805	Jan. 31	2928	752	62	647
Gortner, George, et al. (See Bagley, Alonzo E., assignor.)						
Gorton, George, Racine, Wis. Basket	496,197	Apr. 25	2651	666	63	539
Gorton, James, New York, N. Y. Gas-stove	506,174	Oct. 3	609	156	65	118
Gose, Jones, Kinderhook, Ill. Tack-hammer	507,317	Oct. 24	2606	641	65	526
Gose, Jones, Kinderhook, Ill. Mouth-harp support	507,318	Oct. 24	2606	641	65	527
Gosling, Henry J., assignor to G. and H. Barnett, Philadelphia, Pa. Rolling-mill	503,134	Aug. 15	1507	370	64	871
Gosney, John, Wilmington, Del., assignor to J. A. Brill, Philadelphia, Pa. Equalizing device for cars	500,573	July 4	55	16	64	11
Goss, Charles E. (See Goss, George W. and C. E.)						
Goss, George F., Wallacetown, Pa. Pool-table rack and tally	507,900	Oct. 31	3580	883	65	723
Goss, George W. and C. E., Kirkersville, Ohio. Hedge-trimming machine	508,936	Nov. 21	1569	384	65	1082
Goss, Orrin L., Grand Rapids, Mich. Potato-digger	504,128	Aug. 29	3099	776	64	1198
Goss Printing Press Company. (See Goss, Samuel G., assignor.)						
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Delivery apparatus for printing-presses	495,481	Apr. 18	1546	388	63	324
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Apparatus for folding sheets	495,482	Apr. 18	1548	389	63	324
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Delivery apparatus for printing-presses	495,483	Apr. 18	1550	389	63	325
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Apparatus for delivering sheets	504,874	Sept. 12	930	239	64	1460
Gothberg, Ernest, Jersey City, N. J. Canopy for light-fixtures	505,459	Sept. 26	1888	487	64	1665
Gott, Clara T., Seattle, Wash. Egg-poacher	495,796	Apr. 18	2048	518	63	411
Gott, Clarence P., assignor to himself and J. C. Hays, New York, N. Y. Registering-turn-stile	492,353	Feb. 21	2052	512	62	1191
Gott, Clarence P., Bayonne, N. J., assignor to himself, and J. S. Page, New York, N. Y. Turnstile	503,698	Aug. 22	2428	604	64	1052
Göttl, Gustav. (See Ferrand and Göttl.)						
Gottschalk, Hermann. (See Küstermann and Gottschalk.)						
Gottwals, William O., Ottawa, Canada. Letter or bill file	493,024	Mar. 7	400	100	62	1437
Götz, Carl. (See Klieber, Josef, assignor.)						
Gough, John B., Providence, R. I. Street-railway switch	497,569	May 16	1918	483	63	995
Gould, Aaron P., Canton, Ohio. Dental chair	489,675	Jan. 10	1054	274	62	235
Gould, Aaron P., Canton, Ohio. Dental chair	491,097	Feb. 7	51	14, 15	62	758
Gould, Aaron P., Canton, Ohio. Dental chair	491,098	Feb. 7	53	15, 16	62	759
Gould, Aaron P., Canton, Ohio. Dental engine	491,099	Feb. 7	56	16	62	759
Gould, Aaron P., Canton, Ohio. Dental chair	493,370	Mar. 14	959	247	62	1563
Gould, Aaron P., Canton, Ohio. Dust-collector	502,883	Aug. 8	1079	266	64	780
Gould, Aaron P., Canton, Ohio. Attachment for operating elevator-gates	510,475	Dec. 12	1050	251	65	1623
Gould, Aaron P., Canton, Ohio. Device for operating elevator-gates	495,032	Dec. 12	1051	252	65	1623
Gould, Charles A., Bay Side, N. Y. Car-coupling	506,908	Oct. 17	1882	469	63	166
Gould, Charles L., Chicago, Ill. Method of operating steam-shovels and disposing of excavated material and apparatus for carrying out such method				470	65	381
Gould, Clement. (See West, William F., assignor.)						
Gould Coupler Company. (See Richards, Willard F., assignor.)						
Gould Coupler Company. (See Wallace, Martin E., assignor.)						
Gould, Earl E., Belvidere, Ill. Ice-velocipede	508,011	Nov. 7	51	15	65	767
Gould, Edward J., Cedar Home, Wash. Device for gaging saw-teeth	506,998	Oct. 17	2023	500	65	409
Gould, Franklin G., Boston, Mass., and J. K. Firth, San Francisco, Cal. Concentrating-machine	492,007	Feb. 21	1513	378	62	1081
Gould, H. H. (See Palmer, Zenus L., assignor.)						
Gould, Leroy M. (See Piper, Charles E., assignor.)						
Gould, Olin E., Dayton, Iowa. Spring-bed	502,118	July 25	2530	634	64	506
Gould, Oraldus O., Springdale, Mich. Rotary engine	506,999	Oct. 17	2024	500	65	409
Gould, Thomas W., Paterson, N. J. Flour scoop and sifter	490,766	Jan. 31	2867	735	62	635

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Goulden, Samuel. (See Allen and Goulden.)						
Goulden, Samuel, assignor to Hardware Specialty Company, Newark, N. J. Bicycle-bell.	507,804	Oct. 31	3430	842	65	696
Goulden, Samuel, assignor to Hardware Specialty Company, Newark, N. J. Rotary bell-hammer	507,805	Oct. 31	3431	842	65	696
Goulding, Thomas, St. Paul, Minn. Piston	510,910	Dec. 19	1859	457	65	1752
Gould's Son & Co., M. (See Hunter, Orange D., assignor.)						
Goumand, Louis, Buenos Ayres, Argentine Republic. Machine for affixing elastic to boxes	490,386	Jan. 24	2245	584	62	500
Gourand, George E. (See Greenhill, Joseph E., assignor.)						
Gouraud, Pierre. (See Gay, Louis, assignor.)						
Gouyard, Gustave M., Denver, Colo. Concentrating zinc-bearing sulphide ores	495,550	Apr. 18	1653		63	343
Govan, Alexander, Glasgow, Scotland. Mud-guard for velocipedes	500,384	June 27	2728	670 671 691 693	63	1907
Govier, John W., Rankin, near Pittsburg, Pa., assignor, by mesne assignments, to Denver Steel Rolling Mill Company, Denver, Colo. Barb-wire machine	498,110	May 23	2764	692 693	63	1162
Gowans, James A., Toronto, Canada. Street-rail-cleaning brush	498,785	June 6	53	12, 13	63	1398
Goward, John E. E., Boston, Mass. Race-track harrow and leveler	506,491	Oct. 10	1217	303	65	244
Gowdy, James B., Oak Grove, Ill. Fence-post	500,883	July 4	554	114	64	101
Gowen, John E., Paris, France. Leak-stopper for ships	503,079	Aug. 8	1397	345	64	838
Gowland, John, Philipsburg, Pa. Running-gear for mining-cars	492,917	Mar. 7	236	59	62	1405
Gowland, John, Philipsburg, Pa. Running-gear for mining-cars, lumber-trucks, &c.	492,918	Mar. 7	237	59	62	1405
Goyme, Arthur H., et al. (See Goyme, Charles A., assignor.)						
Goyme, Charles A., assignor to himself, F. H., T. R., and A. H. Goyme, Ashland, Pa. Duplex steam-pump	509,659	Nov. 28	2316	679 680	65	1332
Goyme, Francis H., et al. (See Goyme, Charles A., assignor.)						
Goyme, Thomas R., et al. (See Goyme, Charles A., assignor.)						
Graaff, Julius S., and I. M. Harbaugh, Portland, Oreg. Extension-table	492,284	Feb. 21	1942	485	62	1170
Grabau's Aluminium-Werke. (See Ackermann, Wilhelm, assignor.)						
Grabner, Herman S., St. Louis, Mo. Water-gage	489,804	Jan. 10	1257	329	62	276
Grabner, Peter, Pittsburg, assignor of one-half to E. F. Welsh, Wilmerding, Pa. Valve mechanism for fluid-pressure brakes	501,615	July 18	1719	429	64	346
Grabner, William, Mansfield, Ohio. Sliding-door hanger	503,535	Aug. 15	2142	537	64	985
Grace, J. L. (See Hester, Joseph W., assignor.)						
Grader, George W., Marblehead, Mass. Apparatus for purifying milk or cream	498,645	May 30	3660	906	63	1335
Grader, George W., Marblehead, Mass. Apparatus for treating milk or cream and producing butter	498,646	May 30	3665	907	63	1336
Graef, Herman, Albany, N. Y. Grate for stoves, &c.	503,699	Aug. 22	2430	604	64	1053
Graemiger, August and J., Edenfield, near Bury, England. Apparatus for dyeing, &c.	509,431	Nov. 28	2439	587 588	65	1261
Graemiger, Joseph. (See Graemiger, August and J.)						
Graf, Henry J., East St. Louis, Ill. Flask	510,172	Dec. 5	552	128	65	1514
Graf, Jacob, New York, N. Y. Fabric-holding frame for embroidering-machines	490,111	Jan. 17	1779	463	62	396
Graf-Link, Christian, Romanshorn, Switzerland. Casing or trough for grindstones	492,647	May 30	3669	907	63	1336
Graf, Robert R., Baltimore, Md., assignor to Phoenix Fire Proof Paint Company, New York, N. Y. Fireproof paint	494,508	Mar. 28	2826		62	1946
Graftin, George W., Jr., Baltimore, Md. Nut-lock	490,553	Jan. 24	2505	645	62	550
Graftin, George W., Jr., Baltimore, Md. Nut-lock	490,557	Jan. 24	2508	646	62	551
Grafton, William S. (See Glass and Grafton.)						
Grafton, William S., Steubenville, Ohio, assignor to Wheeling Corrugating Company, Wheeling, W. Va. Metallic molding	502,357	Aug. 1	181	42, 43	64	599
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Metallic finishing-plate	496,478	May 2	134	37, 38	63	643
Grafunder, Ernst H., Horicon, Wis. Broadcast seeder	491,167	Feb. 7	174	44, 45	62	781
Grafunder, Ernst H., Horicon, Wis. Grain-drill	492,009	Feb. 21	1516	379	62	1082
Graham, Arthur N. (See Tracy and Graham.)						
Graham, Clarence V. (See Griswold, John B., assignor.)						
Graham, Edmund H., Biddeford, Me., assignor of one-half to L. Woodbury, Washington, D. C. Positive shuttle-motion for looms	503,956	Aug. 29	2829	706	64	1148
Graham, Francis, et al. (See Wiley, George, assignor.)						
Graham, Frank, and I. E. Curtis, Easton, Wash. Convertible stool	499,104	June 6	611	147	63	1497
Graham, Frank B., and J. H. Knapp, Westphalia, Kans. Hay-press attachment	490,072	Jan. 17	1716	447	62	382
Graham, Fred A., and A. R. Griffin, Mishawaka, Ind. Plow	511,135	Dec. 19	2241	550	65	1854
Graham, George C. B., Memphis, Tenn. Perforating attachment for printing-presses	492,794	Mar. 7	35	8	62	1366
Graham, George H., Ridgeland, Ill. Rotary engine	494,138	Mar. 28	2235	569 570 573	62	1836
Graham, George H., Oak Park, Ill. Car-truck	496,933	May 9	891	233 234	63	798
Graham, George M., Chicago, Ill. Drawing or plotting board	493,766	Mar. 21	1608	408	62	1703
Graham, George M., Chicago, Ill. Sectional mold for building or paving blocks	493,767	Mar. 21	1609	409	62	1703
Graham, Harry, assignor to S. Graham, New York, N. Y. Hanger for laying fireproof floors	495,672	Apr. 18	1852	464	63	376
Graham, James A., and E. J. Birkett, assignors to Milwaukee Harvester Company, Milwaukee, Wis. Grain-binder	503,662	Aug. 22	2369	591 592	64	1041
Graham, James P. (See Gibbs, William H., assignor.)						
Graham, James S., assignor to James S. Graham & Company, Rochester, N. Y. Planing-machine	508,516	Nov. 14	889	219	65	938
Graham, James S., and J. Kane, assignors to J. S. Graham & Company, Rochester, N. Y. Resawing-machine	508,515	Nov. 14	887	219	65	938
Graham, James W., Old Fort, N. C. Facing buildings	507,430	Oct. 24	2785	682	65	561
Graham, John, Wilmerding, Pa. Coupling for air-brakes	498,705	May 30	3773	931	63	1354
Graham, John H., Kansas City, Mo. Self-operating weather-strip	501,503	July 18	1540	388	64	311
Graham, John H., Boston, Mass., assignor to Consolidated Railway Supply Company, Boston, Mass., and Providence, R. I. Car-truck	503,044	Aug. 8	1349	333	64	829
Graham, Samuel, Lebeck, Mo. Wire-stretching device	510,477	Dec. 12	1052	252	65	1624
Graham, Robert O., and F. C. Smith, Bloomington, Iowa. Oil-pump	497,653	May 16	2045	510	63	1018
Graham, Robert S., and W. B. Savell, San Francisco, Cal. Key-cushion for type-writing machines	504,065	Aug. 29	2996	748	64	1178
Graham, Samuel J., et al. (See Curry, James H., assignor.)						
Graham, Sarah. (See Graham, Harry, assignor.)						
Graham, Simon P., Detroit, Mich. Lawn-mower	503,792	Aug. 22	2573	640	64	1082
Graham, Thomas W., Dubuque, Iowa. Elevator-gate-operating device	499,357	June 13	1028	248 249	63	1584
Graham, Warren D., et al. (See Ridout, Moses T. and E. M., assignors.)						
Graham, William, assignor of one-half to W. F. Ashbaugh, Hamilton, Canada. Mop-wringer	503,663	Aug. 22	2372	592	64	1042

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Graham, William J., Waltham, Mass. Closing device for cans or jars	488,999	Jan. 3	35	10	62	9
Grahl, Carl B. and H. H., Council Bluffs, Iowa. Sheet-metal roofing	508,105	Nov. 7	206	53	65	797
Grahl, Harry H. (See Grahl, Carl B. and H. H.)						
Grambs, Charles H., Dalton, assignor of one-third to H. Frey, Scranton, Pa. Car-brake ..	498,167	May 23	2844	711	63	1176
Gramer, Joseph. (See Kimball and Gramer.)						
Grandpré, Louis, Woonsocket, R. I. Pulley-block	497,654	May 16	2046	510	63	1018
Granger, James B., Franklin, N. Y. Car-coupling	492,328	Feb. 21	2009	500	62	1183
Granger, John W., Philadelphia, Pa. Hair-pin	497,049	May 9	1057	271	63	827
Granger, John W., assignor of one-half to Richardson & De Long Brothers, Philadelphia, Pa. Machine for carding hooks and eyes	491,221	Feb. 7	349	88	62	815
Granger, John W., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Machine for manufacturing hooks and eyes	491,282	Feb. 7	353	89	62	816
Granger, Lorenzo O., San Francisco, Cal. Trousers-stretcher	491,062	Jan. 31	3351	855	62	732
Granger, William S., Providence, R. I. Device for singeing cloth	506,395	Oct. 10	1035	258	65	209
Grannis, William P., Wolcottville, Ind. Mowing-machine	503,957	Aug. 29	2830	707	64	1148
Grant, Alexander. (See Meyer, Kiehl, and Grant.)						
Grant Anti Friction Ball Company. (See Grant, Robert H., assignor.)						
Grant, Arthur L. and C. G. Richardson; said Grant assignor to A. B. English, Toronto, Canada. Treating ores containing nickel	490,847	Jan. 31	2987		62	660
Grant, Arthur W., assignor of two-thirds to B. McGrew and J. W. Stafford, Springfield, Ohio. Vehicle-wheel	497,784	May 23	2259	567	63	1073
Grant, Cyrus, Pottstown, Pa. Washing-machine	498,786	June 6	56	13	63	1399
Grant, David A., Raleigh, Canada. Land-roller	510,785	Dec. 12	1600	399	65	1724
Grant, Duncan E., assignor of one-third to A. Ritchie, Quebec, Canada. Breech-loading gun ..	490,650	Jan. 31	2679	691	62	599
Grant, Duncan E., assignor of one-third to A. Ritchie, Quebec, Canada. Breech-loading gun ..	494,330	Mar. 28	2540	641	62	1893
Grant, Emmett C., Farmer, N. Y. Hammock-hook	508,698	Nov. 14	1165	287	65	993
Grant, George, London, England. Smoker's combination-case	496,973	May 9	944	248	63	807
Grant, James W., Orono, Me. Hose-valve	509,371	Nov. 28	2307	558	65	1234
Grant, John, Windsor, Canada. Last-support	493,765	Mar. 21	1607	408	62	1703
Grant, John, Chicago, Ill. Machine for making beam-hangers	494,102	Mar. 21	2164	552	62	1808
Grant, John, Springfield, Ohio. Work-rest	511,201	Dec. 19	2346	574	65	1873
Grant, John, assignor to himself and D. O. James, Chicago, Ill. Machine for making beam-hangers ..	506,197	Oct. 3	653	166	65	126
Grant, Jott. (See Pottle, George F., assignor.)				167		
Grant, Lawrence, and N. C. Heston, Chicago, Ill. Mortising-machine	504,722	Sept. 12	668	170	64	1408
Grant, Maurice. (See Kohler, Edward, assignor.)						
Grant, Oscar F. (See Stifel, Torrance, and Grant.)						
Grant, Robert H., assignor to Grant Anti Friction Ball Company, Fitchburg, Mass. Measuring-machine ..	504,107	Aug. 29	3071	769	64	1193
Grant, Schuyler. (See Terry, Eugene, assignor.)						
Grant, Sidney A., Springfield, Mass. Velocipede	509,079	Nov. 21	1200	443	65	1127
Grant, William, Philadelphia, Pa. Metal bar to be calked	500,884	July 4	556	144	64	101
Grant, William H., Brooklyn, N. Y. Butter-cutting apparatus	497,319	May 16	1520	383	63	924
Grant, William W., Brooklyn, N. Y. Gas-engine	497,239	May 9	1346	343	63	880
Grant, William W., Brooklyn, N. Y. Safety-reservoir and compensator for supplying liquid hydrocarbon to gas-engines	511,694	Dec. 26	3171	775	65	2037
Grantland, John W., Philadelphia, Pa., assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic shutter	496,356	Apr. 25	2927	731	63	592
Grantland, John W., assignor to G. L. Parker, Philadelphia, Pa. Conduit railway-conductor ..	507,806	Oct. 31	3432	843	65	696
Granville, Bernard, Dayton, Ohio. Type-writing machine	496,304	Apr. 25	2823	706	63	572
Graphite Lubricating Company. (See Bache, William H., assignor.)				707		
Grass, Josiah, and C. E. Hardie, Lassen county, Cal. Mechanical motor	503,593	Aug. 22	2255	565	64	1021
Grasselli Chemical Company. (See Bragg, Everett B., assignor.)						
Grasset, Isaac, Geneva, Switzerland. Device for polishing precious stones	494,715	Apr. 4	297	75	63	60
Grasset, Isaac, and A. Meylan, Geneva, Switzerland. Watch-winding device	502,884	Aug. 8	1080	266	64	780
Gratias, Simeon D., assignor to Fay Gas Fixture Company, St. Louis, Mo. Insulating device for preventing electric currents in pipes	500,488	June 27	2877	708	63	1933
Gratiot, Henry R., Gratiot, Wis. Power-converting machine	507,583	Oct. 31	3069	751	65	627
Grattan, Christopher, Stockton, Cal. Brake for harvesters	490,197	Jan. 17	1920	499	62	423
Grattan, Christopher, assignor to Stockton Combined Harvester and Agricultural Works, Stockton, Cal. Traveling thrasher	497,717	May 16	2147	536	63	1037
Gratz, Benjamin. (See Case, Norton, assignor.)				537		
Grau, William, Philadelphia, Pa. Candle-holder for Christmas-trees	493,161	Mar. 7	607	152	62	1478
Graves, Calvin V. (See Welch, Henry J., assignor.)						
Graves, Cashious M., Eddyville, assignor of one-half to M. P. Molloy, W. M. Bowman, J. L. James, Jr., and J. H. Catlett, Lyon county, and C. W. Matthis, La Rue county, Ky. Car-coupling ..	501,933	July 25	2245	560	64	452
Graves, E. C. (See Crawford, George W., assignor.)						
Graves, George W., New York, N. Y. Gas heating attachment for solid-fuel stoves	495,169	Apr. 11	1050	261	63	212
Graves, James R., Mount Pleasant, Mich. Liquid-vending machine	506,687	Oct. 17	1510	379	65	313
Graves, James S. (See Ritchie, Enoch E., assignor.)						
Graves, John W., Little Rock, assignor to J. K. Jones, Washington, J. Lanigan, executrix of T. Lanigan, deceased, Fort Smith, and P. E. Brugman, Little Rock, Ark. Press for baling cotton ..	510,385	Dec. 5	888	215	65	1578
Graves, John W., assignor to P. E. Brugman, Little Rock, J. K. Jones, Washington, and T. Lanigan, Fort Smith, Ark. Baling-press for cotton, &c.	510,386	Dec. 5	895	215	65	1580
Graves, John W., assignor to P. E. Brugman, Little Rock, J. K. Jones, Washington, and T. Lanigan, Fort Smith, Ark. Baling-press for cotton, &c.	510,387	Dec. 5	899	216	65	1581
Graves, John W., Little Rock, assignor to J. K. Jones, Washington, T. Lanigan, Fort Smith, and P. E. Brugman, Little Rock, Ark. Baling-press for cotton, &c.	510,388	Dec. 5	903	217	65	1582
Graves, Richard H., Grand Rapids, Mich. Stretcher-key	496,223	Apr. 25	2696	676	63	547
Graves, Willis N., St. Louis, Mo. Oil-burner for furnaces	505,355	Sept. 19	1712	442	64	1618
Gray, Albert C., Pittsburg, Pa., assignor to Western Electric Company, Chicago, Ill. Cable-rack	496,381	Apr. 25	2972	741	63	601
Gray, Alexander, London, England. Hydrocarbon-engine	504,723	Sept. 12	669	170	64	1409
Gray, Alexander, London, England. Press for bending printing-plates	507,431	Oct. 24	2766	682	65	562

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Gray, Christian H., Silvertown, England. Pneumatic tire	491,479	Feb. 7	686	172	62	880
Gray, Elisha, Highland Park, Ill. Electro-mechanical movement	491,346	Feb. 7	473	132	62	838
Gray, Elisha, Highland Park, Ill. Telautograph	491,347	Feb. 7	477	133 124	62	839
Gray, Elisha, Highland Park, Ill. Telautograph	494,562	Apr. 4	40	9 10 11	63	9
Gray, Gorham, Boston, assignor to J. Wilder, Atlantic, Mass. Bottle-neck and tool for threading same	509,525	Nov. 28	2606	630	65	1291
Gray, Isaac C., Elion, Ind. Traction-engine	495,182	Apr. 11	1067	265	63	216
Gray, Isaac J., Beloit, Kans. Latch	508,541	Nov. 14	927	227 228	65	945
Gray, James A. (See Murch and Gray.)						
Gray, John, Buffalo, N. Y. Truss	490,558	Jan. 24	2510	646	62	551
Gray, Mattie, Heber, Ark. Stove	509,892	Dec. 5	78	19	65	1424
Gray, Ralph, Anderson, Ind. Device for rolling glass	510,338	Dec. 5	816	198	65	1565
Gray, Richard, Bloomington, Ill. Bridge	489,946	Jan. 17	1503	392 393	62	339
Gray, Samuel. (See Altmann, Arthur, assignor.)						
Gray, William, assignor of one-half to C. Soby, Hartford, Conn. Telephone-toll apparatus	510,535	Dec. 12	1178	2-3	65	1645
Gray, William A., Elizabeth, N. J., assignor to himself, and E. R. De Wolfe, New York, N. Y. Valve for pneumatic tires	490,904	Jan. 31	3098	794	62	681
Gray, William D., Milwaukee, Wis. Middlings-purifier	489,676	Jan. 10	1056	275	62	235
Gray, William D., Milwaukee, Wis., assignor to Edward P. Allis Company, of Wisconsin. Flour-bolt	492,795	Mar. 7	37	9	62	1366
Gray, William D., assignor to Edward P. Allis Company, Milwaukee, Wis. Scalping-machine	497,655	May 16	2047	511 512	63	1018
Gray, William D., assignor to Edward P. Allis Company, Milwaukee, Wis. Middlings-purifier	502,187	July 25	2641	579	64	528
Graydon Dynamite Projectile Cartridge and High Explosive Company. (See Graydon, James W., assignor.)						
Graydon, James W., assignor, by mesne assignments, to Graydon Dynamite Projectile Cartridge and High Explosive Company, Washington, D. C. Submarine torpedo	502,294	Aug. 1	63	14	64	577
Graydon, James W., London, England assignor to W. F. Cody. Signaling apparatus	505,879	Oct. 3	122	31, 32	65	25
Grayson, James H., Graysontown, Va. Vehicle-brake	495,882	Apr. 18	2186	549	63	436
Greathouse, John A. (See Brydson and Greathouse.)						
Greatrex, William. (See Mercer and Greatrex.)						
Greaves, Walter, Ottawa, Canada. Fishing-basket	506,909	Oct. 17	1887	470	65	382
Greibenstein, Charles H., New York, N. Y. Machine for molding confections	504,449	Sept. 5	220	58, 59	64	1311
Greeley, Andrew J., Hillsborough, Wis. Floor-clamp	492,010	Feb. 21	1519	379	62	1082
Green, Alem J. (See Cuthbertson, James W., assignor.)						
Green, Alexander. (See Riker and Green.)						
Green, Alfred, et al. (See Hooper, George W., assignor.)						
Green, Alison T., and J. Wesselowski, Jewell, Kans. Weather-strip	500,885	July 4	557	144	64	101
Green, Arthur G., and T. A. Lawson, assignors to Brooke, Simpson & Spiller, Limited, London, England. Red azo dye	500,761	July 4	368		64	68
Green, Arthur G., and T. A. Lawson, assignors to Brooke, Simpson & Spiller, Limited, London, England. Red azo dye	500,762	July 4	370		64	69
Green, Charles H., Boston, and E. M. Green, Somerville, Mass. Car-fender	506,315	Oct. 10	887	219	65	181
Green, Daniel D., Scofield, Utah Ter. Car-coupling	495,630	Apr. 18	1782	448	63	365
Green, Daniel D., Scofield, Utah Ter. Car replacer and derailer	496,055	Apr. 25	2447	617	63	501
Green, Edgar, Albion, Ind. Type-writing machine	501,651	July 18	1776	442 443	64	355
Green, Edgar M. (See Green, Charles H. and E. M.)						
Green, Edward T., New York, N. Y. Water-cooler	501,007	July 4	743	195	64	135
Green, Erastus. (See Read, Stephen G., assignor.)						
Green, George F., deceased, Kalamazoo, Mich., (M. L. Green, executrix,) assignor of one-half to O. S. Kelly, Springfield, Ohio. Supply system for electric railways	504,977	Sept. 12	1104	282 283	64	1492
Green, George F., deceased, Kalamazoo, Mich., (M. L. Green, executrix,) assignor of one-half to O. S. Kelly, Springfield, Ohio. Trolley	506,492	Oct. 10	1218	304	65	245
Green, George F., deceased, Kalamazoo, Mich., (M. L. Green, executrix, Springfield, Ohio,) assignor of one-half to O. S. Kelly. Conduit for electric railways	507,493	Oct. 24	2878	706	65	579
Green, George W., Joliet, Ill. Bridge-gate	505,707	Sept. 26	2358	596	64	1753
Green, Harvey G. (See Hogg and Green.)						
Green, Harvey S., et al. (See Adams, Charles F., assignor.)						
Green, Henry, Hartford, Conn. Incandescent electric lamp	510,018	Dec. 5	306	68	65	1467
Green, Henry, assignor of one-half to G. S. Miller, Hartford, Conn. Incandescent lamp	495,467	Apr. 11	1524	381	63	301
Green, Henry A., Montrose, Colo. Window-bead fastener	504,820	Sept. 12	1006	260	64	1474
Green, Herman, New York, N. Y. Loop-fastener	502,962	Aug. 8	1226	302	64	806
Green, Ira L., Kittanning, assignor of five-sixths to J. M. Patterson, Sharpsburg, G. M.) Fox, W. Reynolds, C. C. Shadle, Kittanning, and M. D. Wayman, Ford City, Pa. Railway-signal	490,626	Jan. 24	2636	678 679	62	576
Green, James. (See Dods, John C., assignor.)						
Green, James. (See Lauth, John N., assignor.)						
Green, James, et al. (See Coze, André, assignor.)						
Green, James E., St. Louis, Mo. Exhaust-fan	499,673	June 13	1542	371	63	1674
Green, John, Renovo, Pa. Shaft or bar iron	504,431	Sept. 5	197	50	64	1307
Green, John, assignor of one-half to C. Norberg, Renovo, Pa. Puzzle	493,768	Mar. 21	1611	409	62	1704
Green, John, assignor of one-half to D. O'Connell, Renovo, Pa. Coffee-pot	495,937	Apr. 18	2261	569	63	451
Green, John, assignor of one-half to W. L. Holman and J. McCord, Renovo, Pa. Manufacture of drawbars	491,480	Feb. 7	687	173	62	880
Green, John F. (See Green, Oscar E. and J. F.)						
Green, John H., assignor of one-third to N. M. Nelson, Ishpeming, Mich. Camera-stand	507,807	Oct. 31	3434	843	65	696
Green, Joseph W., Jr. (See Moore, George C., assignor.)						
Green, Laurence. (See Ash and Gill, assignors.)						
Green, Martha A., Montclair, Colo. Cover-holder	492,329	Feb. 21	2011	500	62	1184
Green, Martha L., executrix. (See Green, George F.)						
Green, Oscar E. and J. F., Baltimore, Md. Means for connecting metallic fittings to glass, china, or earthenware	499,918	June 20	1963	477	63	1761
Green, Squire, Stretford, England. Tire	504,032	Aug. 29	2948	738	64	1169
Green, Theron H. (See Campbell, Hardy W., assignor.)						
Green, William E. (See Michaels and Green.)						
Green, William F. (See Jackson, George, assignor.)						
Green, William W., Chicago, Ill. Dust-separating machine	508,611	Nov. 14	1035	255	65	966

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Green, William W., Chicago, Ill., assignor of one-half to A. V. Terry, Brockport, N. Y. Harrow	491,100	Feb. 7	57	16	62	759
Greenbaum, Oscar. (See Woodbury and Greenbaum.)						
Greene, Frank E., et al. (See Dunning, Harry, assignor.)						
Greene, Frank R. (See Sperry, Elmer A., assignor.)						
Greene, Fred. H. (See Marble and Greene.)						
Greene, James G., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Buttonhole-cutter	492,796	Mar. 7	38	9	62	1366
Greene, James G., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Welt-guide for sewing-machines	507,119	Oct. 24	2234	552	65	459
Greene, John T., Chicago, Ill. Cash register and indicator	502,885	Aug. 8	1081	267	64	780
Greene, Lemuel A., Greer's, S. C. Cotton-grader	499,358	June 13	1030	249	63	1585
Greene, Merritt, Pittsburg, Pa. Pressure-indicator	505,652	Sept. 26	2261	572 } 573	64	1735
Greene, Noble T., Providence, R. I. Steam-piston packing	495,221	Apr. 11	1123	280	63	226
Greene, Thomas C. (See Jones and Greene.)						
Greene, Thomas C., Liberty, assignor of one-half to C. F. Cleaveland, Indianapolis, Ind. Wire-stretcher	502,515	Aug. 1	449	108	64	649
Greene, Tweed & Co. (See Burr, Charles T., assignor.)						
Greene, William H., and W. H. Wahl, Philadelphia, Pa. Manufacturing manganese and alloys of manganese free from carbon	489,303	Jan. 3	491		62	107
Greene, William H., and W. H. Wahl, Philadelphia, Pa. Producing metallic alloys	490,961	Jan. 31	3184		62	697
Greener, Harry, Birmingham, England. Breech-loading breakdown gun	498,947	Jan. 17	1505	393	62	340
Greener, Jacob, Elmira, N. Y. Pianoforte-action	508,416	Nov. 14	719	177	65	905
Greenfield, John C., Forreston, Ill. Turfing implement	504,577	Sept. 5	437	111	64	1351
Greenhill, Joseph E., London, assignor of one-half to G. E. Gourand, Beulah Hill, England. Apparatus for controlling the speed of clockwork mechanism	494,633	Apr. 4	169	40, 41	63	34
Greenhill, Matthew C., London, England. Oscillating liquid-meter	496,934	May 9	894	234	63	799
Greenhill, William P. (See Surerus and Greenhill.)						
Greenleaf, Joseph H., New Haven, Conn. Cash register and indicator	505,101	Sept. 19	1313	338 } 339 } 340	64	1545
Greenless, J. R., et al. (See Welsh, Artemus and A., assignors.)						
Greenstein, Adolph. (See Dinsmore, Robert, assignor.)						
Greenstreet, Charles J., Indianapolis, Ind. Nitrogenous fertilizer and making same	508,220	Nov. 7	397		65	832
Greenwood Brothers & Company. (See Greenwood, Charles W., assignor.)						
Greenwood, Charles W., assignor to Greenwood Brothers & Company, South Gardner, Mass. Machine for weaving cane for chair-seats	494,139	Mar. 28	2238	570	62	1837
Greenwood, James, assignor to Caustic Soda and Chlorine Syndicate, Limited, London, England. Apparatus for the production of chlorine and caustic soda	489,677	Jan. 10	1058	275 } 276	62	236
Greenwood, Stephen D. (See Moritz and Greenwood.)						
Greenwood, Williston W., New York, N. Y. Pneumatic tire	503,594	Aug. 22	2257	565	64	1021
Greer, Francis B., Barnhill, Ill. Flood-fence	504,346	Sept. 5	51	14	64	1220
Greer, Howard, Chicago, Ill. Railway-rail	429,948	Jan. 17	1507	393	62	340
Greer, Howard, Chicago, Ill. Machine for making spikes or nails	505,960	Oct. 3	275	72, 73	65	54
Greer, Jerome B., et al. (See Jones, Wesley C., assignor.)						
Greer, Robson C., Lebanon, Pa. Ore roasting and calcining furnace	495,883	Apr. 18	2187	549	63	436
Greer, Robson C., Lebanon, Pa. Ore roasting and calcining furnace	508,542	Nov. 14	929	228	65	945
Greeves, Malcom M., Belfast, Ireland. Clearer for yarns	490,347	Jan. 24	2189	570	62	489
Grefstad, Swan, Duluth, Minn. Sketching apparatus	499,224	June 13	798	189	63	1543
Gregg, James A. S., New Rochelle, N. Y. Galvanic battery	507,708	Oct. 31	3269	799	65	665
Gregg, James E., et al. (See Carstarphen, William P., Jr., assignor.)						
Gregg, John, et al. (See Taylor, Martin M., assignor.)						
Gregg, Richard, Oswego, assignor to Ingersoll-Sergeant Drill Company, New York, N. Y. Tool for withdrawing bushings	511,610	Dec. 26	3042	741	65	2013
Gregg, Robert, assignor to Fairbank Canning Company, Chicago, Ill. Machine for making cans	489,250	Jan. 3	419	116 } 117	62	94
Gregg, Robert, assignor to Fairbank Canning Company, Chicago, Ill. Can-making machine	491,015	Jan. 31	3269	834 } 835	62	714
Gregg, William J., Laconia, N. H. Steam-trap	509,846	Nov. 28	3114	752	65	1388
Gregory, Annie M., London, England. Apparatus for teaching astronomy and geography	501,136	July 11	965	246	64	190
Gregory, Charles A., Montreal, Canada. Musical instrument	500,231	June 27	2487	607	63	1865
Gregory, Clarence C. (See Sweet, Ira C. N., assignor.)						
Gregory, Fred L., Chicago, Ill. Magnet-armature	496,648	May 2	411	111	63	694
Gregory, Fred L., Niagara Falls, N. Y. Sign-letter	498,430	May 30	3298	823	63	1271
Gregory, Fred L., Niagara Falls, N. Y. Electric meter	503,595	Aug. 22	2259	565	64	1021
Gregory, Herbert, New York, N. Y. Shoe for cycle-wheels	492,510	Feb. 28	2321	576	62	1258
Gregory, James L., Washoe City, Nev. Fire-escape	504,576	Sept. 5	436	111	64	1351
Gregory, John W., Garden City, Kans. Pump	499,105	June 6	612	147	63	1497
Greif, Louis M., Cleveland, Ohio. Machine for leveling, trussing, and hooping barrels	493,329	Mar. 14	886	226 } 227	62	1547
Greif, Louis M., Cleveland, Ohio. Machine for setting up and windlassing barrels or casks	499,787	June 20	1742	421	63	1722
Greig, George W., Chicago, Ill. Machine for mixing dough	507,360	Oct. 24	2674	657	65	540
Greimann, John, East Elkport, Iowa. Nailless horseshoe	506,688	Oct. 17	1512	380	65	313
Greiner, Abraham J., Chicago, Ill. Earth-auger	493,769	Mar. 21	1611	410	62	1704
Greiner, Abraham J., Chicago, Ill. Compound for preserving food	504,724	Sept. 12	671		64	1409
Greiner, Christian, Munich, Germany. Stocking-stretcher	501,065	July 11	837	218	64	168
Greist, John M., New Haven, Conn. Tuck-marker for sewing-machines	504,805	Sept. 12	821	208	64	1437
Greist, John M., New Haven, Conn. Ruffling attachment for sewing-machines	504,875	Sept. 12	932	240	64	1460
Greist, John M., New Haven, Conn. Attachment-holder for sewing-machines	504,876	Sept. 12	934	240	64	1460
Greive, John F., Clay, Ind. Hill-plow	507,614	Oct. 31	3120	763	65	638
Grenet, Emile H., Paris, France. Wheel-tire	501,588	July 18	1673	417	64	337
Grenfell, Hubert H., London, and J. G. Accles, Birmingham, England. Revolving small-arm	501,566	July 18	1641	411	64	331
Grennan, William, Bristol, Conn. Marker for window-frames	503,045	Aug. 8	1351	334	64	830
Gressett, Lawrence F., Ballinger, Tex. Hay-press	493,996	Mar. 21	1992	508	62	1776
Gresty, John E., Manchester, England. Steam-boiler	503,700	Aug. 22	2431	605	64	1053
Grether, Emil, Wiesbaden, Germany. Machine for straining or removing tendons from chopped meat	501,417	July 11	1420	356	64	272
Grether, Ernest, deceased. (See Bentz, Edmeston, and Grether.)						
Gridley, Wilmer D., Brooklyn, N. Y. Device for supporting flower-pots	492,919	Mar. 7	238	60	62	1405
Grier, Matthew J. (See Broadwell, Edward C., assignor.)						
Grier, Matthew J., Philadelphia, Pa. Compensating device for car-brakes	507,654	Oct. 31	3193	782	65	651
Griesser, William, Philadelphia, Pa. Ratchet-drill	509,893	Dec. 5	79	20	65	1425

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Grievies, Andrew, and T. F. Frazier, Allegheny, Pa. Welding cylinders	509,526	Nov. 28	2608	{ 630 631	{ 65	1292
Grievies, Edward W. (See Cole and Grievies.)						
Griffen, John D., New York, N. Y. Shoe-lace fastener	497,094	May 9	1133	290	63	840
Griffin, A. G., et al. (See Smith, George, assignor.)						
Griffin, Albert A., Roscommon, Mich. Tool-holder	489,678	Jan. 10	1059	276	62	236
Griffin, Albert A., Roscommon, Mich. Folding card-table	493,925	Mar. 21	1859	474	62	1751
Griffin, Alexander R. (See Graham and Griffin.)						
Griffin, Charles H., Lake City, Colo. Car-truck and means for automatically arresting the same	489,473	Jan. 10	764	202	62	176
Griffin, Duane D., Westfield, Mass. Stalk-splitting machine for whips	508,937	Nov. 21	1573	385	65	1082
Griffin, Edwin C., Newton, Mass. Pulverizing-mill	507,432	Oct. 24	2788	683	65	562
Griffin, George W., Franklin, N. H. Manufacture of saws	502,886	Aug. 8	1085	267	64	781
Griffin, George W., Franklin, N. H. Band-saw machine for cutting metal, &c.	502,887	Aug. 8	1086	267	64	781
Griffin, Heber C., assignor of one-half to C. F. Adams, Hill, N. H. Clothes-pin	500,574	July 4	58	17	64	12
Griffin, James F. (See Staats, William H., assignor.)						
Griffin, John G., Maple Hill, Kans. Cultivator	494,985	Apr. 4	714	181	63	137
Griffin, John J., Irwin, Iowa. Harness	497,541	May 16	1873	472	63	987
Griffin, John S., Roslyn, Wash. Machine for forming projectiles	509,730	Nov. 28	2924	{ 707 708	{ 65	1351
Griffin, Martin L., Holyoke, Mass. Manufacture of Portland cement	497,785	May 23	2260	.....	63	1073
Griffin, Samuel, Audubon, Iowa. Wagon-brake	495,247	Apr. 11	1179	295	63	236
Griffin, Thomas A., Chicago, Ill. Sectional chills	489,474	Jan. 10	765	202	62	176
Griffin, Willard H., and E. P. Nichols, Henniker, N. H. Adjustable wrench	499,919	June 20	1964	477	63	1761
Griffin, Willard H., and E. P. Nichols, Henniker, N. H. Adjustable wrench	499,920	June 20	1965	477	63	1761
Griffs, Jack C., Gipsy, Ala. Vehicle-top	494,858	Apr. 4	535	136	63	104
Griffith, Alfred P., and T. N. Caswell, Michigan City, Ind. Circular-knitting machine	493,924	Mar. 21	1856	{ 473 474	{ 62	1750
Griffith, Charles, South Waverly, Pa. Hoisting-machine	491,168	Feb. 7	179	45	62	782
Griffith, Charles E., Storm Lake, Iowa. Catching and holding tool	491,642	Feb. 14	954	240	62	955
Griffith, John, et al. (See Tiner, John F., assignor.)						
Griffith, John L., et al. (See Rawles, John, assignor.)						
Griffith, Josh T. (See McGee, Robert D., assignor.)						
Griffith, Mollie I., Winchester, Ky. Bake-pan	508,305	Nov. 7	535	131	65	857
Griffith, Wilfred S., Ambler, assignor of one-half to C. S. Solomon, Philadelphia, Pa. Pump-regulator	491,101	Feb. 7	59	17	62	760
Griffiths, David F., New York, N. Y. Packing-case	507,808	Oct. 31	3435	844	65	697
Griffiths, Edward J., and J. G. Miller, Nekimi, Wis. Tire-fastener	497,786	May 23	2261	567	63	1074
Griffiths, George J., Tampa, Fla. Compartment-trunk	495,033	Apr. 11	792	200	63	166
Griffiths, James R., Chicago, Ill. Trolley-stand	498,932	June 6	324	76	63	1449
Griffiths, James R., Chicago, Ill. Electric-railway trolley	498,933	June 6	326	76	63	1450
Griffiths, Samuel, Weir, Kans. Hoisting machine	502,188	July 25	2643	667	64	528
Griffiths, Thomas H., Philadelphia, Pa. Apparatus for coating tin andterne plates	510,173	Dec. 5	553	128	65	1515
Grisby, Hugh S., Chicago, Ill. Pulverized-fuel feeder	494,375	Mar. 28	2623	658	62	1908
Grill, Edward. (See Townsend, Louis, assignor.)						
Grill, John F., Evansville, Ind. Shade-holder	511,136	Dec. 19	2242	550	65	1855
Grile, Joseph. (See Welker, Henry H., assignor.)						
Grilley, Charles T., Boston, Mass. Car-fender	502,037	July 25	2401	604	64	481
Grim, Charles B., assignor of one-half to F. L. Lamont and C. Sterner, Pottsville, Pa. System of distributing steam for heating railway-cars	495,612	Apr. 18	1752	{ 441 442	{ 63	360
Grimaux, Edouard, Paris, France, assignor to J. B. F. Rigaud. Making salts of quinine ..	501,066	July 11	838	.....	64	168
Grimes, Charles D., Dayton, and G. E. Harter, Springfield, assignors to Dayton Autographic Register Company, Dayton, Ohio. Autographic register apparatus	491,348	Feb. 7	487	125	62	840
Grimes, Charles L., assignor to W. White & Co., Moline, Ill. Hydrostatic tire-setter. (Re-issue)	11,307	Feb. 7	739	187	62	891
Grimes, George W., Murfreesborough, N. C. Fan	499,421	June 13	1147	275	63	1605
Grimes, George W., Murfreesborough, N. C. Fan attachment	500,489	June 27	2879	708	63	1934
Grimes, Granville P., et al. (See Searce, Edward M., assignor.)						
Grimes, Willis R. (See James and Grimes.)						
Grimm, John H. (See Sadtler and Grimm.)						
Grimm, Max, West Hoboken, N. J. Packing	494,716	Apr. 4	298	75	63	60
Grimm, Paul H., assignor of one-half to E. E. Duryea, Glen Cove, N. Y. Press for expressing moisture	500,490	June 27	2880	708	63	1934
Grimm, Philip H., and F. J. Willard, Ashland, Wis. Jack-screw	500,203	June 27	2442	596	63	1856
Grimstad, Soren, Chicago, Ill. Composite material for moldings, &c., and making same ..	510,855	Dec. 12	1770	434	65	1753
Grindle, Perry S., Brooklyn, Ala. Composition for kindling fires	505,311	Sept. 19	1651	.....	64	1607
Grinnell, Amos L., Campbell, Iowa. Capstan and apparatus for plowing	509,028	Nov. 21	1708	422	65	1109
Griscom, John P., Pottsville, Pa. Process of and apparatus for moving granular materials ..	496,684	May 2	466	125	63	704
Griscom, Samuel E. (See Bradford, Hezekiah, assignor.)						
Grisel, George, assignor of two-thirds to J. D. Case, deceased, (E. A. Case, administratrix,) and F. Severio, San Francisco, Cal. Match-packing machine	498,899	June 6	265	62, 63	63	1439
Grist, Benjamin W., assignor to Pennsylvania Iron Works Company, Philadelphia, Pa. Means for supporting drums or pulleys	495,884	Apr. 18	2188	{ 549 550	{ 63	437
Grist, Benjamin W., assignor to Pennsylvania Iron Works Company, Philadelphia, Pa. Means for supporting drums or pulleys	495,885	Apr. 18	2190	{ 550 551	{ 63	437
Grist, James E., assignor to Pennsylvania Iron Works Company, Philadelphia, Pa. Valve for gas or air compressors	507,901	Oct. 31	3583	884	65	723
Griswold, Frank B., Troy, N. Y. Fountain-penholder	495,969	Apr. 25	2309	583	63	475
Griswold, Henry J., Madison, Conn. Method of and machine for knitting fashioned webbing ..	499,729	June 20	1636	394	63	1704
Griswold, James B., McCook, Nebr. Rod-packing	499,422	June 13	1148	276	63	1605
Griswold, John B., Zanesville, Ohio, assignor of one-half to C. V. Graham. Brick-kiln	489,805	Jan. 10	1258	{ 329 330	{ 62	276
Griswold, John B., Zanesville, Ohio, assignor of one-half to C. V. Graham. Building-brick ..	489,898	Jan. 10	1391	362	62	302
Griswold, John H., Oakland, Cal. Combined fruit-picker and pruning implement	491,269	Feb. 7	329	83	62	811
Griswold, John H., Oakland, Cal. Line holder and guide	500,491	June 27	2882	709	63	1934
Griswold, John H., Oakland, Cal. Sash-holder	504,978	Sept. 12	1107	284	64	1493
Griswold, John W. (See Allen, Alexander S., assignor.)						
Griswold Manufacturing Company. (See Shields, David, assignor.)						
Griswold, Matthew. (See Shields, David, assignor.)						
Griswold, Thomas, Jr., Cleveland, Ohio. Clutch mechanism	491,169	Feb. 7	180	46	62	782
Groat, Elias, San Luis Obispo, Cal. Apparatus for reducing and softening bituminous rock ..	502,416	Aug. 1	279	66	64	617
Groat, Elias, San Luis Obispo, Cal. Machine for reducing and softening bituminous rock ..	502,417	Aug. 1	281	67	64	618

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Grob & Co. (See Grob, Julius, assignor.)						
Grob, Julius, assignor to Grob & Co., Horgen, Switzerland. Heddle and heddle-frame for looms	489,631	Jan. 10	1000	260	62	223
Grobe, D. E. (See Crannell, Charles W., assignor.)						
Groenendyke, Montgomery, Cleveland, Ohio. Dish-washing machine	489,190	Jan. 3	319	88	62	72
Grosser, George, Frankfort-on-the-Main, Germany. Toy rowing-boat	506,590	Oct. 10	1359	341	65	273
Groff, William R., et al. (See Thibault, Henry, assignor.)						
Grognet, Felix, Bourbevoie, France. Preparing hides	503,235	Aug. 15	1669		64	900
Gronberg, Oscar, assignor of one-half to W. T. Clarke, Elgin, Ill. Cuff-holder	506,778	Oct. 17	1672	422	65	343
Gron Dahl, Lars, Red Wing, Minn. Washing-machine	505,981	Oct. 3	281	74	65	55
Groom, Patrick W., deceased; J. Kennedy, Lamar, administrator, and assignor of one-half to C. D. Moody, Webster Groves, Mo. Manufacture of shovels	491,944	Feb. 14	1420	354	62	1048
Groom, Richard C., Cobb, Ky. Buggy-top	497,173	May 9	1253	318	63	862
Gros, Hermann C., Ober-Ursel, Germany. Boot or shoe	501,830	July 18	2064	509	64	405
Gros, Hermann C., Ober-Ursel, Germany. Welt-attaching machine	501,831	July 18	2065	509	64	405
Grosch, Alexander, A. Allenburg, and C. Buerling, Cincinnati, Ohio. Fire-shutter fastener	503,046	Aug. 8	1352	334	64	830
Grosch, Thomas J., Savanna, Ill. Boiler-furnace	490,962	Jan. 31	3186	815	62	697
Groschans, Ferdinand, Baltimore, Md. Fender for railway-cars	499,882	June 20	1910	464	63	1752
Groshon, John A., New York, N. Y. Direct-acting steam-engine	499,730	June 20	1638	394	63	1705
Gross, Charles V., assignor of one-half to C. E. Curby, St. Louis, Mo. Sheet-metal ceiling	497,718	May 16	2149	396	63	1037
Gross, Daniel, et al. (See Flack, Mortimer C., assignor.)						
Gross, John B., Hoboken, N. J. Train-stopping mechanism for railway-tracks	503,111	Aug. 8	1458	358	64	848
Gross, John B., assignor of one-half to L. Finke, Hoboken, N. J. Train-stopping device	502,963	Aug. 8	1227	359	64	806
Gross, Robert H., et al. (See Gates, Matthias, assignor.)						
Gross, William M., assignor of one-half to G. L. Walker, Spokane, Wash. Excavating-machine	505,460	Sept. 26	1889	487	64	1665
Grosse, Carl F. E., Berlin, Germany. Marbled glass	494,063	Mar. 21	2100		62	1796
Grosse, William, Little Suamico, Wis. Steamboat	495,410	Apr. 11	1424	358	63	281
Grosselin, Nicolas H., Sedan, France. Gig-mill	493,549	Mar. 14	1235	316	62	1614
Grossman, Joseph H., assignor of one-half to M. L. Klauber, Chicago, Ill. Combined kitchen-table and ironing-board	499,674	June 13	1543	371	63	1674
Grossman, Lawrence S., Cleveland, Ohio, assignor to Cleveland Faucet Company, of Ohio. Bolt-cutter	500,887	July 4	559	145	64	102
Grossman, Simon, New Castle, Pa. Broom clasp or clamp	497,656	May 16	2050	512	63	1019
Grossmann, Adam J. (See Colhower and Grossmann.)						
Grossmann, Heinrich, Dortmund, Germany. Steam-valve	500,492	June 27	2883	709	63	1934
Grosz, Henry, and R. Ashley, Philadelphia, Pa., assignors, by mesne assignments, to United Columbian Electric Company, of New Jersey. Commutator for dynamos and electric motors	489,000	Jan. 3	36	20	62	9
Grosz, Herman, Mendota, Ill. Windmill-regulator	491,550	Feb. 14	802	103	62	923
Grotenuis, William J., and H. T. Sidway, assignors, by mesne assignments, to Sidway Manufacturing Company, Chicago, Ill. Biscuit-cutter	504,534	Sept. 12	876	226	64	1449
Grothe, Waldemar, Berlin, Germany. Adjustable type-founding apparatus	501,934	July 25	2246	561	64	453
Grotz, Charles, assignor to Hardsocg Manufacturing Company, Ottumwa, Iowa. Coal-drill	500,124	June 27	2110	559	63	1894
Grotz, Charles, assignor of one-half to G. W. Thayer, Ottumwa, Iowa. Drill	505,199	Sept. 19	1466	378	64	1572
Grotz, Charles, assignor of three-fourths to Hardsocg Manufacturing Company, Ottumwa, Iowa. Screw-machine	507,494	Oct. 24	2880	706	65	579
Grotz, Gottlob F., Bissingen, Württemberg, Germany. Machine for cutting keyways	489,304	Jan. 3	493	136	62	107
Grouilliers, Hector de, Berlin, Germany. Paper for making transfer-pictures	504,535	Sept. 12	877	137	64	1450
Grove, David, Berlin, Germany. Baking-oven	498,261	May 30	3019	752	63	1221
Grove, David, Berlin, Germany. Apparatus for sterilizing water	500,763	July 4	371	95	64	69
Grove, David, and B. Lilienfeld, Berlin, Germany. Roasting apparatus for coffee, cocoa, &c.	507,538	Oct. 31	2975	730	65	610
Grove, Frank G., and D. P. Lillard, Luray, Va. Folding umbrella	507,809	Oct. 31	3436	844	65	697
Grove, George W., assignor to National Cash Register Company, Dayton, Ohio. Check-ejector for check-printing cash-registers	509,660	Nov. 28	2818	680	65	1332
Grove, John A., Bluffton, Ind. Wire fence	509,731	Nov. 28	2927	681	65	1352
Grove, William H., assignor of one-half to C. R. Dresback, Circleville, Ohio. Car-coupling	495,797	Apr. 18	2049	708	63	411
Grovenor, Wallace. (See Pugh, Robert, assignor.)						
Groves, Aaron, et al. (See Shattuck, Samuel, assignor.)						
Groves, Charles E., Attica, Ohio. Work-bench for saloons	511,048	Dec. 19	2087	517	65	1824
Groves, James E., Boston, Mass. Device for turning the backs of car-seats	500,663	June 20	2181	531	63	1799
Groves, John T., Cincinnati, Ohio. Carriage-top joint	503,135	Aug. 15	1508	371	64	871
Groves, William P., assignor of one-half to W. H. Galbraith, Philadelphia, Pa. Puzzle	504,347	Sept. 5	53	15	64	1281
Grow, Charles A., et al. (See Billings, Alvah G., assignor.)						
Grow, Elisha P. (See Thomas and Grow.)						
Grubbs, Albert M., Forest Grove, Oreg. Game	500,888	July 4	562	146	64	102
Grubbs, Albert M., Forest Grove, Oreg. Addition-pencil	508,417	Nov. 14	721	178	65	906
Gruber, Paul, St. Louis, Mo. Record and index book	508,699	Nov. 14	1166	288	65	993
Gruebel, Frederick A., Baltimore, Md. Display-tray	508,700	Nov. 14	1169	288	65	993
Gruen, Dietrich, Columbus, Ohio. Stem-winding watch	493,584	Mar. 14	1302	332	62	1628
Gruessner, Frank, assignor of one-fourth to F. B. Badt, Chicago, Ill. Regenerating solutions	489,632	Jan. 10	1001		62	223
Gruessner, Frank, assignor of one-fourth to F. B. Badt, Chicago, Ill. Recovering meta-stannic acid	489,633	Jan. 10	1002		62	223
Grueter, John B., and O. Jackson, Carrollton, Ill. Sprocket wheel and chain	511,137	Dec. 19	2243	550	65	1855
Gruetzmacher, Louis, Galveston, Tex. Plant protector	493,400	Mar. 14	987	254	62	1568
Gruzin, Hugh P., Helena, Mont. Stamp-stem guide	505,400	Sept. 19	1793	463	64	1634
Grublike, Henry C. O., Morris, Ill. Automatic safety railway-switch	489,583	Jan. 10	935	242	62	209
Grublike, Henry C. O., Morris, Ill. Automatic safety railway-switch	507,495	Oct. 24	2886	709	65	580
Grumbach, Hugo, Jersey City, N. J. Printing-press	496,305	Apr. 25	2828	707	63	573
Grünberg, Hulda, Biel, Switzerland. Calendar-clock	504,432	Sept. 5	198	51	64	1307
Grundy, William S. (See Lever and Grundy.)						
Grunwald, Jacques, Berlin, Germany. Making soap	506,004	Oct. 3	317		65	62
Grush, Andrew J., and H. B. Sooy, Defiance, Iowa. Bread-raiser	510,536	Dec. 12	1179	284	65	1646

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Grusonwerk. (See Kampf, August, assignor.)						
Grusonwerk. (See Mohr, Frederik, assignor.)						
Grusonwerk. (See Steinbach, Reinhold, assignor.)						
Gruver, Benjamin F. (See Chambers and Gruver.)						
Guattari, Auguste, Milan, Italy. Process of and apparatus for producing ornamental woodwork	491,283	Feb. 7	358	90	62	817
Gubbins, Richard R., Belvedere, England. Wheel-tire	508,306	Nov. 7	536	132	65	857
Gubbins, Richard R., Belvedere, England. Pneumatic tire	510,019	Dec. 5	307	69	65	1468
Gubelmann, William S., Buffalo, N. Y. Adding-machine	507,810	Oct. 31	3438	{ 844 } 845	{ 65 }	697
Gudmunson, Abraham. (See Whipple and Gudmunson.)						
Gue, Jerome V., North Western, N. Y. Feed mechanism for sawing-machines	490,748	Jan. 31	2841	729	62	630
Guenther, Christian, Trenton, N. J. Beer-faucet	499,537	June 13	1336	317	63	1639
Guenther, Henry. (See Froelich, Lorey, and Guenther.)						
Guenther, Jacob, Philadelphia, Pa. Portable vise	490,112	Jan. 17	1780	463	62	396
Guenther, John E., Owensborough, Ky. Water-cooling attachment for refrigerators	502,562	Aug. 1	525	126	64	663
Guerbois, Ernest, Plaisance, France. Apparatus for preventing the refilling of bottles	505,461	Sept. 26	1893	488	64	1666
Guerin, Adolphe G., Savannah, Ga. Stop-watch	495,583	Apr. 18	1707	430	63	353
Guerin, Craig R. (See Coleman, George D., assignor.)						
Guernsey, Jane M. (See Guernsey, William B., assignor.)						
Guernsey, Oscar S., Seymour, Ind. Car-coupling	501,832	July 18	2068	510	64	406
Guernsey, William B., assignor to J. M. Guernsey, Norwich, N. Y. Automatic train-brake	489,899	Jan. 10	1392	{ 362 } 363	{ 62 }	302
Guerrant-Cable Tobacco Stemmer Company. (See Guerrant, John C., assignor.)						
Guerrant, Estill C., Memphis, Tenn. Pump-rod coupler	491,551	Feb. 14	803	203	62	923
Guerrant, John C., deceased; M. L. Guerrant, administratrix, assignor to Guerrant-Cable Tobacco Stemmer Company, Danville, Va. Machine for stemming tobacco	494,254	Mar. 28	2423	611	62	1871
Guerrant, Mary L., administratrix. (See Guerrant, John C.)						
Guerry, Peter V., Philadelphia, Pa. Brake for dental engines	510,856	Dec. 12	1771	435	65	1753
Gnest, David P., Norfolk, Va. Window-screen	496,781	May 2	619	{ 165 } 166	{ 63 }	730
Gnest, Herbert, Sheffield, England. Pocket air-pump	497,050	May 9	1057	271	63	827
Gubr, Charles A., and A. E. Richter, Chicago, Ill. Hay drier and stacker	503,368	Aug. 15	1896	470	64	940
Gührs, Paul. (See Wegner and Gührs.)						
Guice, John W., McKeesport, Pa. Metal shoe-sole	495,131	Apr. 11	984	247	63	201
Guiher, Frank T., Waynesburg, Pa. Steam-engine attachment	510,131	Dec. 5	490	112	65	1502
Guilbert, John M., Philadelphia, Pa., assignor of one-half to H. H. Barnum, New York, N. Y. Curtain-ring	505,625	Sept. 26	2204	558	64	1725
Guild & Garrison. (See Garrison, William F., assignor.)						
Guild & Garrison. (See Worthen, William H., assignor.)						
Guild, George, Knoxville, Tenn. Phosphate separator and disintegrator	506,591	Oct. 10	1360	341	65	273
Guild, Henry G., New York, N. Y. Comb	504,979	Sept. 12	1107	284	64	1493
Guild, James F., Dundee, Scotland. Driving-gear	508,701	Nov. 14	1169	288	65	993
Guiley, Augustus H. R., et al. (See Cornell, Elijah B., assignor.)						
Guilford, William W., et al. (See Abbott, Leonard G., assignor.)						
Guilfoyle, Thomas, Collingwood, Canada. Cigar attachment	505,401	Sept. 19	1794	464	64	1634
Guilfoyle, William P., Binghamton, N. Y. Bottle-stopper	510,478	Dec. 12	1053	252	65	1624
Guillaume, Quirin, Mount Vernon, N. Y. Ornamenting glass	510,597	Dec. 12	1283	312	65	1664
Guillaume, Franz, and E. Goltstein, Bonn, Germany. Jar-lid fastener	501,418	July 11	1420	356	64	273
Guillaume, Theodore, Cologne, Germany. Fencing-wire	496,974	May 9	945	248	63	807
Guillaume, Theodore, Cologne, Germany. Electric cable	502,358	Aug. 1	183	43	64	600
Guinard, Henry. (See Hester, Charles T., assignor.)						
Guise, David P., Williamsport, Pa. Brick-machine	510,066	Dec. 5	381	84	65	1481
Guiteau, Jerome C. (See Jewell, Dell. W. and G., assignors.)						
Guldin, Olaf N., Fort Wayne, Ind. Combination-valve connection for water-gas apparatus	510,506	Dec. 12	1097	265	65	1632
Gulick, Ashley J., Clearfield, Pa. Baggage-check	490,806	Jan. 31	2929	752	62	647
Gulich, Ashley J., and W. T. Humphrey, Clearfield, Pa. Broom-holder	496,563	May 2	273	72	63	669
Gull, John M., Johnstown, Pa., assignor, by mesne assignments, to Johnson Company, of Pennsylvania. Welding	508,012	Nov. 7	52	16	65	767
Gullmann, Christopher, New York, N. Y. Dredging-machine	506,592	Oct. 10	1361	341	65	273
Gullmann, Christopher, New York, N. Y. Apparatus for discharging refuse from scows	507,902	Oct. 31	3584	884	65	723
Gumbart, Louis, New York, N. Y. Convertible finger-ring	498,648	May 30	3670	908	63	1337
Gumbel, Gustav, Strasburg, Germany. Compound for waterproofing oil-receptacles	491,284	Feb. 7	360		62	817
Gumeson, Carl, National Mine, Mich. Face-protector	505,653	Sept. 26	2263	573	64	1736
Gundelach, Emil, New York, N. Y. Bicycle-gear	492,285	Feb. 21	1943	{ 485 } 486	{ 62 }	1170
Guniewicz, Franz. (See Faranowski and Guniewicz.)						
Gunkel, Caspar, Jefferson, Iowa. Tailor's measure	509,080	Nov. 21	1803	443	65	1127
Gunn, Alfred C., Geneva, Switzerland. Stop-watch	503,416	Aug. 15	1956	{ 485 } 486	{ 64 }	952
Gunn, George P., assignor of one-half to Atlas Gun Company, Union, N. Y. Combined metallic tie and track-fastening	502,435	Aug. 1	311	74	64	623
Gunn, Joseph H., McLean, N. Y. Shoe-fastening	509,802	Nov. 28	3048	736	65	1376
Gunn, William S., Grand Rapids, Mich. Folding bed	494,419	Mar. 28	2688	674	62	1920
Gunning, Thomas, Pittsburg, Pa. Smoke-consumer	489,381	Jan. 3	608	163	62	131
Gunning, Thomas, Pittsburg, Pa. Smoke-consumer	496,479	May 2	136	38	63	643
Gunnorson, Bengt, West Haven, Conn. Bottle-stopper fastener	505,291	Sept. 19	1614	419	64	1600
Ginther, Adam R., Berlin, Germany. Coin-sorting apparatus	502,715	Aug. 8	816	197	64	730
Ginzburg, Charles, New Orleans, La. Wall-protector	492,673	Feb. 28	2576	637	62	1310
Grünzenbäuser & Co., M. (See Meyer, Johannes, assignor.)						
Guptill, Roderick G., Pendleton, Ind. Glass-pipe-casting machine	494,951	Apr. 4	660	170	63	127
Gurnee, Elbert M., Westport, Mo. Car-platform holder	499,106	June 6	613	147	63	1497
Gurnee, Isaac Q., Butler, N. J., assignor to Butler Hard Rubber Company, New York, N. Y. Atomizer	502,904	Aug. 8	1120	276	64	788
Gurney, Charles, Brooklyn, N. Y. Street-sweeper	507,361	Oct. 24	2674	{ 657 } 658	{ 65 }	540
Gurney, Robert L., Kirkwood, Mo. Pocket pencil-holder	501,714	July 18	1884	469	64	373
Gury, John B., St. Louis, Mo. Vise	499,291	June 13	899	218	63	1561
Gusdorf, Solomon M., and D. S. Blue, Fremont, Ohio. Shackle	495,034	Apr. 11	792	201	63	167
Gustafson, August F., New York, N. Y. Shutter-fastener	504,921	Sept. 12	1007	260	64	1475
Gustafson, Axel R., Chicago, Ill., assignor of one-half to W. F. Anderson, Negaunee, Mich. Ironing-machine	490,113	Jan. 17	1781	{ 463 } 464	{ 62 }	396

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Gustafson, Axel R., Milwaukee, Wis., assignor of one-half to W. F. Anderson, Negaunee, Mich. Thrashing-machine.	510,253	Dec. 5	689	{ 165 166 }	65	1541
Gustafson, John, assignor of one-third to D. R. Brown, Brooklyn, N. Y. Hydraulic air-compressor.	509,220	Nov. 21	2050	495	65	1175
Gustafsson, Karl P. (See Lind and Gustafsson.)						
Guth, Ferdinand, New York, N. Y. Labyrinth.	496,604	May 2	329	90, 91	63	679
Guth, Frederick A., Waverly, Ohio, assignor of one-half to G. H. Ohlstrom, Shelton, Conn. Piano-action.	491,308	Feb. 7	413	107	62	826
Guthrie, Herbert, Levenshulme, England. Drive-chain gear.	495,584	Apr. 18	1708	430	63	353
Guthrie, James F., Jr., assignor of one-half to C. A. Cushman, Somerville, Mass. Throw-out.	489,530	Jan. 10	861	{ 224 225 }	62	195
Guthrie, Thomas, and W. T. Hall, South Shields, England. Cycle-saddle.	503,236	Aug. 15	1669	410	64	900
Guthrie, Wardell, Chicago, Ill. Furnace.	508,013	Nov. 7	54	16	65	768
Gutmann, Emil, New York, N. Y. Suspender-end.	501,272	July 11	1173	298	64	228
Gutmann, Julius, Berlin, Germany. Horseshoe with auxiliary flanges.	491,643	Feb. 14	956	240	62	956
Gutsell, Ida A., Ithaca, N. Y. Doll-producing blank.	503,316	Aug. 15	1808	449	64	924
Guttman, Oscar, London, England. Making nitric acid.	491,481	Feb. 7	688	173	62	880
Guttman, Oscar, London, England. Apparatus for concentrating liquids.	505,520	Sept. 26	2005	513	64	1686
Güttner, Max, Breslau, Germany. Preparing solder.	500,125	June 27	2311		63	1834
Guyer, Caleb, <i>et al.</i> (See Rush, John T., assignor.)						
Guyer, Nelson, Cygnet, Ohio. Low-water alarm.	502,815	Aug. 8	979	238	64	761
Guymon, Edward T. (See Flagg and Guymon.)						
Guyton, Patrick H., Lowell, Mass. Horseshoe-calk.	505,898	Oct. 3	155	40	65	31
Gwyn, Edward C. (See Hoppes and Gwyn.)						
H. H. Babcock Company. (See Davis, Francis G., assignor.)						
H. H. Perkins Manufacturing Company. (See Tunnichiff, John C., assignor.)						
H. L. Judd & Company. (See Edsall and Walsh, assignors.)						
H. L. Judd & Company <i>et al.</i> (See Brothwell and Phillips, assignors.)						
H. Tibbe & Son Manufacturing Company. (See Lamparter, Henry, assignor.)						
H. W. Butterworth & Sons Company. (See Mackinney, William C., assignor.)						
Haag, Gustav C., New York, N. Y. Loading attachment for carts.	492,763	Feb. 28	2715	675	62	1338
Haagen, John A., Howard, Pa. Chute.	508,307	Nov. 7	537	132	65	857
Haaker, William, New York, N. Y. Tin can.	503,265	Aug. 15	1716	423	64	965
Haarmann, Ludwig, Eschershausen, Germany. Securing asphaltic mastic.	492,197	Feb. 21	1808		62	1142
Haas, Edwin, Philadelphia, Pa. Sirup-jar and faucet-lever for soda-water fountains.	505,915	Oct. 3	179	46	65	35
Haas, Edwin, Philadelphia, Pa. Measuring-faucet.	508,014	Nov. 7	54	16	65	768
Haas, Joseph. (See Porter and Haas.)						
Haas, Philip M. (See Miller and Haas.)						
Haas, Samuel H., Philadelphia, Pa. Harness-fastening.	499,883	June 20	1912	464	63	1752
Haas, Walter E. (See Boyer, Israel D., assignor.)						
Haast, Emil, assignor to F. Ulrich, Paterson, N. J. Machine for making loom-harness.	500,653	July 4	192	50	64	38
Habedank, Charles F., Jersey City, N. J. Composition for forming lithographic transfers.	502,964	Aug. 8	1231		64	806
Haberkorn, Theodore H., Fort Wayne, Ind. Valve mechanism for air-brakes.	508,702	Nov. 14	1170	289	65	993
Haberkorn, Theodore H., Fort Wayne, Ind. Brake mechanism for locomotives.	510,911	Dec. 19	1860	458	65	1782
Haberthür, Benedikt, and J. Mandel, assignors of one-half to J. P. Henderson and O. A. Kraus, Logansport, Ind. Bridge-gate.	500,654	July 4	194	51	64	38
Habicht, Louis. (See Dietrich and Habicht.)						
Hack, Peter, Michigan City, Ind. Tension device for wire fences.	490,073	Jan. 17	1717	448	62	382
Hacker, Charles F., Parsons, Kans., assignor of five-eighths to J. A. Scott, Muscogee, Indian Ter., B. Boggy and F. Shapleigh, St. Louis, Mo. Breech-loading shotgun.	493,084	Mar. 7	485	{ 121 122 }	62	1455
Hacker, Francis B., Charleston, S. C., and P. S. Gilchrist, assignors to themselves, and A. C. Johnson, Baltimore, Md. Apparatus for making sulphuric acid.	503,847	Aug. 22	2647	663	64	1096
Hacker, Richard W., York, Nebr. Corn-popping machine.	495,886	Apr. 18	2192	{ 551 552 }	63	437
Hackett, Benjamin F., and J. P. McLarty, Hackett City, Ark. Baling-press.	508,703	Nov. 14	1173	289	65	994
Hackett, George G., Wakefield, Mass. Refrigerator.	506,593	Oct. 10	1363	342	65	273
Hackett, Jacob C. (See Keephart and Hackett.)						
Hackett, John C., St. Louis, Mo. Automatic lifting-jack.	498,546	May 30	3500	865	63	1307
Hackh, Eugen, Stuttgart, Germany. Photographic gallery.	501,340	July 11	1298	323	64	249
Hackman, Henry. (See Hackman, Samuel R. and H.)						
Hackman, Samuel R. and H., Pequea, Pa.; said H. Hackman assignor to said Samuel R. Hackman. Knife or fork scourer.	499,884	June 20	1913	464	63	1752
Hackney, Herbert, South Evanston, Ill., assignor to Benjamin Machine Company, of Illinois. Feedwork for woodworking-machines.	489,076	Jan. 3	141	40	62	35
Haddock, Harry E., Philadelphia, Pa. Truck-frame for street-cars.	495,326	Apr. 11	1296	325	63	258
Hadley, Charles E., Chicopee, Mass., assignor to Overman Wheel Company, Hartford, Conn. Pneumatic tire.	492,580	Feb. 28	2426	604	62	1282
Hadley, Charles E., Chicopee, Mass., assignor to Overman Wheel Company, Hartford, Conn., and Chicopee Falls, Mass. Cycle.	495,732	Apr. 18	1950	491	63	393
Hadley, Charles E., Chicopee, Mass., assignor to Overman Wheel Company, Chicopee Falls, Mass., and Hartford, Conn. Mud-guard for cycles.	500,889	July 4	562	146	64	103
Hadley, Joshua A., assignor of one-half to R. L. Kennedy, Brazil, Ind. Flue-stop.	509,307	Nov. 21	2188	526	65	1202
Hadley, William, and A. T. McDonald, assignors of one-third to W. Wilkinson, Shelton, Conn. Rossing-machine.	489,251	Jan. 3	422	117	62	94
Haedrich, Henry G., Jr., Philadelphia, Pa. Horse-sandal.	501,567	July 18	1642	411	64	331
Haefner, Hugo, deceased; M. Buckler, administrator, assignor to A. Ohl, Newark, N. J. Varnishing-machine.	495,484	Apr. 18	1552	390	63	325
Hafely, Alfred C., New York, and J. Redlefsen, Brooklyn, N. Y. Manufacture of celluloid boxes.	505,462	Sept. 26	1894	488	64	1666
Hafer, Adam E. (See Glick, Heim, and Hafer.)						
Hafey, Cuthbert J., Enreka, Kans. Lid-lifting attachment for kettles.	491,552	Feb. 14	804	204	62	924
Hafigar, Magnus J., Chicago, Ill. Folding bed.	494,563	Apr. 4	52	11	63	11
Hafkemeyer, Charles, Chicago, Ill. Stand for displaying carpets.	502,716	Aug. 8	817	198	64	730
Hagan, William E. (See Fitzgerald, Mathew, assignor.)						
Hagans, Christian, Erfurt, Germany. Locomotive.	501,616	July 18	1723	429	64	346
Hagar, Abraham, and A. J. Amick, Boonesborough, Mo. Animal-trap.	507,000	Oct. 17	2026	501	65	409
Hagelstein, Henry, San Angelo, Tex. Hoisting device.	511,014	Dec. 19	2043	505	65	1816
Hagemann, Otto C., New York, N. Y. Separating tannin from other bodies.	510,132	Dec. 5	491		65	1502
Hagen, Rudolf, San Francisco, Cal. Faucet.	498,787	June 6	57	13	63	1399
Hagen, Rudolf, San Francisco, Cal. Faucet attachment.	498,788	June 6	58	13	63	1399
Hagenmeyer, Robert, Nuernberg, Germany. Lead-pencil holder.	497,873	May 23	2404	600	63	1098
Hager, Augustus W. L., <i>et al.</i> (See King, James O., assignor.)						
Hager, Ben. (See Read and Hager.)						
Hager, Ben, Salt Lake City, Utah Ter. Apparatus for disintegrating bituminous rock.	493,357	Mar. 14	921	237	62	1554

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Hagerman, Clyde, <i>et al.</i> (See Warner, Isaac M., assignor.)						
Hagerman, John D., <i>et al.</i> (See Warner, Isaac M., assignor.)						
Haggenmuller, Franklin F., New York, assignor to E. Fishop, Brooklyn, N. Y. Producing lithographic drawings	494,859	Apr. 4	536		63	104
Haggerty, John, Bradford, Pa. Blackboard-eraser	508,704	Nov. 14	1175	290	65	994
Haglund, Frank. (See Walgren and Haglund.)						
Hagmaier, Charles, assignor of one-half to Pelton Water Wheel Company, San Francisco, Cal. Apparatus for regulating the speed of water-wheels	498,714	May 30	3792	{ 935 936 }	63	1357
Hagmann, George, assignor of one-half to John James Company, La Crosse, Wis. Piston-rod packing	509,803	Nov. 28	3049	736	65	1376
Hahl, Augustus L., Chicago, Ill. Velocipede	502,717	Aug. 8	818	198	64	731
Hahl, Augustus L., Chicago, Ill. Velocipede	503,080	Aug. 8	1398	346	64	838
Hahn, Hermann, assignor to L. P. Degen, San Francisco, Cal. Feeding device for riveting-machines	509,732	Nov. 28	2928	708	65	1352
Hahn, Jeremiah, <i>et al.</i> (See Key, Isaac, assignor.)						
Hahn, John H., Jr., Sargent, Mo., assignor of one-fourth to J. A. Jeffrey, Columbus, Ohio. Cable haul mechanism	503,908	Aug. 22	2736	686	64	1114
Hahn, John J., assignor of one-half to A. Schinkel, New York, N. Y. Steam-boiler	499,828	June 20	1815	441	63	1734
Hahn, John J., assignor of one-half to A. Schinkel, New York, N. Y. Pump	507,911	Oct. 31	3442	845	65	698
Hahn, John W., <i>et al.</i> (See Scheurecker, Joseph, assignor.)						
Hahnel, Robert, Toledo, Ohio. Power-transmitter	494,331	Mar. 28	2548	{ 641 642 }	62	1895
Haig, Robert, Paisley, Scotland. Mechanical retort	505,356	Sept. 19	1715	{ 442 443 }	64	1619
Haigh, John A., Newport, Ky. Game apparatus	505,826	Oct. 3	36	10	65	10
Haight, George E. (See Mower and Haight.)						
Haight, Henry J., New York, N. Y. Electrical indicator	492,011	Feb. 21	1521	{ 380 381 }	62	1083
Haight, Henry S. (See Saum, Perry A., assignor.)						
Haight, Samuel J. (See Clark, John W., assignor.)						
Hailes, Frederick A., <i>et al.</i> , executors. (See Hailes, William.)						
Hailes, William, deceased, Albany, N. Y.; W. H. and F. A. Hailes, executors. Culinary vessel	506,849	Oct. 17	1784	449	65	364
Hailes, William, deceased, Albany, N. Y.; W. H. and F. A. Hailes, executors. Car-wheel	506,850	Oct. 17	1786	449	65	364
Hailes, William H., <i>et al.</i> , executors. (See Hailes, William.)						
Hailwood, John T., Rochdale, England. Stop-cock or tap	502,094	July 25	2491	626	64	498
Hain, Garrett E., Fremont, Mich. Nut-lock	495,551	Apr. 18	1635	416	63	343
Hain, Henry. (See Wilson and Hain.)						
Hain, Henry C., Booneville, Mo. Electric program-clock	496,258	Apr. 25	2752	688	63	557
Haindl, Joseph, Riesa, Germany. Revolving knife-block for shaping cones	503,317	Aug. 15	1813	449	64	925
Haines Brothers. (See Haines, William P., assignor.)						
Haines, Franklin, Yonkers, N. Y. Street-curb	508,308	Nov. 7	538	132	65	857
Haines, Fred M., Fort Fairfield, Me. Horse-hoe and fertilizer-distributor	509,468	Nov. 28	2516	607	65	1274
Haines, George B. (See Munson and Haines.)						
Haines, George B., Chicago, Ill. Ice-velocipede	510,133	Dec. 5	492	112	65	1502
Haines, Jacob E., Medford, N. J. Seeding attachment for vehicles	506,910	Oct. 17	1887	470	65	382
Haines, John F., Ringtown, Pa. Holdback for vehicles	502,718	Aug. 8	821	198	64	731
Haines, Joseph, <i>et al.</i> (See Gledhill, Walter, assignor.)						
Haines, William P., assignor to Haines Brothers, New York, N. Y. Piano	491,423	Feb. 7	592	149	62	861
Haiss, George, New York, N. Y. Hoisting-bucket	497,021	May 9	1019	261	63	820
Haldeman, Aquilla F. (See Mahaffey and Haldeman.)						
Hale, David. (See Young, Albert A., assignor.)						
Hale, Francis W., Boston, Mass. Pianoforte-mute	493,622	Mar. 14	1368	347	62	1640
Hale, Fred D., <i>et al.</i> (See Carpenter, James H., assignor.)						
Hale, George C., Kansas City, Mo. Bridle	505,762	Sept. 26	2446	616	64	1769
Hale, Henry S., Philadelphia, Pa. Manger	490,767	Jan. 31	2868	{ 735 736 }	62	635
Hale, Henry S., Philadelphia, Pa. Railway-car seat	505,246	Sept. 19	1535	400	64	1585
Hale, Henry S., Philadelphia, Pa. Seat for railway-cars	509,527	Nov. 28	2609	631	65	1292
Hale, James W., Newburyport, Mass. Plug or stopper for lavatory apparatus	492,012	Feb. 21	1528	381	62	1083
Hale & Kilburn Manufacturing Company. (See Hunter, Rudolph M., assignor.)						
Hale, Seth P. H., Williamsville, Mass. Apparatus for moving invalids	505,654	Sept. 26	2265	574	64	1736
Hales, Franklin J., Bush's Store, Ky. Door-securer	503,536	Aug. 15	2143	538	64	986
Haley, Addison E., administrator. (See Hanna, Thompson.)						
Haley, Benjamin F., Beatty, Ohio. Register for grain-measures	503,719	Aug. 22	2464	612	64	1060
Haley, Fred H., Hamilton, Ill. Revolving case for books	497,657	May 16	2051	{ 512 513 }	63	1019
Haley, William W., Moline, Ill. Locking device for car-doors, &c.	495,327	Apr. 11	1297	326	63	258
Halin, John B., assignor to J. G. Notter and J. G. Notter, trustee, Quincy, Ill. Incubator	499,989	June 20	2060	499	63	1778
Halkyard, William, Providence, R. I. Machine for setting lacing-hooks	509,733	Nov. 28	2929	708	65	1352
Halkyard, William, Providence, R. I. Machine for setting lacing-hooks	509,734	Nov. 28	2931	709	65	1353
Hall, Albert E. (See Barker, Peleg, assignor.)						
Hall, Alexander D., and G. B. Sloan, San Francisco, Cal. Screw-propeller	505,402	Sept. 19	1795	464	64	1634
Hall, Alexander W., New York, N. Y. Pianoforte	501,226	July 11	1105	281	64	217
Hall, Bicknell, Taunton, assignor to Wainwright Manufacturing Company, Boston, Mass. Corrugating-machine	491,259	Feb. 7	314	79, 80	62	809
Hall, Bicknell, Taunton, assignor to Wainwright Manufacturing Company of Massachusetts, Boston, Mass. Corrugating-machine	505,600	Sept. 26	2169	549	64	1718
Hall & Brown Wood Working Machine Co. (See Judd, Edwin, assignor.)						
Hall, Charles H. (See Flagg, Orrin H., assignor.)						
Hall, Charles H., <i>et al.</i> (See Stiles, Frederic, assignor.)						
Hall, Charles K., and W. B. Lillard, New Orleans, La. Electrical alarm system	504,980	Sept. 12	1109	{ 284 285 }	64	1493
Hall, Charles S., Medford, Mass. Book for bookkeeping	495,798	Apr. 18	2050	519	63	411
Hall Chemical and Gas Company. (See Hall, Thurston G., assignor.)						
Hall, Cofran I., San Francisco, Cal. Apparatus for controlling pumps	492,723	Feb. 28	2649	656	62	1325
Hall, Cofran I., assignor to Cahill & Hall Elevator Company, San Francisco, Cal. Valve for hydraulic elevators, &c.	509,847	Nov. 28	3116	752	65	1389
Hall, Edward H., <i>et al.</i> (See Tonns, Lewis N., assignor.)						
Hall, Edward J., Morris, N. J., assignor to American Telephone and Telegraph Company, of New York. Trunk-line signaling apparatus and circuit for telephone-exchanges	491,553	Feb. 14	804	204	62	924
Hall, Edward J., Morris, N. J., assignor to American Telephone and Telegraph Company, of New York. Central-office apparatus and circuit for telephone-exchanges	495,087	Apr. 11	872	223	63	182

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Hall, Edward J., Morris, and F. A. Pickernell, Newark, N. J., assignors to American Telephone and Telegraph Company, of New York. Signaling apparatus and circuit	492,482	Feb. 28	2259	564	62	1246
Hall, Edward J., Morris, and F. A. Pickernell, Newark, N. J., assignors to American Telephone and Telegraph Company, of New York. Busy-signal for telephone-circuits	492,483	Feb. 28	2263	564	62	1246
Hall, Ephraim O., Marshfield, Oreg. Hoop sawing and shaping machine	508,309	Nov. 7	539	132	65	857
Hall, Eva J., Stillwater, Minn., assignor to St. Croix Manufacturing Company, Hudson, Wis. Making needles	503,476	Aug. 15	2057	513	64	968
Hall, Francis, Tacoma, Wash. Preserving wood	506,493	Oct. 10	1220	65	65	245
Hall, Frank E., Newton, Mass. Glove-fastener	490,627	Jan. 24	2640	679	62	577
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove or clothing fastener	490,435	Jan. 24	2313	600	62	512
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove-fastener	490,436	Jan. 24	2314	601	62	513
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Button-setting machine	491,016	Jan. 31	3270	{ 835 836 }	62	714
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Button	496,155	Apr. 25	2593	652	63	529
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Button	496,357	Apr. 25	2929	731	63	592
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Button	496,408	May 2	28	8	63	624
Hall, Frank E., Newton, Mass., assignor, by mesne assignments, to Consolidated Fastener Company, Portland, Me. Glove-fastener	503,081	Aug. 8	1400	346	64	838
Hall, Frank S., <i>et al.</i> (See Gard and Wing, assignors.)						
Hall, Fred J., Wallingford, Conn. Bicycle-whistle	492,887	Mar. 7	182	44	62	1395
Hall, Fridolin, Donaueschingen, Germany. Hair-cleaning machine	504,348	Sept. 5	54	15	64	1281
Hall & Garrison. (See Williams, William, assignor.)						
Hall, George A., Grand Rapids, Mich. Fountain-pen	498,514	May 30	3438	853	63	1296
Hall, George F., <i>et al.</i> (See Bates, Sadie M., assignor.)						
Hall, Henry, assignor of two-thirds to H. H. Hall, Hill City, and J. L. Buckingham, Hermosa, S. D. Godevil	504,725	Sept. 12	672	{ 171 172 183 }	64	1409
Hall, Henry G., Blacksburg, S. C. Steaming apparatus	506,224	Oct. 10	730	{ 182 183 }	65	150
Hall, Henry H., <i>et al.</i> (See Hall, Henry, assignor.)						
Hall, Hiram, Jr., South Thomaston, assignor to Hall Manufacturing Company, Rockland, Me. Ax-helve. (Reissue)	11,312	Mar. 7	724	185	62	1501
Hall, Jacob G. (See Neff, John W., assignor.)						
Hall, James L. (See Chase, Frank H., assignor.)						
Hall, James L., Kingston, Mass., and F. H. Chase, Grand Rivers, Ky. Fruit-pitter	496,734	May 2	548	147	63	718
Hall, James L. and J. S., Eden, Ill. Combined governor and clutch	505,827	Oct. 3	38	10	65	10
Hall, James T., assignor of one-half to L. D. Craig, San Francisco, Cal. Brake-shoe	511,298	Dec. 19	2512	612	65	1904
Hall, John E., Lincoln, Nebr. Trolley-wheel	503,136	Aug. 15	1509	371	64	871
Hall, John H., Brantford, Canada. Stove-caster	502,189	July 25	2644	667	64	528
Hall, John S. (See Hall, James L. and J. S.)						
Hall, Joseph, Kirmington, near Brocklesby, England. Manual gymnasium for musicians	494,197	Mar. 28	2330	591	62	1855
Hall, Joseph B., Wheeling, W. Va. Producing aluminum	503,929	Aug. 22	2765	692	64	1119
Hall, Joseph J., Willow, Cal. Grate	500,493	June 27	2884	709	63	1935
Hall, Josiah N., Sterling, Colo. Shot-spreader for firearms	497,874	May 23	2406	600	63	1099
Hall, Julian D. (See Dare and Hall.)						
Hall, Lester, Kansas City, Kans. Rocking grate	493,085	Mar. 7	487	122	62	1456
Hall Manufacturing Company. (See Hall, Hiram, Jr., assignor.) (Reissue.)						
Hall, Mary E., Boston, Mass. Hemstitching attachment for sewing-machines	493,496	Mar. 14	1142	{ 292 293 }	62	1596
Hall, Orlando C., Auburn, N. Y., assignor to Sheldon Axle Company, Wilkes-Barré, Pa. Channeled axle bar and blank	492,553	Feb. 28	2389	593	62	1273
Hall, Samuel C. (See Gay, Chauncey W., assignor.)						
Hall, Samuel L., Chicago, Ill. Cake-machine	500,655	July 4	197	51, 52	64	38
Hall, Samuel L., Chicago, Ill. Apparatus for mixing dough	500,656	July 4	200	52	64	39
Hall Signal Company. (See Buchanan, John P., assignor.)						
Hall Signal Company. (See Daves, William, assignor.)						
Hall Signal Company. (See Johnson, Arthur H., assignor.)						
Hall Signal Company. (See Kenyon, William H., assignor.)						
Hall Signal Company. (See Wilson and Salmon, assignors.)						
Hall, Thomas. (See Holt, Charles C., assignor.)						
Hall, Thomas, New York, N. Y. Drill-grinder	497,095	May 9	1134	290	63	841
Hall, Thurston G., assignor to Hall Chemical and Gas Company, Chicago, Ill. Apparatus for manufacturing gas	494,198	Mar. 28	2333	591	62	1855
Hall, Thurston G., assignor to Hall Chemical and Gas Company, Chicago, Ill. Pyro-electric battery	494,199	Mar. 28	2334	592	62	1855
Hall, Thurston G., assignor to Hall Chemical and Gas Company, Chicago, Ill. Process of and apparatus for manufacturing gas	494,200	Mar. 28	2336	592	62	1856
Hall, Thurston G., assignor to Hall Chemical and Gas Company, Chicago, Ill. Smoke-consumer	494,201	Mar. 28	2341	593	62	1857
Hall, Van. (See Snodgrass, George M., assignor.)						
Hall, Walter A. (See Best and Hall.)						
Hall, Walter L. H., Kansas City, Mo. Extension-table	509,894	Dec. 5	80	20	65	1425
Hall, William, Fort Wayne, Ind. Shoe	500,385	June 27	2730	671	63	1908
Hall, William A., Bellows Falls, Vt. Apparatus for applying color to paper	505,982	Oct. 3	283	74	65	55
Hall, William H., Tiffin, Ohio. Pugging-mill	495,485	Apr. 18	1554	391	63	325
Hall, William H., Chicago, Ill. Signaling apparatus	505,102	Sept. 19	1317	340	64	1546
Hall, William M., Victoria, Miss. Car-coupling	502,295	Aug. 1	65	14	64	578
Hall, William N., Woodburn, Iowa. Car-coupling	498,789	June 6	59	14	63	1399
Hall, William T. (See Guthrie and Hall.)						
Hall, Willis E., Altoona, assignor to himself, and M. W. Rudderow, Philadelphia, Pa. Cylinder for power-boists	492,769	Feb. 28	2726	678	62	1340
Hall, Zachary T., Philadelphia, Pa. Making sheet-metal salvers	499,359	June 13	1031	249	63	1585
Hallanan, Michael, New York, N. Y. Elastic horseshoe	503,848	Aug. 22	2648	663	64	1096
Hallanan, Michael, New York, N. Y. Horseshoe and pad	503,849	Aug. 22	2649	663	64	1097
Hallanger, Tobias N., Chicago, Ill. Stove	505,463	Sept. 26	1896	488	64	1667
Hallas, James G., Waterbury, Conn. Hose-sleeve	511,138	Dec. 19	2244	551	65	1855
Hallas, James G., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Drawer-pull	508,878	Nov. 14	1436	356	65	1043
Hallden, John A., Ishpeming, Mich. Permutation-padlock	491,102	Feb. 7	61	17	62	760

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Haller, John B. (See Mentzer, Alonzo M., assignor.)						
Hallett, George W., Aberdeen, S. D. Feed-regulator for thrashing-machines	493,706	Mar. 21	1498	{ 383 384 }	62	1682
Halliwell, William J., and T. Donohue, Paterson, N. J. Fire-lighting attachment for steam-engines	496,156	Apr. 25	2594	653	63	529
Hallman, Clarence C., Paul's Valley, Indian Ter. Wagon-raiser	490,787	Jan. 31	2902	745	62	642
Hallock, William H. H., West Hampton, N. Y. Device for facilitating moving trunks on stairs	498,649	May 30	3672	908	63	1337
Hallsey, Charles P., Chicago, Ill. Saw	496,874	May 9	793	209	63	780
Halmshaw, Charles. (See Spivey and Halmshaw.)						
Halpin, Cornelius, North Tarrytown, N. Y. Car-coupling	500,890	July 4	564	146	64	103
Halsey, Charles B., assignor, by mesne assignments, to E. A. Halsey, New York, N. Y. Chair	491,724	Feb. 14	1077	272	62	980
Halsey, Effie A. (See Halsey, Charles B., assignor.)						
Halsey, William S., Allentown, Pa. Steam hydraulic crane	505,220	Sept. 19	1497	390	64	1578
Halstead, Charles F., La Crosse, Wis. Hose-band pliers	511,732	Dec. 26	3233	793	65	2048
Halstead, Charles L., La Crosse, Wis. Lantern-holder	501,833	July 18	2069	510	64	406
Halstenbach, August, Buffalo, N. Y. Washing-machine	489,475	Jan. 10	766	202	62	177
Haltermann, Harry, <i>et al.</i> (See Ballance, John, assignor.)						
Haltermann, Henry, <i>et al.</i> (See Ballance, John, assignor.)						
Halvardsgaard, Svein M., South Sioux Falls, S. D. Husking-pin	490,559	Jan. 24	2511	646	62	551
Halvorson, Cromwell A. B., Saugus, assignor of one-half to R. B. Lincoln, Boston, Mass. Bushing for incandescent-lamp sockets	491,682	Feb. 14	1012	255	62	968
Halyburton, John L., Philadelphia, Pa., assignor, by mesne assignments, to J. Wood, Jr., Haddonfield, N. J. Metallic rod-packing	509,895	Dec. 5	82	20	65	1425
Ham, Albert W., Lansingburg, N. Y. Machine for setting buttons	492,397	Feb. 28	2121	{ 529 530 }	62	1218
Ham, Albert W., Lansingburg, assignor to Trojan Button Fastener Company, Incorporated, Troy, N. Y. Machine for threading button-fasteners into the eyes of buttons	491,103	Feb. 7	62	17, 18	62	761
Ham, Charles T., assignor to C. T. Ham Manufacturing Company, Rochester, N. Y. Lantern	499,107	June 6	615	147	63	1498
Ham, Charles T., assignor to C. T. Ham Manufacturing Company, Rochester, N. Y. Lantern	511,421	Dec. 26	2741	663	65	1958
Ham, Edwin W., Worcester, Mass. Reed-organ	503,850	Aug. 22	2650	664	64	1097
Hamann, Carl, Reinbeck, Germany. Shears	492,198	Feb. 21	1809	452	62	1142
Hamann, Carl, Reinbeck, Germany. Shears	509,125	Nov. 21	1885	{ 460 461 }	65	1143
Hamann, Charles W., Brooklyn, N. Y. Bottle-washer	499,021	June 6	494	115	63	1477
Hamblin, Stephen M., New Bedford, assignor of one-half to E. S. Damon, Plymouth, Mass. Loom-shuttle	501,781	July 18	1998	493	64	393
Hamblin, Stephen M., New Bedford, assignor of one-half to E. S. Damon, Plymouth, Mass. Self-threading loom-shuttle	503,851	Aug. 22	2651	664	64	1097
Hambrio, Thomas W., Denver, Colo. Churn	491,644	Feb. 14	957	240	62	956
Hambrecht, Heinrich F., assignor to R. Hinrichsen, Hamburg, Germany. Corset-clasp	507,679	Oct. 31	3226	790	65	657
Hamburger, Leon, <i>et al.</i> (See Darley, John W., Jr., assignor.)						
Hamburger, Philip, <i>et al.</i> (See Darley, John W., Jr., assignor.)						
Hamel, Ephraim. (See Buckley, Thomas H., assignor.)						
Hamel, William J., assignor of one-half to F. Parker, Oswego, N. Y. Flue-scraper	507,812	Oct. 31	3443	845	65	698
Hamel, Henry W., Potsdam, N. Y. Spring-gear for vehicles	493,708	Mar. 21	1500	384	62	1682
Hamer, Samuel, assignor of one-half to J. Wilkinson, Swinton, near Manchester, England. Car-coupling	510,254	Dec. 5	691	{ 166 167 }	65	1541
Hamill, John F., P. B. Lentz, and C. T. Cole, York, Pa. Match-splint-bundling machine	490,963	Jan. 31	3187	815	62	698
Hamill, William J., St. Catharines, Canada. Sully	503,137	Aug. 15	1510	371	64	871
Hamilton, Charles F., Champaign, Ill. Cash-register	507,120	Oct. 24	2236	{ 552 553 }	65	460
Hamilton, Charles L. (See Newhall and Hamilton.)						
Hamilton, Charles W. (See Clark and Hamilton.)						
Hamilton, Eddie H., Washington, D. C. Wall-table	508,938	Nov. 21	1574	386	65	1083
Hamilton, Emery M., New York, N. Y. Piano-action	506,225	Oct. 10	732	183	65	150
Hamilton Folding Bed Company. (See Stevenson, Donald M., assignor.)						
Hamilton, Henry N., Yonkers, N. Y. Axle-bearing	510,255	Dec. 5	692	167	65	1541
Hamilton, Herbert E., Salmon Falls, N. H. Shuttle-binder for looms	504,349	Sept. 5	55	15	64	1281
Hamilton, Herbert E., N. Boivert, and G. Champoux, Salmon Falls, N. H. Loom	496,480	May 2	137	38	63	644
Hamilton, Herbert E., N. Boivert, and G. Champoux, Salmon Falls, N. H. Stopping mechanism for looms	498,881	June 6	236	55	63	1434
Hamilton, James. (See Webster and Hamilton.)						
Hamilton, James A. (See Weaver, Adams, and Hamilton.)						
Hamilton, John A., New York, N. Y. Type-writing machine	505,521	Sept. 26	2007	{ 513 514 }	64	1687
Hamilton, John S., Marysville, Ohio. Fence	501,341	July 11	1299	324	64	250
Hamilton, William, Bedford, Iowa. Hoof-weight	509,804	Nov. 28	3050	737	65	1377
Hamilton, William R., Indiana, Pa. Washing-machine	492,674	Feb. 28	2577	638	62	1310
Hamlet, Francis P., Hempstead, N. Y. Ironing-board	497,787	May 23	2263	568	63	1074
Hamlet, Noah, Little Rock, Ark. Sash-balance	503,596	Aug. 22	2261	566	64	1022
Hamlet, Thomas J., assignor of nine-sixteenths to C. S. Wallace, Terrebonne, Canada. Harvester	496,358	Apr. 25	2930	{ 731 732 }	63	593
Hamlin, Charles S., Los Angeles, assignor of one-half to A. C. Harper, University, Cal. Double-lap pipe	496,118	Apr. 25	2538	640	63	518
Hamlin, Charles S., Los Angeles, assignor of one-half to A. C. Harper, University, Cal. Sheet-metal pipe-bell lock-joint	498,210	May 23	2929	729	63	1190
Hamlin, Charles S., Los Angeles, assignor of one-half to A. C. Harper, University, Cal. Sheet-metal pipe	507,709	Oct. 31	3272	800	65	665
Hamlin, Frank D. (See Hobby, Delzon G., assignor.)						
Hamlin, Henry A., Minneapolis, Minn. Trolley-wire support	497,293	May 9	1465	369	63	898
Hammack, Emma C., <i>et al.</i> (See Lattimore, Daniel J., assignor.)						
Hamman, Frank M., assignor to Ariel Cycle Manufacturing Company, Goshen, Ind. Means for repairing cycle-tires	496,359	Apr. 25	2933	732	63	593
Hammann, Edward, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Water closet	510,598	Dec. 12	1284	313	65	1665
Hammann, Edward, Brooklyn, and T. Susemihl, assignors to J. L. Mott Iron Works, New York, N. Y. Sink	502,516	Aug. 1	450	108	64	649
Hammarström, Ernst F., Stockholm, Sweden, assignor of one-fifth to A. Jungmarker, Worcester, Mass. Combined cut-out and lightning-arrester	493,380	Mar. 14	960	247	62	1563
Hammel, Charles A. (See Foster and Hammel.)						
Hammen, Charles, Chicago, Ill. Reversing-engine	510,256	Dec. 5	693	168	65	1541

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Hammer, Alfred E., Branford, Conn. Core-machine	506,226	Oct. 10	735	183 184	65	151
Hammer, Alfred E., Branford, Conn. Machine for making cores for casting pipe-elbows, &c.	506,227	Oct. 10	740	184 185	65	151
Hammer, Alfred E., Branford, Conn. Machine for making cores for casting pipe-tees, &c.	506,228	Oct. 10	745	185 186	65	152
Hammer, Robert E., Philadelphia, Pa. Braking mechanism for cycles	511,614	Dec. 26	3048	742	65	2014
Hammer, William, Elyria, Ohio. Cultivator	493,707	Mar. 21	1499	384	62	1682
Hammer, William C. (See Allred, Elijah H., assignor.)						
Hammerl, Ignaz, assignor to A. Dolge, New York, N. Y. Harp	510,857	Dec. 12	1772	435	65	1753
Hammerle, Joseph, Allegheny, Pa. Self-waiting table	492,747	May 30	3856	950	63	1369
Hammerschmidt, Louis. (See Walker and Hammerschmidt.)						
Hammerstein, Charles L., St. Louis, Mo. Overshoe-holder	505,655	Sept. 26	2266	574	64	1737
Hammett, Clarence A., Newport, R. I. Carpet-sweeper	498,431	May 30	3299	823	63	1372
Hammett, James W., Eureka, W. Va. Roofing and siding strip	498,111	May 23	2771	694	63	1163
Hammill, James E. (See Towle, Felix S., assignor.)						
Hammond Buckle Company. (See Dalton, Daniel F., assignor.)						
Hammond, Charles N., assignor to Hammond Cleat and Insulator Company, Boston, Mass. Insulator	511,611	Dec. 26	3043	742	65	2013
Hammond, Charles N., assignor to Hammond Cleat and Insulator Company, Boston, Mass. Insulator	511,612	Dec. 26	3044	742	65	2014
Hammond, Charles N., assignor to Hammond Cleat and Insulator Company, Boston, Mass. Rosette for electric lights	511,613	Dec. 26	3045	742	65	2014
Hammond Cleat and Insulator Company. (See Hammond, Charles N., assignor.)						
Hammond, Edward D. (See Hammond, Eugene G. and E. D.)						
Hammond, Emma, Phelps, N. Y. Lamp-chimney	503,720	Aug. 22	2466	613	64	1060
Hammond, Eugene G. and E. D., Hanover, Ill. Washing and sizing machine	489,738	Jan. 10	1160	301 302	62	255
Hammond, Frank, assignor of one-third to J. Penman, Paris, Canada. Electric stop mechanism for knitting-machines	499,921	June 20	1966	477 478	63	1762
Hammond, Frank I. (See Jackson and Hammond.)						
Hammond, Henry, Balston, N. Y. Pipe tongs and wrench	492,199	Feb. 21	1810	452 453	62	1142
Hammond, James B., New York, N. Y. Type-writing machine	494,742	Apr. 4	340	86, 87	63	67
Hammond, James B., New York, N. Y. Type-writing machine	501,504	July 18	1542	388 389	64	311
Hammond, Thomas E. (See Northway and Hammond.)						
Hamper, Henry, Greenville, Mich. Grain-separator	498,388	May 30	3235	805	63	1260
Hampel, Anthony, Cincinnati, Ohio. Carriage-curtain fastener	506,110	Oct. 3	482	125	65	94
Hampel, Hugo. (See Weber and Hampel.)						
Hampson, William H., Cambridge, Mass. Coupling	508,705	Nov. 14	1176	290	65	994
Hampton, George P. (See Cooper and Hampton.)						
Hanaford, Riley, Beloit, Wis. Coupling for extension-table leaves	489,001	Jan. 3	37	11	62	10
Hanchett, John L., Sioux City, Iowa. Surgical-needle holder	508,939	Nov. 21	1576	386	65	1083
Hancock, Addison, Allegheny, Pa. Mixer and stirrer	504,472	Sept. 5	262	68	64	1319
Hancock, Addison, Allegheny, Pa. Grain-scourer	507,903	Oct. 31	3585	884 885	65	724
Hancock, Andrew J. (See Armour and Hancock.)						
Hancock, Edwin A., E. E. Lovelace, and T. F. Lawless, Lynchburg, Va. Plug-tobacco form	489,900	Jan. 10	1404	363	62	304
Hancock, George, Providence, R. I. Brake for velocipedes	503,112	Aug. 8	1461	359	64	849
Hancock, George, Providence, R. I. Elastic tire for vehicle-wheels	511,733	Dec. 26	3234	793	65	2049
Hancock, George, assignor to himself and S. Smith, Providence, R. I. Vestibuled railway-car	489,906	Jan. 10	1413	366	62	306
Hancock Inspirator Company. (See Park and Williston, assignors.)						
Hancock, Milton T., Shreveport, La. Rotary plow	504,779	Sept. 12	778	196 197	64	1429
Hancock, Milton T., Shreveport, La. Bedding-plow	506,429	Oct. 10	1107	274	65	223
Hancock, Milton T., Shreveport, La. Rotary plow	506,815	Oct. 17	1731	435	65	354
Hancock, Milton T., Shreveport, La. Device for attaching horses to vehicles	510,537	Dec. 12	1181	284	65	1646
Hancock, Milton T., Shreveport, La., E. C. Atkins and N. H. Roberts, Indianapolis, Ind., assignors to said Atkins. Rotary plow	496,119	Apr. 25	2539	641	63	518
Hand, Nelson T., Kincaid, Kans. Box-lid fastener	489,531	Jan. 10	862	225	62	195
Hand, Samuel S., Camden, assignor of one-half to D. Focer, Cape May, N. J. Screw-driver	508,706	Nov. 14	1177	290	65	994
Hand, Thomas W. (See Etheridge, Richard L., assignor.)						
Handfield, Oliver J., Springfield, Mass. Keeper for coins, medals, or the like	495,248	Apr. 11	1180	296	63	237
Handlan, Alexander H., Jr., St. Louis, Mo. Headlight	504,214	Aug. 29	3249	810	64	1226
Handy Coal Cutter Company of Illinois. (See Wantling and Johnson, assignors.)						
Handy, Edward A., et al. (See Beeman, Frank A., assignor.)						
Hanebeck, Carl W., Iserlohn, Germany. Machine for manufacturing fishing-hooks	501,906	July 18	2193	545	64	427
Hanes, Joseph T., and T. Blankinsop, Martin's Ferry, Ohio. Apparatus for forming stemmed glass articles	490,905	Jan. 31	3099	795	62	681
Haney, Charles A., Brooklyn, N. Y. Numbering-head	510,912	Dec. 19	1861	458	65	1782
Haney, John Q. A., Buckhannon, W. Va. Vehicle running-gear	498,112	May 23	2771	694	63	1163
Hanhart, Louis. (See Myers and Hanhart.)						
Hankenhof, Julius, New York, N. Y. Water-closet cistern	505,601	Sept. 26	2170	549	64	1719
Hankey, Anton, Gilman, Colo. Carpet-stretcher	501,617	July 18	1725	430	64	346
Hapkin, John, Rutherford, N. J. Car-ventilator	503,047	Aug. 8	1353	334	64	830
Hankinson, William H., New York, N. Y. Dust-collector	507,319	Oct. 24	2607	641	65	527
Hanks, William R., assignor of one-half to J. E. Selfe, Wellesley, Mass. Water-filter	503,597	Aug. 22	2262	566	64	1022
Hanley, John C. (See Brazier, James D., assignor.)						
Hanley, Patrick J., Amesbury, Mass. Vehicle-brake	508,612	Nov. 14	1037	256	65	967
Hanlon, Edward L., Boston, assignor to E. W. Blake, Pepperell, Mass. Hose-supporter	511,015	Dec. 19	2044	505	65	1816
Hannore, Howard B., St. Paul, and T. M. McLean, Fergus Falls, Minn. Car-brake	495,799	Apr. 18	2053	519	63	412
Hann, George V. (See Zimmerman, Lawrence J., assignor.)						
Hanna, David, Ogdensburg, N. Y. Process of and apparatus for purifying water	502,252	July 25	2759	698	64	550
Hanna, George. (See Casey, Ezekiah, assignor.)						
Hanna, Robert. (See Reid, Hanna, Holroyd, and Wheat.)						
Hanna, Thompson, deceased; A. E. Haley, Kennebunk, Me., administrator. Manufacturing parchmentized paper-board	510,421	Dec. 12	957		65	1606
Hanna, Thompson, deceased; A. E. Haley, Kennebunk, Me., administrator. Manufacturing parchmentized paper and paper-board	510,422	Dec. 12	958		65	1606
Hanna, Thompson, deceased; A. E. Haley, Kennebunk, Me., administrator. Manufacturing parchmentized paper-board	510,423	Dec. 12	959		65	1606

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Hanna, Thompson, deceased; A. E. Haley, Kennebunk, Me., administrator. Manufactur- ing parchmentized paper-board.	510,424	Dec. 12	960		65	1606
Hanna, William A., Henry, Ill. Vehicle-tongue.	492,013	Feb. 21	1530	381	62	1084
Hanna, William H., Petersburg, Ill. Sewing-machine.	491,554	Feb. 14	810	{ 204 205 }	62	925
Hannahs, Fred C., assignor to Kenosha Crib Company, Kenosha, Wis. Folding bed.	506,316	Oct. 10	889	219	65	181
Hannahs, Fred C., assignor to Kenosha Crib Company, Kenosha, Wis. Cradle.	509,848	Nov. 28	3119	753	65	1389
Hanneken, John H., and J. T. May, Villa Ridge, Mo. Garden implement.	509,308	Nov. 21	2189	526	65	1202
Hannen, John W., assignor of one-half to E. B. Seymour, Grand Rapids, Mich. Blank book.	506,634	Oct. 10	1419	356	65	285
Hannigan, Willis H., Manistique, Mich. Hame.	492,157	Feb. 21	1752	436	62	1130
Hannum, Henry A., assignor of one-half to P. A. Webster, Cazenovia, N. Y. Commi- nut-ing-machine. (Reissue).	11,298	Jan. 3	712	{ 190 191 }	62	153
Hanover, Henry D. (See Mahoney and Hanover.)						
Hansbarger, Harvey, Pittsburg, Ohio. Fence.	505,357	Sept. 19	1717	443	64	1619
Hanscom, Aaron B., North Andover, Mass. Feed-roll for opening, picking, and carding machines.	499,423	June 13	1149	276	63	1605
Hansell, William H., Philadelphia, Pa. Car-brake.	507,001	Oct. 17	2027	501	65	409
Hansell, William H., Philadelphia, Pa. Car-truck.	511,016	Dec. 19	2045	{ 505 506 }	65	1816
Hansen, Adolph C., Chicago, Ill. Cash indicator and register.	503,598	Aug. 22	2263	567	64	1022
Hansen, Christian, Rockford, Ill. Vehicle-gear.	502,905	Aug. 8	1121	276	64	788
Hansen, Christian D. A. (See Storch, Wilhelm, assignor.)						
Hansen, Fred. (See Labudde and Hansen.)						
Hansen, Frits, Leipsic-Reudnitz, Germany. Electric-arc lamp.	496,409	May 2	29	8, 9	63	624
Hansen, Hans M., Quincy, Mass. Shoe.	501,505	July 18	1545	389	64	312
Hansen, Jens, assignor of three-fourths to O. Hansen, H. and J. Dahly, Chicago, Ill. Waiter's stand.	494,704	Apr. 4	276	70	63	55
Hansen, Julius W., assignor of one-half to W. H. Eimers, St. Paul, Minn. Electric motor.	490,280	Jan. 24	2073	542	62	465
Hansen, Niels, Cedar Falls, Iowa. Post-support.	490,651	Jan. 31	2686	692	62	600
Hansen, Oscar, et al. (See Hansen, Jens, assignor.)						
Hansen, Peter, Antigo, Wis. Stump-extractor.	507,121	Oct. 24	2239	553	65	460
Hansen, Rasmus. (See Augustenborg and Hansen.)						
Hansen, Thorwald. (See Andersen, Hans C., assignor.)						
Hansen, Thorwald T. A., Copenhagen, Denmark. Centrifugal butter-extractor.	498,470	May 30	3364	838	63	1284
Hanson, Alice A., Baltimore, Md. Child's carriage.	490,114	Jan. 17	1783	464	62	397
Hanson, Dempsey B. (See Hinkley, Hanson, and Trout.)						
Hanson, Freeman, Bar Mills, assignor of two-thirds to H. and W. J. Knowlton, Portland, Me. Danger-signal.	506,175	Oct. 3	610	156	65	118
Hanson, George F., San Francisco, Cal. Folding chair.	509,735	Nov. 28	2933	710	65	1353
Hanson, Hans C., Hobart, Ind. Composite puzzle.	499,383	June 13	1067	{ 259 260 }	63	1591
Hanson, Harry. (See Richard and Hanson.)						
Hanson, Henry G., Trevor, Wis. Car-replacer.	496,935	May 9	895	{ 234 235 }	63	799
Hanson, Isaac W. (See Shaw, Lorenzo C., assignor.)						
Hanson, John F., Macon, Ga. Clothes-drier.	489,305	Jan. 3	495	137	62	108
Hanson, Joseph H., assignor of one-half to W. J. Brown, J. F. Hocking, F. Scadden, and G. E. Voos, Crystal Falls, Mich. Thill-coupling.	502,816	Aug. 8	980	238	64	761
Hanson, Martin, San Francisco, Cal. Miter-box.	509,736	Nov. 28	2935	710	65	1353
Hanson, Paul, Chicago, Ill. Grain-binder.	510,174	Dec. 5	554	{ 129 130 131 }	65	1515
Hanson, Paul, assignor to William Deering & Company, Chicago, Ill. Self-binding har- vester.	503,283	Aug. 15	1744	{ 431 432 433 }	64	914
Hansson, Charles A., Brooklyn, N. Y. Producing pure cultivated pressed yeast.	491,939	Feb. 14	1412	353	62	1046
Hansson, John, New York, N. Y. Seed-planter.	492,920	Mar. 7	239	60	62	1406
Happgood, Sherman, Deering, Me. Snow-roller.	505,944	Oct. 3	218	57	65	43
Happold, Henry C., New York, N. Y. Screw-propeller.	507,320	Oct. 24	2609	642	65	527
Harbaugh, Idah M. (See Grnaaff and Harbaugh.)						
Hardcastle, Charles F., Philadelphia, Pa., and A. H. Bardsley, Rosedale, N. J. Adjust- able brush-bridle.	497,788	May 23	2264	568	63	1074
Harcourt, Matthew, Detroit, Mich. Vehicle-gear.	494,332	Mar. 28	2549	642	62	1895
Hard, John R., New York, N. Y. Electrical annunciator.	492,519	Feb. 28	2330	578	62	1260
Hardee, Isaiah, Burke, Tex. Rotary stock-cutter.	492,675	Feb. 28	2578	638	62	1310
Hardegger, Arnold, Flayyl, assignor to A. Meyer-Kreis, St. Gall, Switzerland. Fabric- holding frame for embroidering-machines.	511,522	Dec. 26	2889	{ 703 704 }	65	1987
Hardeman, Emmanuel J., et al. (See Smith, Jacob C., assignor.)						
Harden, Edward W. (See Ramsey and Harden.)						
Harden, Edward W. (See Weir and Harden.)						
Harden, Edward W., assignor to F. C. Weir, Cincinnati, Ohio. Direct-acting and compound engine.	490,348	Jan. 24	2190	570	62	489
Harden, Edward W., assignor to F. C. Weir, Cincinnati, Ohio. Steam-engine.	490,349	Jan. 24	2192	{ 570 571 }	62	489
Harden, Edward W., assignor to F. C. Weir, Cincinnati, Ohio. Valve-controlling mechan- ism.	505,764	Sept. 26	2449	{ 616 617 }	64	1769
Harden, Edward W., assignor to F. C. Weir, Cincinnati, Ohio. Quadruplex engine.	507,433	Oct. 24	2791	{ 683 684 }	65	563
Harder, Charles N. (See Sagendorph, Longley L., assignor.)						
Harder, James E., Niles, Mich., and J. H. Fox, Springfield, Ohio. Device for removing sediment from the bottoms of liquid-storage vessels.	500,742	July 4	336	89	64	63
Hardie, Charles E. (See Grass and Hardie.)						
Hardie, Robert, Brooklyn, assignor to H. C. Elliot, New York, N. Y. Cigarette-machine.	495,613	Apr. 18	1756	{ 443 444 }	63	361
Hardie, Robert W., Albany, N. Y. Disk harrow.	496,198	Apr. 25	2652	666	63	540
Hardiman, G. H. (See Steffey, William E., assignor.)						
Harding, Charles W. (See Webber, John T., assignor.)						
Harding, Edward W., Boston, Mass. Fender for railway-cars.	506,396	Oct. 10	1037	259	65	210
Harding, Hannah F., Sydney, New South Wales. Invalid-mattress.	509,081	Nov. 21	1604	443	65	1128
Harding, Henry J. (See Watson, William, assignor.)						
Harding, Philip A., et al. (See Henry, John, assignor.)						
Harding, Thomas G., assignor of one-half to J. W. Goodell, Burlington, Vt. Implement for banding boxes.	493,330	Mar. 14	888	227	62	1547
Hardman, Fred H., Beverly, assignor to W. E. Bennett, Boston, Mass. Shank-button.	489,864	Jan. 10	1337	349	62	293

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Hardman, Peter. (See Kerr and Hardman.)						
Hardoin, Nicolas, Detroit, Mich. Tap and filler for oil-cans.	491,349	Feb. 7	489	125	62	841
Hardoin, Nicolas, Detroit, Mich. Beer tap and rump.	493,086	Mar. 7	489	122	62	1456
Hardsoeg Manufacturing Company. (See Grotz, Charles, assignor.)						
Hardsoeg, Martin, Ottumwa, Iowa. Mining-machine	493,381	Mar. 14	961	{ 247 248 }	62	1563
Hardware Specialty Company. (See Goulden, Samuel, assignor.)						
Hardwick, Frederick W., Passaic, N. J., assignor to New York Belting and Packing Company, Limited, of England. Valve for pneumatic tires.	501,715	July 18	1885	469	64	374
Hardwick, Frederick W., Passaic, N. J., assignor to New York Belting and Packing Company, Limited, of England. Pneumatic tire.	501,716	July 18	1886	469	64	374
Hardwick, Harry, Philadelphia, Pa. Jacquard mechanism	490,350	Jan. 24	2193	571	62	490
Hardwick, Harry, Thompsonville, Conn. Jacquard mechanism for looms	497,277	May 9	1411	{ 357 358 359 }	63	890
Hardwick, Harry, Thompsonville, Conn. Ingrain carpet fabric.	505,788	Sept. 26	2483	{ 626 627 }	64	1776
Hardwick, Harry, Thompsonville, Conn. Ingrain carpet fabric.	505,789	Sept. 26	2485	627	64	1777
Hardwick, Harry, Thompsonville, assignor to Hartford Carpet Company, Hartford, Conn. Jacquard mechanism for looms	497,022	May 9	1021	261	63	820
Hardwick, Saunie W., et al. (See Elam, William E., assignor.)						
Hardt, Louis, Yuba City, Cal. Plane	502,906	Aug. 8	1123	277	64	788
Hardy, Charles S. (See Barker and Reynolds, assignors.)						
Hardy, Charles S., San Diego, Cal. Device for refrigeration and storage.	509,805	Nov. 28	3052	737	65	1377
Hardy, Charles S., San Diego, Cal. Refrigerator-car.	509,806	Nov. 28	3056	737	65	1377
Hardy, Charles S., San Diego, Cal. Refrigerator-car.	509,807	Nov. 28	3057	738	65	1378
Hardy, Colin F., assignor of one-half to L. M. Godley, Scottsville, N. Y. Bolting apparatus	494,952	Apr. 4	663	{ 170 171 }	63	128
Hardy, Lewis W., Chicago, Ill., assignor of two-thirds to H. Rickel and J. A. Ward, Cedar Rapids, Iowa. Steam-pump	492,797	Mar. 7	39	9, 10	62	1367
Hare, William W. (See Wood and Hare.)						
Harford, John H. (See Raymond, Charles W., assignor.)						
Hargraves, Robert F., Providence, R. I. Friction ratchet-clutch	495,328	Apr. 11	1298	326	63	259
Hargreaves, George, Syracuse, N. Y. Switch.	509,896	Dec. 5	84	21	65	1426
Hargreaves, William, Philadelphia, Pa. Fireproof stage	497,240	May 9	1354	344	63	881
Harkins, Charles, Menlo Park, Cal. Hat	504,350	Sept. 5	56	15	64	1281
Harkinson, David, Philadelphia, Pa. Kitchen table and cabinet	498,974	June 6	401	94	63	1462
Harksen, Alfred J., assignor to A. B. Flesher, Hoboken, N. J. Ironing-board	507,221	Oct. 24	2437	601	65	495
Harman, Samuel W., Rogers, Ark. Dish-cleaner	495,329	Apr. 11	1299	326	63	259
Harman, Samuel W., Rogers, Ark. Steam-cooker	496,056	Apr. 25	2448	618	63	501
Harmer, Edward, Ottawa, Canada. Advertising device	501,137	July 11	966	247	64	191
Harmon, Charles H., D., and A. McKee, Milton, Oreg. Cultivator	497,658	May 16	2054	513	63	1019
Harmon, John B. (See Hawkins and Harmon.)						
Harmon, Joseph, and G. W. Faber, Duluth, Minn. Nut-lock	508,823	Nov. 14	1346	333	65	1026
Harmon, Leve O., and W. E. Rhodes, Erie, Pa. Injector	495,486	Apr. 18	1555	391	63	326
Harmon, Martin, Bloomington, Ill. Car-coupling	495,132	Apr. 11	985	247	63	201
Harms, August E., Pikeville, N. Y. Feed-water regulator	501,834	July 18	2070	511	64	406
Harnden, Henry H., Rockford, Ill. Draft-elevator	505,160	Sept. 19	1408	362	64	1561
Harned, Frank P., assignor to Warren Manufacturing Company, Merchantville, N. J. Preparing cast astrigent pencils	497,659	May 16	2056		63	1020
Harner, Daniel W. (See Weaver, John A., assignor.)						
Harness, Samuel A., assignor to T. and J. Diedrich, Celina, Ohio. Ice-tongs	496,649	May 2	412	111	63	694
Harper, Abraham T., Portland, Me. Cap for tobacco-pipes.	499,384	June 13	1070	260	63	1592
Harper, Arthur C. (See Hamlin, Charles S., assignor.)						
Harper, Clarence L., Philadelphia, Pa. Combined trousers hanger and press	498,054	May 23	2685	672	63	1147
Harper, Edmond W. (See Staton, Charles P., assignor.)						
Harper, Fred D., Woonsocket, R. I., assignor to Cushman Paper Box Machine Company, Portland, Me. Paper-box machine	498,975	June 6	403	94	63	1462
Harper, Fred D., Woonsocket, R. I., assignor to E. H. Taylor and G. E. Gooding, Lynn, Mass. Feeding device for paper-box-making machines	498,976	June 6	404	95	63	1463
Harper, Henry, assignor to himself, J. Tryon, and T. G. Poole, London, England. Electric arc lamp.	492,200	Feb. 21	1811	453	62	1143
Harper, Henry, assignor to himself, J. Tryon, and T. G. Poole, London, England. Electric arc lamp.	492,201	Feb. 21	1812	{ 453 454 }	62	1143
Harper, James, assignor of one-half to F. Clingfast, La Pile, Ark. Railway-gate	499,360	June 13	1032	{ 249 250 }	63	1585
Harper, James M. (See Otis and Harper.)						
Harper, James M., Peoria, Ill. Tube-compressor	504,268	Aug. 29	3334	833	64	1242
Harper, Lewis W., New York Mills, Minn. Velocipede-saddle	501,782	July 18	1999	494	64	393
Harper, Lewis W., New York Mills, Minn. Unicycle	511,139	Dec. 19	2245	551	65	1855
Harper, Smith, et al. (See Cornell, Elijah B., assignor.)						
Harper, Thomas, assignor to W. S. Hurley and D. Alexander, Brooklyn, and A. P. Meylert, New York, N. Y. Machine for buffing metal tubes	505,221	Sept. 19	1499	{ 390 391 392 }	64	1578
Harper, Thomas, assignor to W. S. Hurley, D. Alexander, Brooklyn, and A. P. Meylert, New York, N. Y. Machine for printing transfers from engraved rolls	509,528	Nov. 28	2611	{ 631 632 }	65	1292
Harpfer, John, Detroit, Mich. Folding camp-chair	493,709	Mar. 21	1502	384	62	1682
Harpman, John, Victoria, Ill. Pile-driver	496,306	Apr. 25	2830	707	63	573
Harrah, Daniel, Gila, Ill. Folding crate, box, &c	490,281	Jan. 24	2076	542	62	465
Harrah, Philip J., Bloomfield, Ind. Folding bed.	493,711	Mar. 21	1505	385	62	1683
Harre, William G., and M. M. Hutt, Yonkers, N. Y. Ingrain carpet fabric.	508,106	Nov. 7	207	55	65	797
Harriman, George M., South Thomaston, Me. Saw-frame	506,111	Oct. 3	483	125	65	94
Harrington, Charles, assignor of one-half to E. Rowntree, Bartlett, Tex. Baling-press	504,033	Aug. 29	2949	738	64	1169
Harrington, Charles F., Lyndhurst, N. J., assignor to McKee & Harrington, New York, N. Y. Wheel	506,430	Oct. 10	1108	274	65	223
Harrington, Ernest A., Beloit, Kans. Corn-harvester	493,710	Mar. 21	1503	385	62	1683
Harrington, George P. (See Richards, Frank P., assignor.)						
Harrington, George W., Wakefield, Mass. Pipe coupling or fitting	492,159	Feb. 21	1754	437	62	1130
Harrington, George W., Pullman, Ill. Dumping-wagon	507,122	Oct. 24	2241	553	65	461
Harrington, George W., assignor of one-half to D. H. Darling, Wakefield, Mass. Preparing the ends of lined pipes for jointing	489,949	Jan. 17	1507	394	62	340
Harrington, George W., assignor of one-half to D. H. Darling, Wakefield, Mass. Method of and apparatus for forming lined pipe	489,950	Jan. 17	1508	394	62	340
Harrington, George W., assignor of one-half to D. H. Darling, Wakefield, Mass. Tool for cutting lead-lined iron pipe	492,158	Feb. 21	1753	436	62	1130

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Harrington, Harry E., Oskaloosa, Iowa. Pipe or flue connection for steam-boilers	507,321	Oct. 24	2609	642	65	527
Harrington, Samuel H., Indianapolis, Ind. Railway-signal	495,938	Apr. 18	2262	569 570	63	451
Harrington, Theodore, Southbridge, Mass. Racing-sulky	498,790	June 6	60	14	63	1399
Harrington, Theodore, Southbridge, Mass. Racing-sulky	508,707	Nov. 14	1179	291	65	995
Harriott, George, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Bicycle	499,109	June 6	622	149	63	1499
Harris, Charles, Brighton, England. Steamship	491,170	Feb. 7	182	46	62	782
Harris, Charles E., Brandon, Canada. Horse-detaching device	495,330	Apr. 11	1301	327	63	259
Harris, Charles L., Omaha, Nebr. Chute for transferring material	511,332	Dec. 26	2574	626	65	1928
Harris, Charles R., Williamsport, Pa. Wire buckle	500,764	July 4	372	96	64	69
Harris, Charles R., Williamsport, Pa. Suspender-buckle	501,067	July 11	839	218	64	168
Harris, Charles R., Williamsport, Pa. Metal binding	507,002	Oct. 17	2028	501	65	410
Harris, Charles R., Williamsport, Pa. Portable steam radiator or heater	510,067	Dec. 5	383	84	65	1482
Harris, Charles R., Williamsport, Pa. Chain-link	510,134	Dec. 5	493	112	65	1503
Harris, Clinton O., assignor of one-half to L. W. Bemis, Chicopee Falls, Mass. Machine for the manufacture of screw-cutting dies	500,494	June 27	2885	710	63	1935
Harris Electrical Propulsion Company. (See Harris, Thomas, assignor.)						
Harris, Erwin W., Palisade, Nev. Furnace-door	510,786	Dec. 12	1601	399	65	1725
Harris, Eugene F., et al. (See Darnell, Calvin F., assignor.)						
Harris, Frank E., Lewiston, assignor to J. M. Jordan, Auburn, Me. Tag-fastener	509,529	Nov. 28	2614	632	65	1292
Harris, Frank H., Toledo, Ohio. Toy vehicle	500,805	July 4	435	114	64	80
Harris, Frank M., deceased, New Albany, Ind.; W. W. Tuley, executor. Uniting metals	489,077	Jan. 3	142	40	62	35
Harris, George A., Bridgeton, N. J. Envelope-fastening	510,787	Dec. 12	1603	399	65	1725
Harris, George H., Kenton, Ohio. Latch and lock	495,971	Apr. 25	2312	584	63	476
Harris, George W., New York, N. Y. Storage-battery electrode	489,186	Jan. 3	313	87	62	71
Harris, Ira F., et al. (See Adams and Lynam, assignors.)						
Harris, John, Chicago, Ill. Hollow-chisel mortising-machine	494,140	Mar. 28	2240	571 572	62	1837
Harris, John C. F., assignor of one-half to H. Merrill, Littleton, N. H. Sleigh	503,478	Aug. 15	2060	514	64	970
Harris, Joseph A. (See Davison, Charles C., assignor.)						
Harris, K. W. (See Harris, Stephen G., assignor.)						
Harris, Levi, assignor of three-fourths to O. M. Allen, Sr., and H. B. Peck, Kalamazoo, Mich. Vehicle-hub-attaching device	493,771	Mar. 21	1614	411	62	1705
Harris, Levi, assignor of two-thirds to O. M. Allen, Sr., and H. B. Peck, Kalamazoo, Mich. Car wheel and axle	505,983	Oct. 3	284	74	65	55
Harris, Louie J., Boston, Mass., assignor to G. W. Bancroft, Chicago, Ill. Car-vestibule	498,432	May 30	3300	823	63	1272
Harris, Luther M., Somerville, Mass. Cigar	492,676	Feb. 28	2580	638	62	1310
Harris, Mary B., New Albany, Ind. Type-writing machine	489,306	Jan. 3	496	137	62	108
Harris, Mary M., Chicago, Ill. Refrigerator	492,286	Feb. 21	1944	426	62	1170
Harris, Max, Everett, and N. Harris, Boston, Mass. Trousers	502,253	July 25	2761	698	64	550
Harris, Nathan. (See Harris, Max, and N.)						
Harris, Nelson E., Orange, Mass. Hydraulic motor	506,876	Oct. 17	1825	457	65	370
Harris, R. Duncan. (See Whalin, Adolph, assignor.)						
Harris, Robert N., Hickory, N. C. Coffee-strainer	492,981	Mar. 7	330	83	62	1424
Harris, Samuel, Cleveland, Ohio. Means for supporting trolley-wires	506,317	Oct. 10	890	219	65	181
Harris, Samuel, assignor to Steel Motor Company, Cleveland, Ohio. Trolley-stand	491,210	Feb. 7	242	61	62	793
Harris, Samuel, assignor to Steel Motor Company, Cleveland, Ohio. Truck for street-cars	493,770	Mar. 21	1612	410	62	1704
Harris, Stephen C., et al. (See Winsor, George H., assignor.)						
Harris, Stephen G., Cynthia, Ind., assignor of one-half to K. W. Harris, Alvin, Tex. Post-driver	495,800	Apr. 18	2054	520	63	412
Harris, Thomas, assignor to Harris Electrical Propulsion Company, Limited, Detroit, Mich. Electric-railway system	490,248	Jan. 17	2008	525	62	440
Harris, Thomas, assignor, by mesne assignments, to Harris Electrical Propulsion Company, Limited, Detroit, Mich. Electric-railway system	493,623	Mar. 14	1370	348	62	1640
Harris, Thomas F., Anniston, Ala. Device for forming beads in molds	508,385	Nov. 7	665	163	65	881
Harris, Walter B., and C. W. Claybourne, Indianapolis, Ind. Gas or oil burner	508,384	Nov. 7	662	163	65	881
Harris, Walter T., et al. (See Kitton, John C., assignor.)						
Harris, William E. B., Vincennes, Ind. Clothes-drier	494,141	Mar. 28	2246	512	62	1838
Harris, William F., San Francisco, Cal. Faucet	503,477	Aug. 15	2059	573	64	969
Harris, William S., Niles, Ohio. Eaves-trough	493,497	Mar. 14	1147	293	62	1597
Harris, William S., Niles, Ohio. Metallic roofing	496,685	May 2	467	126	63	704
Harris, William T., Baltimore, Md., assignor of one-eighth to E. W. Bradford, Indianapolis, Ind. Vehicle-motor	495,733	Apr. 18	1952	491 492	63	394
Harrison, Abraham C., Grand Rapids, Ohio. Fence-post	502,623	Aug. 1	627	150	64	682
Harrison, Alfred H. (See Champney, George F., assignor.)						
Harrison, Andrew L., Wilmington, N. C. Relief-valve	500,891	July 4	565	147	64	103
Harrison, Benjamin J., New York, N. Y. Step-ladder	497,096	May 9	1135	290	63	841
Harrison, Charles T., Falling Spring, W. Va. Car-coupling	503,346	Aug. 15	1857	459	64	933
Harrison, Dallas M. (See Trippe, Merrill H., assignor.)						
Harrison, Eben L., et al. (See Merrill, Anson P., assignor.)						
Harrison, Edward M., Fort Smith, Ark. Telephone	499,108	June 6	617	148	63	1498
Harrison, Frederick J., Brooklyn, assignor to E. & H. T. Anthony & Company, New York, N. Y. Film measuring and cutting device	492,354	Feb. 21	2053	512	62	1192
Harrison, George A., et al. (See Mustard, James E., assignor.)						
Harrison, Henry J. (See Harrison, Joseph N. and H. J.)						
Harrison, Henry P. (See Loyd, William T., assignor.)						
Harrison, James. (See Cook and Harrison.)						
Harrison, John, Brooklyn, N. Y., assignor to Herbert Booth King & Brother Publishing Company, of New Jersey. Advertising device	510,599	Dec. 12	1285	313	65	1665
Harrison, Joseph N. and H. J., San Francisco, Cal. Electrode for firing explosives	502,965	Aug. 8	1232	303	64	807
Harrison, Joseph N. and H. J., San Francisco, Cal. Flash-light apparatus for photographers' use	504,578	Sept. 5	439	112	64	1352
Harrison, Philip B., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake-beam	508,940	Nov. 21	1577	386	65	1083
Harrison Machine Works. (See Stout, James A., assignor.)						
Harrison, Nancy M., Perry, Iowa. Carpet-fastener	493,401	Mar. 14	988	255	62	1569
Harrison, Samuel A., New York, N. Y. Registering or counting hand-stamp	493,498	Mar. 14	1148	293	62	1597
Harrison, Thomas S., and C. Semper, Philadelphia, Pa. Aluminous compound	497,570	May 16	1919	.....	63	995
Harrison, Thomas S., and C. Semper, Philadelphia, Pa. Making aluminous compounds	497,571	May 16	1920	.....	63	995
Harrison, Walter J., et al. (See Merrill, Anson P., assignor.)						
Harrison, Walton, Meridian, Miss. Counter-pressure fluid-bearing	506,779	Oct. 17	1673	422	65	343
Harrison, William D. (See Thompson, Murphree, and Harrison.)						
Harrison, William H., Newark, N. J. Veil-fastener	506,494	Oct. 10	1221	304	65	245

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Harrison, William H., Centre Hill, Ark. Bedstead	508,517	Nov. 14	892	220	65	939
Harrison, William S., Hong-Kong, China. Telephonic apparatus	509,530	Nov. 28	2615	632	65	1292
Harrity, John J., Jr., Philadelphia, Pa. Driving mechanism for fans, &c	498,389	May 30	3236	805	63	1260
Harrold, Amos, Columbiana, Ohio. Sawmill dogging mechanism	509,029	Nov. 21	1709	422	65	1110
Harry, George W., Manhattan, Kans. Collar-fastener	498,168	May 23	2846	711	63	1177
Hart, Albert S., Steubenville, Ohio. Retouching device	491,171	Feb. 7	183	46	62	783
Harsen, Edward D. (See Hussey and Harsen.)						
Harsh, Samuel E. (See Harter and Harsh.)						
Harsha, Leslie R., Chicago, Ill. Furniture-joint	501,935	July 25	2247	561	64	453
Hart, Andrew S., Morrisville, N. Y. Vine-trellis	495,673	Apr. 18	1854	464	63	376
Hart, Charles A., et al. (See Brooks, Silas M., assignor.)						
Hart & Crouse. (See Hersey, George H., assignor.)						
Hart, Edward, et al. (See Callender, Romaine, assignor.)						
Hart, Edward O., Chicago, Ill. Means for displaying advertisements	497,023	May 9	1022	262	63	820
Hart, Frederick, Poughkeepsie, N. Y., assignor to Aktiebolaget Separator, Stockholm, Sweden. Centrifugal liquid-separator	496,120	Apr. 25	2542	641	63	519
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Machine for bending crank-shafts	495,631	Apr. 18	1783	448 449	63	365
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Ruling-machine	497,472	May 16	1757	442 443	63	966
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Flanging-machine	498,433	May 30	3302	824	63	1272
Hart, George L. and H. C., Unionville, Conn. Curling-iron	496,259	Apr. 25	2754	689	63	558
Hart, George P., New Britain, Conn. Stop-hinge	491,645	Feb. 14	959	241	62	956
Hart, Gerald W., Windsor, assignor to Hart & Hegeman Manufacturing Company, Hartford, Conn. Electric snap-switch. (Reissue)	11,395	Dec. 12	1804	444 445	65	1760
Hart, Harry, Kansas City, Mo. Horse-collar fastener	490,282	Jan. 24	2078	542	62	465
Hart & Hegeman Manufacturing Company. (See Hart, Gerald W., assignor.) (Reissue.)						
Hart, Hubert C. (See Hart, George L. and H. C.)						
Hart, James M., Topeka, Kans. Ice-cream freezer	491,104	Feb. 7	66	18	62	761
Hart, Joel T., Pleasant Hill, Mo. Vehicle-hub	491,925	Feb. 14	1390	347	62	1042
Hart, John A. (See Case, William H., assignor.)						
Hart, Joseph E., assignor of one-half to J. Hollingsworth, Fowler, Ind. Governor for mechanical motors	490,249	Jan. 17	2011	526	62	441
Hart, Mark A., Scribner, Cal. Suspended chair	491,172	Feb. 7	184	47	62	783
Hart, Marshall M. (See Mealy, John J., assignor.)						
Hart, Russell A., Battle Creek, Mich. Counting apparatus for printing-presses, &c	489,078	Jan. 3	143	40	62	35
Hart, Stacy B., assignor to Hart Weigher Company, Peoria, Ill. Steering-gear for traction-engines	505,523	Sept. 26	2014	515	64	1688
Hart, Thomas J., assignor to Sherwood Manufacturing Company, Buffalo, N. Y. Injector.	492,921	Mar. 7	241	60, 61	62	1406
Hart Weigher Company. (See Hart, Stacy B., assignor.)						
Hart Weigher Company. (See Kramer, George W., assignor.)						
Hart, William E., Sr., and W. E., Jr., Wolverhampton, England. Spring attachment for the wheels or other parts of cycles and other vehicles	510,538	Dec. 12	1182	284	65	1646
Hart, William H., Jr., Philadelphia, Pa. Lock for bicycle-chains	505,292	Sept. 19	1615	419	64	1601
Hart, William H., Jr., Philadelphia, Pa. Bicycle-lock	505,522	Sept. 26	2013	515	64	1688
Hart, William H., Jr., Philadelphia, Pa. Bicycle-jack	506,495	Oct. 10	1222	304	65	245
Hart, William H., assignor to Stanley Works, New Britain, Conn. Manufacture of chain-links	489,252	Jan. 3	424	118	62	94
Hart, William H., assignor to Stanley Works, New Britain, Conn. Drive-chain	504,494	Sept. 5	306	77	64	1327
Hart, William H., assignor to Stanley Works, New Britain, Conn. Hinge	504,877	Sept. 12	935	241	64	1460
Hart, William H., assignor to Stanley Works, New Britain, Conn. Drive-chain	507,362	Oct. 24	2678	658	65	540
Harte, Richard, Croydon, England. Cryptographic instrument	492,677	Feb. 28	2581	638	62	1311
Hartelius, Charles E., Bay Ridge, N. Y. Electrical attachment for rocking-chairs	493,997	Mar. 21	1994	508	62	1777
Harter, George E. (See Grimes and Harter.)						
Harter, John M., and S. E. Harsh, Wabash, Ind. Gag-swivel	497,660	May 16	2057	513	63	1020
Hartford Carpet Company. (See Hardwick, Harry, assignor.)						
Hartford, John, Chicago, Ill. Plumber's trap	496,975	May 9	945	248	63	808
Hartford Machine Screw Company. (See Withereff, George E., assignor.)						
Harthan, Charles E. (See Thomson and Harthan.)						
Hartig, Henry J., Brooklyn, N. Y. Governor for gas-engines	507,584	Oct. 31	3070	751	65	627
Hartig, Ignatz, Munich, Germany. Lighting gas-lamps	509,531	Nov. 28	2616	633	65	1293
Hartigan, James B., Oswego, N. Y. Exhaust-pipe for locomotives	496,410	May 2	32	9	63	624
Hartigan, William R. (See Wilcox, Elbert, Jr., assignor.)						
Hartin, John, Boston, Mass. Distributing apparatus for beer, &c. (Reissue)	11,314	Mar. 21	2192	560	62	1814
Hartin, John, Boston, Mass. Distributing apparatus for beer	494,634	Apr. 4	171	41	63	35
Hartley, Charles J., assignor of two-thirds to J. K. Warren and B. K. Durfee, Decatur, Ill. Grain-weigher	490,710	Jan. 31	2778	714	62	619
Hartley, Walter S., Little York, Ill. Gate-operating device	494,860	Apr. 4	538	136	63	104
Hartling, Charles N., Halifax, Canada. Sleigh-guard	497,174	May 9	1253	318	63	862
Hartlove, Asbury W., Baltimore, Md. Machine for making sheet-metal cans	497,542	May 16	1874	472	63	987
Hartman, Andrew, Hawthorne, Nev., assignor of one-half to C. H. Reynolds, San Francisco, Cal. Burglar-alarm	506,040	Oct. 3	368	97	65	72
Hartman, Benjamin F., Pickering, Pa. Washing-machine	497,918	May 23	2476	618	63	1110
Hartman, Francis M., Centralia, Kans. Thill-coupling	498,114	May 23	2775	694	63	1163
Hartman, Jacob G., and E. Baker, Baltimore, Md. Automatic signal for street-railways	499,163	June 6	703	169	63	1513
Hartman, Jacob G., and E. Baker, Baltimore, Md. Automatic signal for street-railways	499,164	June 6	705	169	63	1513
Hartman, Jacob G., and E. Baker, Baltimore, Md. Automatic railway-signal	499,165	June 6	707	169	63	1513
Hartman, Jacob G., and E. Baker, Baltimore, Md. Audible signal for railways	499,166	June 6	711	170	63	1513
Hartman, John B. (See Bendure and Tilbery, assignors.)						
Hartman, John M., Philadelphia, Pa. Iron notch for blast-furnaces	500,386	June 27	2731	671	63	1908
Hartman, John M., Philadelphia, Pa. Blast-furnace	500,387	June 27	2733	672	63	1908
Hartman, Marion B., et al. (See Iske, Anthony and A., assignor.)						
Hartman, Noble W., Cardington, Ohio. Corn-harvester	509,162	Nov. 21	1936	473 474	65	1153
Hartman, Philip, Ehrenfeld, Pa. Hauling and controlling mechanism for cars	497,661	May 16	2058	514	63	1020
Hartmann & Braun. (See Bruger, Theodor, assignor.)						
Hartmann & Braun. (See Wilkens, Carl, assignor.)						
Hartmann, Charles A., and G. A. McKee, Etna, Pa. Gas-burner	499,731	June 20	1643	396	63	1706
Hartmann, Christian F., Bethlehem, Pa. Guitar	498,113	May 23	2773	694	63	1163
Hartmann, Johann G. W., Offenbach-on-the-Main, Germany. Pressure-regulator	500,126	June 27	2512	559	63	1834
Hartmann, Wilhelm E., Cassel, Germany. Combined letter and bread box	509,532	Nov. 28	2617	633	65	1293
Hartness, James, Springfield, Vt. Tool for turning tapering surfaces	501,273	July 11	1174	298	64	228

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Hartness, James, Springfield, Vt. Metal-screw machine.....	502,517	Aug. 1	452	109	64	649
Hartness, James, Springfield, Vt. Chuck.....	507,904	Oct. 31	3586	885	65	724
Hartness, James, Springfield, Vt. Screw-machine.....	510,020	Dec. 5	308	69	65	1468
Harton, Pembroke D., Philadelphia, Pa. Cake-machine.....	501,274	July 11	1176	{ 298 299 }	{ 64 64 }	229
Hartshorn, Edmund F., Newark, N. J., assignor to Stewart Hartshorn Company, of New Jersey. Spring shade-roller.....	511,076	Dec. 19	2136	527	65	1834
Hartshorn, Stewart, Short Hills, N. J., assignor to Stewart Hartshorn Company, of New Jersey. Shade-roller.....	496,411	May 2	33	9	63	625
Hartsock, Ithamar S., Van Wert, Ohio. Kitchen-cabinet.....	489,951	Jan. 17	1509	394	62	341
Hartson, Ralph, Richmond Centre, Ohio. Thill-coupling.....	494,476	Mar. 28	2770	695	62	1935
Hartstein, Ernst, Göppingen, Germany. Cannula for tracheotomy.....	507,813	Oct. 31	3444	846	65	699
Hart, William A., Tucson, Ariz. Ter. Gravity-pump.....	504,922	Sept. 12	1008	{ 260 261 }	{ 64 64 }	1475
Hartwig, Carl, Pittsburg, Pa. Dropping-stopper for bottles.....	500,892	July 4	566	147	64	103
Hartzell, Conrad, St. Joseph, Mo. Plow.....	492,724	Feb. 28	2651	656	62	1326
Harvey, Francis B., Atglen, Pa. Harrow and roller.....	490,198	Jan. 17	1921	499	62	423
Harvey, Francis B., Atglen, Pa. Harrow and roller.....	499,990	June 20	2064	500	63	1779
Harvey, Francis B., Atglen, Pa. Cultivator-tooth.....	499,991	June 20	2066	500	63	1779
Harvey, Francis B., Atglen, Pa. Harrow and roller.....	500,064	June 20	2183	532	63	1799
Harvey, Frank, and J. Kane, Renovo, Pa. Car-coupling.....	493,998	Mar. 21	1995	{ 508 509 }	{ 62 62 }	1777
Harvey, Hayward A., Orange, N. J., assignor to Harvey Steel Company, New York, N. Y., and Newark, N. J. Composition for supercarburizing steel, &c.....	498,390	May 30	3237	-----	63	1260
Harvey, Hayward A., Orange, assignor to Harvey Steel Company, Newark, N. J. Manufacture of steel rails for railways.....	506,689	Oct. 17	1513	380	65	314
Harvey, James F., Green Brier, Ark. Clamp.....	501,936	July 25	2248	561	64	453
Harvey, Jennie D., Wilkes-Barré, Pa. Mayonnaise-mixer.....	506,635	Oct. 10	1420	356	65	285
Harvey, Jennie D., Wilkes-Barré, Pa. Egg-beater.....	506,636	Oct. 10	1422	356	65	285
Harvey, Patrick, Chicago, Ill. Siphon closet and tank.....	501,506	July 18	1546	390	64	313
Harvey, Patrick, Chicago, Ill. Supply-valve for closet-tanks.....	501,507	July 18	1550	390	64	313
Harvey Steel Car and Repair Works. (See McIlwain, John D., assignor.)						
Harvey Steel Company. (See Harvey, Hayward A., assignor.)						
Harvey, Valmer R., Watertown, N. Y. Drawer-slide and extension-support.....	500,575	July 4	58	17	64	12
Harvey, William, Indianapolis, Ind. Carpet-stretcher.....	498,977	June 6	406	95	63	1463
Harwood, Thomas T. H., Rockport, Mass. Dumping-scow.....	489,434	Jan. 3	691	{ 185 186 }	{ 62 62 }	148
Hascall, Charles A., Portage, Wis. Shirt.....	499,788	June 20	1744	422	63	1722
Hassey, Sydney P., New York, N. Y. Pneumatic alarm device.....	493,265	Mar. 14	770	{ 196 197 }	{ 62 62 }	1527
Hassey, Sydney P., New York, N. Y. Pneumatic alarm.....	493,712	Mar. 21	1506	385	62	1683
Haskell, Amos A., et al. (See Davidson, David J., assignor.)						
Haskell, Andrew J., San Francisco, Cal. Resawing-machine.....	499,424	June 13	1152	276	63	1606
Haskell, Ezra, Kennebunk, Me. Traveling-bag.....	511,077	Dec. 19	2137	527	65	1834
Haskell, Frank H., Revere, and W. E. Haskell, Chelsea, Mass. Ticket-holder.....	501,652	July 18	1780	443	64	356
Haskell, Willie E. (See Haskell, Frank H. and W. E.)						
Hasker, Charles H., assignor to Hasker & Marcuse Manufacturing Company, Richmond, Va. Label-holder for sheet-metal vessels.....	505,312	Sept. 19	1652	427	64	1607
Hasker & Marcuse Manufacturing Company. (See Hasker, Charles H., assignor.)						
Haskin, James H., Three Oaks, Mich. Gate.....	502,460	Aug. 1	353	85	64	631
Haskin, Samuel E., Avoca, N. Y. Curing tobacco.....	497,572	May 16	1920	-----	63	995
Haskin, Samuel E., Avoca, N. Y. Brick-machine.....	503,958	Aug. 29	2832	707	64	1148
Haskin, Stanley O., McDonald, Tenn. Rolling-mill.....	511,422	Dec. 26	2742	663	65	1958
Haskins, Alfonso, assignor to Jordan Bituminous Rock Company, San Francisco, Cal. Asphalt-disintegrating boiler.....	500,495	June 27	2886	710	63	1935
Haskins, Caryl D. (See Johnson and Haskins.)						
Haskins, Caryl D., Lynn, Mass., assignor to General Electric Company, of New York. Electric snap-switch.....	501,068	July 11	840	218	64	168
Haskins, Charles D., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Strong-current protector.....	499,425	June 13	1153	276	63	1606
Haskins, Charles D., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Current-regulator for dynamo-electric machines.....	511,523	Dec. 26	2891	{ 704 705 }	{ 65 65 }	1987
Haskins, Charles H., New York, N. Y. Electric telemeter.....	502,399	Aug. 1	249	59	64	611
Haskins, Henry W. (See Brooks, Sidney R., assignor.)						
Haslam, John G. (See Schilling and Haslam.)						
Haslam, John G., Philadelphia, Pa. Apparatus for dyeing.....	505,984	Oct. 3	286	74, 75	65	56
Haslup, Gilbert A., Laurel, Md. Car-coupling.....	496,516	May 2	198	53	63	654
Hass, Caesar, London, England. Method of and apparatus for reproducing fac-simile carvings in wood.....	511,696	Dec. 26	3173	{ 775 776 777 }	{ 65 65 65 }	2038
Hassall, William, Ashby-de-la-Zouch, England. Furnace for kilns.....	508,136	Nov. 7	264	65	65	807
Hassan, Midbury W., Rochester, N. Y. Commutator for electric generators or motors.....	497,123	May 9	1182	302	63	849
Hassan, Midbury W., Rochester, N. Y. Electric rink.....	497,495	May 16	1812	455	63	975
Hassard, John J., Harrison, N. J. Dust-brush.....	497,175	May 9	1254	319	63	862
Hasselberg, Pehr, Stockholm, Sweden. Apparatus for copying sculptural work.....	508,310	Nov. 7	541	133	65	858
Hassell, Richard L., Chicago, Ill. Conveyor.....	493,772	Mar. 21	1615	411	62	1705
Hasselman, Otto H., Indianapolis, Ind. Election-booth.....	494,808	Apr. 4	457	113	63	88
Hasselquist, Albert A. (See Ackerman and Hasselquist.)						
Hassencamp, Hugo. (See Kothe, Reingruber, and Hassencamp.)						
Hassencamp, Hugo, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Triphenylmethane dye.....	498,471	May 30	3366	-----	63	1284
Hassencamp, Hugo, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Violet dye.....	501,069	July 11	841	-----	64	169
Hassenpflug, Friedrich, New York, N. Y. Woven trimming.....	506,365	Oct. 10	981	{ 243 244 }	{ 65 65 }	198
Hassey, James C. (See Okey, Joseph B., assignor.)						
Hassey, James C., Indianapolis, Ind. Adjustable bicycle-support.....	508,311	Nov. 7	543	133	65	858
Hassler, Robert H., Dayton, Ohio. Armature for electric motors.....	493,025	Mar. 7	401	100	62	1438
Hastings, Azariah H., New York, N. Y. Touch-regulator for pianos.....	497,051	May 9	1058	271	63	827
Hastings, Cornelius C., assignor to Milton Bradley Company, Springfield, Mass. Folding table.....	510,858	Dec. 12	1772	435	65	1754
Hastings, Frank D., and O. N. Durand, Champion, Mich. Temporary binder.....	503,959	Aug. 29	2834	707	64	1149
Hastings, James L., assignor to National Heat and Power Company, Philadelphia, Pa. Manufacture of gas.....	505,524	Sept. 26	2017	516	64	1689

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Hastings, James L., assignor to National Heat and Power Company, Philadelphia, Pa. } Process of and apparatus for the manufacture of gas	505,525	Sept. 26	2023	{ 516 517 518 }	{ 64 64 64 }	1690
Hastings, Robert L., assignor of one-half to H. O. Stearns, Waltham, Mass. Needle-threader	492,581	Feb. 28	2428	605	62	1282
Haswell, Alfred M., Chicago, Ill. Shade-guide	493,162	Mar. 7	608	153	62	1478
Haswell, George H., <i>et al.</i> (See Pinkney, Charles W., assignor.)						
Haswell, George I., Fort Wayne, Ind. Folding chair	509,432	Nov. 28	2442	588	65	1261
Haswell, Theodore, assignor to W. S. Haswell, Denver, Colo. Blacking-brush	491,105	Feb. 7	69	19	62	762
Haswell, Theodore, assignor to W. S. Haswell, Denver, Colo. Blacking-brush	499,538	June 13	1337	317	63	1639
Haswell, William S. (See Haswell, Theodore, assignor.)						
Hatch, C. N., <i>et al.</i> (See Thompson, Charles, assignor.)						
Hatch, Charles, Jr. (See Woodward and Hatch.)						
Hatch, Charles A., Hartford, Conn., assignor to Safety Steam Appliance Company, Bos- } ton, Mass. Apparatus for stopping engines	506,229	Oct. 10	731	{ 186 187 }	{ 65 65 }	153
Hatch, Leonard F., Boston, Mass. Pessary-adjuster	506,851	Oct. 17	1788	449	65	364
Hatch, Nathan, Boston, Mass. Window-cap	492,922	Mar. 7	243	61	62	1406
Hatch, Walter P., and T. Murphy, Chicago, Ill.; said Murphy assignor to said Hatch. Drop-hammer	509,897	Dec. 5	90	21	65	1427
Hatcher, Milton B., Augusta, Ga. Tobacco-pliers	499,539	June 13	1338	317	63	1639
Hatfield, Charles B., Utica, N. Y., assignor to Stanley Manufacturing Company, Boston, Mass. Sole-inking machine	492,798	Mar. 7	41	10	62	1367
Hatfield, Charles B., assignor, by mesne assignments, to Q. W. and I. E. Booth, Rochester, N. Y. Scallop-turning machine	509,469	Nov. 28	2517	607	65	1275
Hatfield, Thomas J., Dublin, Ind. Fanning-mill	500,496	June 27	2888	710	63	1936
Hatfield, William, Fort Wayne, Ind. Device for side-dressing circular saws	504,726	Sept. 12	673	172	64	1409
Hathaway, Adele L., administratrix. (See Hathaway and Kelleher.)						
Hathaway, Cornelia F., San Francisco, Cal. Shoe-lace fastener	500,497	June 27	2890	711	63	1936
Hathaway, Louis A., and E. W. Elkins, Kenyon, Minn. Sash-holder	489,476	Jan. 10	767	203	62	177
Hathaway, Merrill H., deceased, Springfield, Mass., (A. L. Hathaway, administratrix,) and J. Kelleher, Manchester, N. H. Insulator for trolley-wires	493,713	Mar. 21	1507	385	62	1683
Hathaway, Thomas J., Montevallo, Mo. Seed-planter	499,110	June 6	624	{ 149 150 }	{ 63 63 }	1499
Hatton, Frank A., Raleigh, Miss. Fireproof book	509,533	Nov. 28	2618	633	65	1293
Hatton, Thomas. (See Woodhead, Frank A., assignor.)						
Haub, Charles C., and J. P. Dasha, San Francisco, Cal. Musical toy	499,292	June 13	900	218	63	1561
Hauber, Louis C., St. Mary's, Pa. Metal punching and shearing machine	499,540	June 13	1339	317	63	1639
Hauberg, Sophus C., Copenhagen, Denmark. Centrifugal creamer	498,914	June 6	297	68	63	1445
Hautman, Leon F., New Orleans, assignor to himself, and J. P. Kock, Donaldsonville, La. Centrifugal machine	506,230	Oct. 10	756	187	65	154
Hauck, Charles J., Jr., Brooklyn, N. Y. Oiler	509,309	Nov. 21	2190	526	65	1202
Hauck, Samuel, and G. S. Comstock, Mechanicsburg, Pa.; said Hauck assignor to said Comstock. Machine feed mechanism	507,496	Oct. 24	2887	710	65	580
Hauck, Samuel, and G. S. Comstock, Mechanicsburg, Pa.; said Hauck assignor to said Com- stock. Sawmill-dog	496,650	May 2	413	112	63	694
Hauff, Henry J., Magnolia, Iowa. Windmill-regulator	493,163	Mar. 7	610	153	62	1478
Hauff, Henry J., Magnolia, Iowa. Windmill-regulator	499,992	June 20	2067	{ 500 501 }	{ 63 63 }	1779
Haug, Gottlieb B., Philadelphia, Pa. Writing-pen	496,875	May 9	794	{ 209 210 }	{ 63 63 }	780
Hangan, Chrestofer, West Superior, Wis. Steamboat	509,808	Nov. 28	3058	738	65	1378
Hangen, Engebret P., deceased, Lac Qui Parle, Minn.; A. L. Himle, administrator. Band- cutter and feeder	496,260	Apr. 25	2755	689	63	558
Haughian, Charles P. (See Woolley, Edward W., assignor.)						
Hann, Peter A. (See Bartholomew, Gilbert A., assignor.)						
Hauptmann, Charles, and S. J. Schwarz, Chicago, Ill. Apparatus for drying malt	506,041	Oct. 3	370	97, 98	65	72
Hausam, Daniel W., Dallas, Tex. Car-coupling	503,347	Aug. 15	1859	460	64	934
Hausburg, Otto E., Brooklyn, N. Y. Watchman's time-detector	489,532	Jan. 10	863	226	62	195
Hauser, Jacob, and J. Whitaker, Boston, Mass. Steam and air engine	489,148	Jan. 3	255	70, 71	62	59
Hanser, Joseph C., New Haven, Conn. Sash-fastener	492,799	Mar. 7	44	10	62	1367
Hausheer, Bernhard. (See Page and Hausheer.)						
Hausman, Frederick H., San Francisco, Cal. Water-gage	502,073	July 25	2457	617	64	492
Hausperger, Frank, <i>et al.</i> (See Beecher, Charles W., assignor.)						
Haus, Joseph, Frankenthal, Germany. School desk and seat	506,496	Oct. 10	1223	304	65	246
Hausmann, Hermann, and S. B. Dunn, Chicago, Ill. Ecraseur	511,202	Dec. 19	2347	574	65	1874
Haustein, Henry, San Francisco, Cal. Illuminating-tile	492,865	Mar. 7	150	36	62	1389
Haustein, Henry, San Francisco, Cal. Frame for illuminating-tiles	501,008	July 4	745	195	64	135
Haustein, Henry, San Francisco, Cal. Illuminating-tile construction	505,044	Sept. 12	1211	312	64	1512
Haustein, Henry, San Francisco, Cal. Illuminating-tile	509,030	Nov. 21	1711	{ 422 423 }	{ 65 65 }	1110
Hautin, Victor. (See Soret, Hurlu, and Hautin.)						
Hauty, Auguste J., assignor of one-third to J. Burke, Saltsburg, Pa. Insulator	490,560	Jan. 24	2512	647	62	551
Havard, Joseph, New Bedford, Mass. Automatic fire-alarm	501,653	July 18	1781	444	64	356
Havell, George, Newark, N. J. Forming button-hooks	492,607	Feb. 28	2472	614	62	1290
Havell, Henry, assignor to A. Devoe, Newark, N. J. Car-axle box	493,026	Mar. 7	403	100	62	1438
Haven, James L. (See Matthews, Edwin S., assignor.)						
Havener, Frank O., Rockport, Me., assignor of one-half to W. E. Douglass, Rome, Ohio. Lumber-gage	489,584	Jan. 10	936	242	62	210
Havens, Frank E., Bridgeton, N. J. Wagon	507,123	Oct. 24	2242	554	65	461
Havens, Frederick A., Weathersfield, Conn. End-gate fastening	502,095	July 25	2493	627	64	498
Havermale, Schuyler S., <i>et al.</i> (See Kitton, John C., assignor.)						
Havey, Cornelius M., assignor to himself and R. Black, New York, N. Y. Signal for rail- ways	493,211	Mar. 7	678	173	62	1492
Haviland, Julia A., St. Joseph, Mo. Window-screen	507,363	Oct. 24	2679	658	65	540
Havner, Robert A. (See Powell, Williamson, and Havner.)						
Hawcroft, Charles R. (See Bancroft and Hawcroft.)						
Hawes, Benjamin N., Toledo, Ohio. Hydrocarbon-burner	492,466	Feb. 28	2234	559	62	1241
Hawes, Charles W. (See Draper, George E., assignor.)						
Hawes, Colin A., assignor to Easton & Burnham Machine Company, Pawtucket, R. I. Bobbin-holder	501,461	July 11	1479	372	64	284
Hawes, Elisha, Sacramento, Cal. Metallic lathing	493,714	Mar. 21	1510	386	62	1684
Hawes, Elmer E., Providence, R. I. Cement	501,937	July 25	2249	.....	64	453
Hawes, Emma D. (See Hawes, George W., assignor.)						
Hawes, George E., Palatka, Fla. Fruit-picker	497,573	May 16	1922	483	63	995
Hawes, George T., Owensborough, Ky. Truss for bridges	499,631	June 13	1483	356	63	1664

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Hawes, George W., Ortonville, assignor to E. D. Hawes, Big Stone county, Minn. Hot-water heat-radiator	498,849	June 6	176	44	63	1423
Hawes, Joel D., and H. D. McNair, Decorah, Iowa. Traction-wheel	509,221	Nov. 21	2053	495	65	1175
Hawes, Richard J., assignor of one-half to D. Goldberg, Chicago, Ill. Stove-board	495,133	Apr. 11	986	247	63	201
Hawick, Theodore H., Grand Rapids, Mich. Car-coupling	495,487	Apr. 18	1557	392	63	326
Hawk, Hale E., and A. J. Hazlett, Bucyrus, assignors to Automatic Machine Company, Alliance, Ohio. Vending apparatus	490,019	Jan. 17	1632	425	62	365
Hawk, Hale E., and O. W. Johnson, Bucyrus; said Johnson assignor to said Hawk, Alliance, Ohio. Street-sweeper	491,555	Feb. 14	813	205 206	62	926
Hawk, Kendall S., near Mechanicsburg, Ohio. Straw or hay hook	498,391	May 30	3328	805	63	1260
Hawkes, Edward B., Orange, assignor to E. W. Davis, Greenfield, Mass. Belt-clamp	505,103	Sept. 19	1318	340	64	1546
Hawkes, Fred. C., Springfield, Mass. Vaporizer	496,481	May 2	138	38	63	644
Hawkes, Frederick W., Chicago, Ill. Game-board	503,318	Aug. 15	1814	449	64	925
Hawkes, Harrison F., Swampscott, Mass., and F. E. Hersey, Wolfborough, N. H. Stave-sawing machine	499,829	June 20	1816	442	63	1735
Hawkins, Charles F., St. John, Kans. Band-cutter and feeder	489,679	Jan. 10	1060	276 277	62	236
Hawkins, Frederick H., New York, N. Y. Pulverized-fuel burner	510,788	Dec. 12	1604	400	65	1725
Hawkins, Gardner C., assignor to H. W. Peabody & Co., Boston, Mass. Fuel-economizer	498,211	May 23	2930	729	63	1190
Hawkins, Harry and J. W., and J. B. Harmon, Birmingham, Ala. Lumber-carrier	500,127	June 27	2314	560	63	1834
Hawkins, Jackson D., and F. M. Ray, Temple, Tex. Beehive	493,864	Mar. 21	1761	448	62	1733
Hawkins, James R., Benjamin, Utah Ter. Centrifugal honey-extractor	501,717	July 18	1888	469	64	374
Hawkins, John K., Mohawk, Tenn. Manufacture of paint	493,999	Mar. 21	1996		62	1777
Hawkins, John W. (See Hawkins and Harmon.)						
Hawkins, Joseph A., Brooklyn, N. Y. Automatic car-switch	497,176	May 9	1255	319	63	862
Hawkins, Thomas. (See Hawkins, William and T.)						
Hawkins, Virgil O. (See Allison, James F., assignor.)						
Hawkins, William and T., Portsmouth, England. Hydrogen-gas generator	490,437	Jan. 24	2315	601	62	512
Hawks, Moses L., Chicago, Ill. Knife	495,699	Apr. 18	1896	476	63	383
Hawks, Moses L., Chicago, Ill. Knife	501,682	July 18	1832	456	64	364
Hawley, Allen G., et al. (See Long and Dimick, assignors.)						
Hawley, Eli J., Manchester, Vt. Centrifugal pump	505,790	Sept. 26	2488	628	64	1777
Hawley, Henry A. (See Farwell, Frederic E., assignor.)						
Hawley, Mary A., Dixon, Ill. Device for applying insecticides	507,615	Oct. 31	3121	763	65	638
Hawley, William D., and S. J. Hogan, Syracuse, N. Y. Proportional meter	496,827	May 2	695	183 184	63	743
Haworth, William H., Brooklyn, N. Y. Packing and shipping case	496,157	Apr. 25	2595	653	63	529
Hawthorne, Samuel R., Hartford, Conn. Roofing	505,526	Sept. 26	2031	518	64	1691
Haxton, Henry R. (See McMahon, John M., assignor.)						
Hay, Alexander G., and M. McIntyre, Glasgow, Scotland. Lubricator	499,541	June 13	1341	318	63	1640
Hay, David, North Manchester, Ind. Flue-thimble	497,374	May 16	1606	405	63	940
Hay, Gilbert, Fayette, Mo. Stapling-machine	500,576	July 4	59	17	64	12
Hay, Henry G. (See Glafcke, Paul E., assignor.)						
Hay & Todd Manufacturing Company. (See Kneip, William F., assignor.) (Reissue.)						
Hay, Walter, Chicago, Ill. Permutation-padlock	504,034	Aug. 29	2951	739	64	1170
Hay, William, Scranton, Pa. Lyro-guitar	508,543	Nov. 14	930	228	65	946
Hay, William H., Prospect, Pa. Sucker-rod elevator	509,433	Nov. 28	2443	588	65	1261
Haydel, H. L., et al. (See Armstrong, Alfred, assignor.)						
Hayden, Austin B., Kansas City, Mo. Computing-scale	506,112	Oct. 3	484	125	65	95
Hayden, George W., et al. (See Saunders, Alanson H., assignor.)						
Hayden, James T., assignor to Crane Company, Chicago, Ill. Graduating-valve for triple-valve mechanisms	493,715	Mar. 21	1511	386	62	1684
Hayden, James T., assignor to Crane Company, Chicago, Ill. Valve mechanism for air-brakes	495,488	Apr. 18	1559	392 393	63	326
Hayden, James T., assignor to Crane Company, Chicago, Ill. Fluid-pressure brake	496,200	Apr. 25	2654	667	63	540
Hayden, James T., assignor to Crane Company, Chicago, Ill. Valve mechanism for air-brakes	496,651	May 2	415	112	63	694
Hayden, James T., assignor to Crane Company, Chicago, Ill. Hose-coupling	503,370	Aug. 15	1898	470	64	941
Hayden, James T., assignor to Crane Company, Chicago, Ill. Air-brake apparatus	509,898	Dec. 5	92	21, 22	65	1427
Hayden, James W., Lewisport, Ky. Spool-thread cabinet	493,087	Mar. 7	490	122 123	62	1457
Hayden, Jennie C., Chicago, Ill. Umbrella-chatelaine	504,579	Sept. 5	440	112	64	1352
Hayden, Jennie C., Chicago, Ill. Chatelaine	504,580	Sept. 5	442	113	64	1352
Hayden, Joseph L., Boston, Mass. Seal	500,743	July 4	338	89	64	63
Hayden, Louis S., assignor to A. M. Wright, Essex, Conn. Expansive bit	500,498	June 27	2891	711	63	1936
Hayden, Mortimer M., New York, N. Y., assignor to Law Battery Company, of New Jersey. Galvanic battery	500,284	June 27	2560	625	63	1877
Hayden, Raphael, Fairmont, W. Va. Conductor system for electric railways	490,597	Jan. 24	2564	660	62	562
Hayden, Thomas T. (See Cropsey, Charles H., assignor.)						
Hayden, William W., Newark, N. J. Eyeglass-hook	493,865	Mar. 21	1763	449	62	1733
Hayden, William W., Newark, N. J. Combined match-box and cigar-cutter	493,866	Mar. 21	1763	449	62	1733
Haydock, John. (See Ainsworth and Haydock.)						
Haydock, John. (See Smith and Haydock.)						
Haydon, George, and W. Vail, London, England. Coin-shooting machine	495,734	Apr. 18	1955	493	63	394
Haydon, James R., Cleveland, Ohio. Submarine boat	493,266	Mar. 14	773	197 198	62	1527
Haydon, William H., Santo, Tex. Washing-machine	491,424	Feb. 7	593	149	62	861
Hayes, Edward. (See Jensen and Hayes.)						
Hayes, Edward, Rochester, N. Y. Generator	489,002	Jan. 3	38	11	62	10
Hayes, Eli B., Oshkosh, Wis. Door	494,114	Mar. 21	2191	560	62	1814
Hayes, Eli B., Oshkosh, Wis. Door-machine	497,978	May 23	2567	642	63	1127
Hayes, Eli B., Oshkosh, Wis. Door-machine	497,979	May 23	2570	642 643	63	1127
Hayes, Eli B., Oshkosh, Wis. Sawing-machine	497,980	May 23	2573	643 644	63	1128
Hayes, Erastus. (See Beers, Franklin H., assignor.)						
Hayes, Francis, and F. J. Lewis, assignors of one-third to W. S. B. Barkwell, London, Canada. Knife	495,110	Apr. 11	930	235	63	193
Hayes, George D., Chetek, Wis. Pole-strap coupler	499,225	June 13	799	190	63	1544
Hayes, Israel, Farmington, N. H. Seam-finishing machine	502,719	Aug. 8	822	199	64	731
Hayes, James P., Mount Vernon, N. Y. Washstand	491,211	Feb. 7	244	61	62	794
Hayes, John J., Flushing, assignor to John J. Hayes Machine Company, Brooklyn, N. Y. Veneer-cutting machine	497,958	May 23	2535	633	63	1120
Hayes, John W., Philadelphia, Pa. Apparatus for gas manufacture	507,003	Oct. 17	2029	502	65	410

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Hayes, John W., assignor to himself, M. Eldredge, and E. S. Fay, Portsmouth, N. H. Steam-engine governor	493,624	Mar. 14	1373	348	62	1641
Hayes, Samuel J., Pittsburg, Pa. Process of and apparatus for generating and applying anæsthetic vapors	509,849	Nov. 28	3120	753	65	1390
Hayes, William, and H. P. Roberts, Boston, Mass. Self-sealing bottle	500,499	June 27	2892	711	63	1936
Hayne, William P., Coushatta, La. Manufacture of barrels	509,534	Nov. 28	2619	634	65	1294
Hayner, Clark, Troy, Ohio. Fly-switcher for horses	492,287	Feb. 21	1945	486	62	1170
Haynes, Charles E. (See Murray and Haynes.)						
Haynes, Charles M., Omaha, Nebr. Long-distance electric telephony	492,467	Feb. 28	2235	559	62	1241
Haynes, Charles M., Chillicothe, Ohio. Eyeglasses	507,434	Oct. 24	2794	684	65	563
Haynes, Edward J., et al. (See Rupel, James M., assignor.)						
Haynes, Harry, Coldwater, Mich. Wire fence	510,257	Dec. 5	700	169	65	1542
Haynes, Henry, Philadelphia, Pa. Insulating compound for printing-presses	508,107	Nov. 7	211		65	797
Haynes, John I., assignor of one-third to J. Fitzgerald, St. Louis, Mo. Type-setting machine	494,564	Apr. 4	53	11 12 13	63	11
Haynes, Richard, Birmingham, and J. Wilcock, Manchester, England. Bobbin or spool	507,124	Oct. 24	2244	554	65	461
Haynes, Richard C., Roanoke, Ala. Fence-post	496,360	Apr. 25	2934	733	63	593
Haynie, Judson K. (See Clark and Haynie.)						
Hays, Charles W., Stratford, Ill. Loading device	500,328	June 27	2644	647	63	1892
Hays, George, assignor to Pratt & Whitney Company, Hartford, Conn. Ball-bearing for lathe-spindles	496,825	May 2	697	184	63	743
Hays, James S., Washington, D. C. Roll-paper cutter and holder	502,400	Aug. 1	251	60	64	612
Hays, John C. (See Gott, Clarence P., assignor.)						
Hays, John W., Robbinsdale, Minn. Index-holder for books	501,508	July 18	1552	390	64	313
Hayslit, James R., Waynesville, Ohio. Churn	494,202	Mar. 28	2343	593	62	1857
Haytock, Benjamin, Paterson, N. J., assignor to Hess, Goldsmith & Co., New York, N. Y. Swivel-loom	491,425	Feb. 7	594	150	62	861
Hayward, Allen B., et al. (See Coombs, Charles L., assignor.)						
Hayward, Alphonzo, Warsaw, Ind. Heater for stock-troughs	511,333	Dec. 26	2575	627	65	1928
Hayward, Enos F., Lake City, Iowa. Combination glazier's tool	494,921	Apr. 4	623	159	63	120
Hayward, Frank W., A. S. King, and A. W. Loveland, Norwich, England. Apparatus for coating paper, &c	504,215	Aug. 29	3249	810 811	64	1226
Hayward, Jacob L., Wadeville, N. C., assignor of one-half to W. B. Crittenden, Bucyrus, Ohio. Nut-lock	491,173	Feb. 7	186	47	62	783
Hayward, Jacob L., Wadeville, N. C., assignor of two-thirds to W. B. Crittenden and A. B. Stetson, Bucyrus, Ohio. Cotton-press	501,419	July 11	1422	356	64	273
Hayward, Thomas S., and F. S. Anderson, Easton, Md. Transparent dust-guard and ventilator	496,199	Apr. 25	2653	666 667	63	540
Haywood, Daniel H., New York, N. Y. Door-check	504,581	Sept. 5	443	113	64	1353
Hayworth, Oliver R., assignor of one-half to A. A. Curfman, Tarkio, Mo. Plane	508,386	Nov. 7	666	163	65	881
Hazard, Augustus A., assignor to M. D. Hazard, Council Bluffs, Iowa. Thill-coupling	505,985	Oct. 3	289	75	65	56
Hazard, Dexter, Marquette, Mich. Car-wheel	508,824	Nov. 14	1347	333	65	1027
Hazard, M. D. (See Hazard, Augustus A., assignor.)						
Hazard, Thomas B. and W. E. Buffalo, assignors to H. F. McCann, Salamanca, N. Y. Machine for sharpening matcher-head cutters, &c	490,283	Jan. 24	2079	543	62	466
Hazard, Willet E. (See Hazard, Thomas B. and W. E.)						
Hazel, Elzie B., Orange Mills, Fla. Hoe	502,720	Aug. 8	824	199	64	731
Hazel, James F. (See Kirk and Hazel.)						
Hazelton, Elias, assignor of one-half to H. Ingersoll, Lansing, Mich. Conduit system for electric railways	493,716	Mar. 21	1513	386 387	62	1684
Hazelton, Frederic D., assignor to S. Bergmann, New York, N. Y. Carbon-holder for electric-arc lamps	501,938	July 25	2250	561	64	453
Hazlehurst, Edward, Oldham, England. Tap	504,433	Sept. 5	199	51	64	1307
Hazlehurst, George B., and F. J. Cole, Baltimore, Md. Coupling-gage	491,174	Feb. 7	188	48	62	783
Hazlett, Andrew J. (See Hawk and Hazlett.)						
Head, Frank E., assignor of one-half to E. E. Kuney, Toledo, Ohio. Trolley wire support	493,212	Mar. 7	679	173	62	1492
Heafer, Napoleon B., Bloomington, Ill. Brick-kiln	495,134	Apr. 11	987	248	63	201
Heald, David. (See French and Heald.)						
Heald, James N., Barre, Mass. Crimping-machine	500,128	June 27	2315	560 561	63	1835
Heald, John L., San Francisco, Cal. Combined harvesting and thrashing machine	509,082	Nov. 21	1805	444	65	1128
Healey, Charles, et al. (See Collyer, Charles W., assignor.)						
Healey, Joseph S., assignor of one-half to H. E. Jenness, Boston, Mass. Fastening for gloves	494,953	Apr. 4	665	171	63	128
Healey, Joseph S., assignor of one-half to H. E. Jenness, Boston, Mass. Glove or garment fastening	494,954	Apr. 4	666	172	63	128
Healy, Caleb E., Detroit, Mich. Combined steam-muffler and heating apparatus	491,482	Feb. 7	689	173 174	62	880
Healy, Caleb E., Detroit, Mich. Trunnion-bearing for oscillating engines	511,203	Dec. 19	2348	574	65	1874
Healy, Richard A., and E. D. Cundell, assignors of one-third to J. Hinchliffe, Paterson, N. J. Clearing streets or railway-tracks from snow	506,497	Oct. 10	1225	305	65	246
Healy, Richard A., and E. D. Cundell, assignors of one-third to J. Hinchliffe, Paterson, N. J. Gas-heated furnace for liquefying snow	506,498	Oct. 10	1226	305	65	246
Healy, Richard A., and E. D. Cundell, assignors of one-third to J. Hinchliffe, Paterson, N. J. Snow-melting machine	506,499	Oct. 10	1227	305	65	246
Healy, Richard A., and E. D. Cundell, assignors of one-third to J. Hinchliffe, Paterson, N. J. Pilot-shoe for snow-melting machines	506,500	Oct. 10	1229	306	65	247
Healy, Richard A., and E. D. Cundell, assignors of one-third to J. Hinchliffe, Paterson, N. J. Gas-heated rotary brush for street-cleaning machines	506,501	Oct. 10	1231	306	65	247
Healy, William F., Bridgeport, Conn. System of fans	498,547	May 30	3502	865	63	1308
Heaney, Thomas N., Chicago, Ill. Umbrella-support for bicycles	508,418	Nov. 14	722	178	65	906
Heard, John A., New Albany, Miss. Combined cultivator and harrow	494,986	Apr. 4	715	181 182	63	137
Heard, Thomas, St. Thomas, Canada. Car-coupling	489,952	Jan. 17	1510	395	62	341
Hearne, John, Buxton, Mass., assignor of one-half to W. J. Strong, New York, N. Y. Center-seal	501,342	July 11	1300	324	64	250
Heaston, John, Topolobampo, Mexico, and E. C. Sooy, Kansas City, Mo. Excavating or dredging machine	495,111	Apr. 11	931	235 236	63	193
Heat and Odor Extinguisher Company. (See Carpenter, Benjamin F., assignor.)						
Heath, E. N., et al. (See Osteman, Carl G., assignor.)						
Heath, Frank, Minneapolis, Minn. Electric-railway trolley	495,035	Apr. 11	794	201	63	167
Heath, Frederick H. (See Caldwell and Heath.)						
Heath, Frederick H., assignor to Heath Rail Joint Company, Minneapolis, Minn. Rail-clamp	495,001	Apr. 4	737	187	63	141

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Heath, Frederick H., assignor to Heath Rail Joint Company, Minneapolis, Minn. Rail-joint.	495,002	Apr. 4	738	187	63	141
Heath, Frederick H., assignor to Heath Rail Joint Company, Minneapolis, Minn. Die for manufacturing rail-joints.	498,791	June 6	61	14, 15	63	1400
Heath, Frederick H., Minneapolis, Minn., assignor to Heath Rail Joint Company, Waterloo, Iowa. Rail-joint.	500,388	June 27	2735	672	63	1908
Heath, Frederick H., and E. P. Caldwell, Minneapolis, Minn., assignors to Heath Rail Joint Company, Waterloo, Iowa. Rail-joint.	500,389	June 27	2737	{ 672 673 }	63	1909
Heath, Frederick H., and E. P. Caldwell, assignors to Heath Rail Joint Company, Minneapolis, Minn. Rail-joint.	500,390	June 27	2738	673	63	1909
Heath Rail Joint Company. (See Caldwell and Heath, assignors.)						
Heath Rail Joint Company. (See Heath, Frederick H., assignor.)						
Heath Rail Joint Company. (See Heath and Caldwell, assignors.)						
Heathorn, Thomas B., London, England. Propeller.	510,970	Dec. 19	1973	{ 484 485 }	65	1804
Heatley, John, assignor to himself, J. H. Gittings, T. and T. R. Venners, Jr., Pittsburg, Pa. Building-block.	495,411	Apr. 11	1425	358	63	281
Heatley, William, assignor to Detector Patent Safety Postal Box Syndicate, Limited, London, England. Jewelry-case.	502,001	July 25	2337	585	64	470
Heatly, Isaiah S., assignor to I. S. Heatly and H. L. Praet, Jr., Jersey City, N. J. Break-down gun.	489,191	Jan. 3	321	88, 89	62	73
Heaton, Charles, Philadelphia, Pa. Shaft-hanger for grinding and polishing machines.	491,884	Feb. 14	1328	328	62	1029
Heaton, John, and G. H. Holden, Manchester, England. Apparatus for the manufacture of steel or iron.	501,138	July 11	968	247	64	191
Heaton, John, and G. H. Holden, Manchester, England. Apparatus for the manufacture of steel or iron.	501,139	July 11	971	248	64	191
Heaton, John, and G. H. Holden, Manchester, England. Apparatus for manufacturing steel or iron.	501,140	July 11	973	248	64	192
Heaton-Peninsular Button Fastener Company. (See Ely, Edward O., assignor.)						
Heaton, Thomas T. (See Barraclough and Heaton.)						
Heavener, Floyd, Helena, Mont. Tie-holder.	492,202	Feb. 21	1814	454	62	1143
Heavey, Bernard C., Chicago, Ill. Garbage-furnace.	505,656	Sept. 26	2267	{ 574 575 }	64	1737
Hebendahl, John P., Weatherby, Pa. Hanger for electric lights.	504,082	Aug. 29	3017	754	64	1182
Hebenstreit, Edward, Reading, Ohio, assignor to A. L. Due Fireworks Company. Device for displaying fireworks.	489,444	Jan. 3	711	190	62	152
Heberling, Solomon R., Fremont, assignor of one-half to J. D. Swartz, Auburn, Ind. Chimney attachment.	495,887	Apr. 18	2193	552	63	438
Heberling, Squire, Des Moines, Iowa. Jewel-setter's vise.	509,310	Nov. 21	2191	527	65	1202
Heberling, William L., Havana, Ill. Roofer's seaming-tongs.	501,509	July 18	1553	{ 390 391 }	64	313
Hebert, Joseph O., Grand Rapids, Wis. Pole-tip.	498,548	May 30	3504	866	63	1308
Hechler, Robert L., Richmond, Va. Book-support.	495,585	Apr. 18	1709	430	63	353
Hecht, Alexander, and W. R. Fechner, New York, N. Y.; said Fechner assignor to said Hecht. Newspaper-file.	489,901	Jan. 10	1406	364	62	304
Hecht, Jacob. (See Maxim and Price, assignors.)						
Hecht, Samuel, Chicago, Ill. Self-closing cut-off for gas-burners.	508,108	Nov. 7	212	55	65	798
Heck, Harry L., and W. S. Kellogg, Little Rock, Ark. Umbrella notch and rib.	495,331	Apr. 11	1303	327	63	260
Heckel, John, Rochester, N. Y. Shank-piece for shoes.	498,055	May 23	2686	672	63	1147
Heckert, Hugo, Halle-on-the-Saale, Germany. Forming glass domes.	497,574	May 16	1923	483	63	996
Heckert, William, Findlay, assignor of one-half to B. Butterworth, Cincinnati, Ohio. Universal tube-rolling mill.	490,628	Jan. 24	2641	{ 680 681 }	62	577
Heckert, William, Findlay, assignor of one-half to B. Butterworth, Cincinnati, Ohio. Method of and apparatus for heating hot water and steam.	499,322	June 13	950	{ 229 230 }	63	1570
Hedbavny, Anton, assignor to L. Werner, New York, N. Y. Machine for removing water-hairs from pelts.	502,359	Aug. 1	184	43	64	600
Hedbavny, Anton, and A. H. Fiala, New York, N. Y. Machine for removing the water-hairs from pelts.	505,104	Sept. 19	1320	{ 340 341 }	64	1546
Hedden, Aaron C., Ithaca, N. Y. Fruit-picker.	498,715	May 30	3795	936	63	1357
Heddy, Miller P., Hillburn, N. Y. Liquid-bottling machine.	490,020	Jan. 17	1635	426	62	365
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Exhaust for reed-organ bellows.	505,161	Sept. 19	1409	362	64	1562
Hedges, Charles, Box, England. Stake-shoe.	492,520	Feb. 28	2332	579	62	1260
Hedges, Fabian. (See Werner and Williams, assignors.)						
Hedges, Killingworth W., London, England. Composition for attaching antifriction linings or facings.	499,111	June 6	626	150	63	1499
Hedley, Frank, Brooklyn, N. Y. Steam or other valve.	510,425	Dec. 12	962	230	65	1606
Heag, Charles W. (See Farmer, John R., assignor.)						
Heene, George W., Cleveland, Ohio. Workman's time-recorder.	491,556	Feb. 14	815	206	62	926
Heene, George W., Cleveland, Ohio. Workman's time-recorder.	491,557	Feb. 14	816	207	62	926
Heer, David, Columbus, Ohio. Curling-iron holder for gas-fixtures.	500,232	June 27	2488	607	63	1865
Heermans, Thaddeus W., Chicago, Ill., assignor to Crane Elevator Company, of Illinois. Elevator.	497,520	May 16	1840	464	63	981
Heermans, Thaddeus W., Chicago, Ill., assignor, by mesne assignments, to National Company, of Illinois. Pump.	510,859	Dec. 12	1774	{ 435 436 }	65	1754
Heermans, Thaddeus W., Chicago, Ill., assignor, by mesne assignments, to National Company, of Illinois. Valve.	510,860	Dec. 12	1775	436	65	1754
Heeson, William H., Toronto, Canada. Self-feeding ratchet-brace for hand-drilling purposes, &c.	493,717	Mar. 21	1516	387	62	1685
Heeson, William H., Toronto, Canada. Furnace grate-bar.	499,732	June 20	1644	396	63	1706
Heffron, Frederic C. (See Drake and Heffron.)						
Heffron, Isaac, Galveston, Tex. Sewer-trap.	506,690	Oct. 17	1515	380	65	314
Hefner-Altenack, Friedrich von, assignor to Siemens & Halske, Berlin, Germany. Rail-circuit-closing contact.	495,674	Apr. 18	1855	464	63	376
Hefter, Maurice, and G. Benard, Paris, France. Process of and apparatus for making extracts.	503,237	Aug. 15	1670	{ 410 411 }	64	900
Hegart, Frank J., Challis, Idaho. Veterinary surgical instrument.	492,288	Feb. 21	1946	486	62	1170
Hegbom, Marselius, assignor to F. Voss, Chicago, Ill. Metallic partition.	495,036	Apr. 11	795	201	63	167
Heggen, Charles O., assignor to Russell & Company, Massillon, Ohio. Steering apparatus for traction-engines.	489,865	Jan. 10	1347	249	62	293
Heggen, Charles O., assignor to Russell & Company, Massillon, Ohio. Spark-arrester.	489,866	Jan. 10	1339	249	62	293
Heggen, Charles O., assignor to Russell & Company, Massillon, Ohio. Balanced slide-valve.	489,867	Jan. 10	1339	350	62	293
Heggen, Charles O., assignor to Russell & Company, Massillon, Ohio. Balanced slide-valve.	491,940	Feb. 14	1413	353	62	1046
Heidelberg, Samuel R., Jacksonville, Tex. Device for loading baggage.	489,003	Jan. 3	41	11, 12	62	11

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Heidenreiter, Joseph, Brooklyn, N. Y. Vent-pipe.....	501,835	July 18	2071	511	64	406
Heidler, Gustav, Chemnitz, Germany. Straight-bar knitting-frame.....	490,351	Jan. 24	2195	{ 571 572 573 }	62	490
Heiges, Lewis, and G. C. Coover, Mechanicsburg, Pa. Dumping-wagon.....	499,830	June 20	1820	{ 442 443 }	63	1735
Heil, Albrecht, Fränkisch Crumbach, Germany. Writing-receiver.....	503,371	Aug. 15	1899	470	64	941
Heil, Albrecht, Fränkisch Crumbach, Germany. Telegraphic apparatus.....	503,372	Aug. 15	1900	471	64	941
Heim, Martin, Syracuse, N. Y. Chain-linking machine.....	494,780	Apr. 4	405	{ 100 101 }	63	79
Heim, Van. M. (See Glick, Heim, and Hafer.)						
Heimann, Salomon, New York, N. Y. Electrode for electric-arc lamps.....	498,915	June 6	298	68	63	1445
Heimerle, Henry F. (See Aberg, Walfrid A., assignor.)						
Heimke, John, St. Louis, Mo. Adjustable bearing for curtain-poles.....	495,332	Apr. 11	1304	327	63	260
Heimlich, Charles H. and F. G., Venice, Ohio. Plow-point.....	504,727	Sept. 12	674	172	64	1410
Heimlich, Fredrick G. (See Heimlich, Charles H. and F. G.)						
Heine, Alfred N., and W. K. H. Woerner, Evansville, Ind. Type-writing machine.....	497,177	May 9	1257	{ 319 320 }	63	863
Heine, August, Silver Creek, N. Y. Combined grain-scourer and dust-collector.....	499,385	June 13	1071	260	63	1592
Heineke, Charles. (See Heineke, Martin and C.)						
Heineke, Martin, Springfield, and C. Heineke, Carlinville, Ill. Clutch mechanism for reversing motion.....	499,226	June 13	801	190	63	1544
Heineke, Martin, Springfield, and C. Heineke, Carlinville, Ill. Straw-stacker.....	501,939	July 25	2251	562	64	453
Heinemann, Solomon E., Detroit, Mich. Method of and apparatus for manufacturing pills.....	499,452	June 13	1344	319	63	1640
Heinemann, Carl, Hammond, Ind. Device for suspending scaffolding.....	491,885	Feb. 14	1329	329	62	1029
Heinemann, Theodore W., assignor to T. W. Heinemann Company, Chicago, Ill. Suspension. (Reissue.).....	11,369	Oct. 3	679	171	65	128
Heinig, Frederick E., Louisville, Ky. Oil-can.....	496,121	Apr. 25	2543	641	63	519
Heinke, Frederick W., Summerfield, Kans. Combination-tool.....	493,088	Mar. 7	492	123	62	1457
Heinlein, John F., assignor of three-fourths to H. Luebker, M. Nicodemus, and J. G. Trump, Richville, Mich. Vegetable-cutter.....	503,599	Aug. 22	2274	568	64	1023
Heintz, Christian, Buffalo, N. Y. Method of and apparatus for purifying and softening liquors.....	492,542	Feb. 28	2366	588	62	1269
Heintz, Theodor, Brandenburg-on-the-Havel, Germany. Fastener for wearing-apparel.....	500,893	July 4	567	147	64	103
Heintzelman, Taylor W., and C. T. Noyes, Sacramento, Cal. Starting appliance for compound engines.....	498,650	May 30	3674	908	63	1337
Heinz, John, Riley county, Kans. Muzzle.....	508,419	Nov. 14	724	178	65	906
Heinze Electric Company. (See Heinze, John O., Jr., assignor.)						
Heinze, Johann G., Gera, Germany, and C. H. Reinmuth, Rockville, Conn. Buoyant fabric.....	503,373	Aug. 15	1902	471	64	942
Heinze, John O., Jr., assignor to Heinze Electric Company, Lynn, Mass. Combined dynamo-electric machine and water-motor.....	496,307	Apr. 25	2831	708	63	573
Heinze, John O., Jr., assignor to Heinze Electric Company, Lynn, Mass. Cut-out and circuit-protector.....	496,308	Apr. 25	2833	708	63	573
Heinze, John O., Jr., assignor to Heinze Electric Company, Lynn, Mass. Volt and ampère meter.....	496,309	Apr. 25	2835	708	63	574
Heiser, Adolph, Chicago, Ill. Closed electric conduit for railways.....	492,398	Feb. 28	2123	530	62	1218
Heisser, Jacob H., Minneapolis, Minn. Envelope for sample-bags.....	505,791	Sept. 26	2489	628	64	1778
Heist, Alfred D., Philadelphia, Pa. Flame.....	502,119	July 25	2531	634	64	506
Heist, Leo G. (See Rader and Heist.)						
Heister, William C., Dayton, Ohio. Oil-gas burner.....	508,312	Nov. 7	544	134	65	858
Heithecker, August, Brooklyn, N. Y. Pressure-regulating valve.....	496,735	May 2	549	147	63	718
Heitman, Henry, Lost Nation, Iowa. Cattle-stanchion.....	509,031	Nov. 21	1712	423	65	1110
Heitmann, Henry, assignor of one-half to C. K. Schaefer, Trenton, N. J. Cow-milker.....	507,069	Oct. 17	2141	531	65	429
Heivly, John H., Oil City, Pa. Pneumatic dental plugger.....	499,632	June 13	1484	356	63	1664
Helbig, Philip, Baltimore, Md. Hardening copper.....	509,619	Nov. 28	2752		65	1320
Heldebrandt, George D., Piqua, Kans. Clod-pulverizer.....	492,399	Feb. 28	2125	{ 530 531 }	62	1218
Hele-Shaw, Henry S., Liverpool, England. Inkstand.....	503,852	Aug. 22	2652	664	64	1097
Helenbolt, George S., Medina, assignor of one-half to E. Knapp, Middleport, N. Y. Hand-rest for penmen.....	490,906	Jan. 31	3100	795	62	681
Heley, Frank. (See Matthews and Heley.)						
Helfensteller, Ernest, Jr., St. Louis, Mo. Waste-pipe-trap cleaner.....	507,435	Oct. 24	2794	684	65	564
Helland, Lewis J., Mansfield, Minn. Hay-sling.....	502,721	Aug. 8	824	199	64	732
Hellendorfer, Georg K., Baltimore, Md. Washing-machine.....	489,806	Jan. 10	1261	330	62	276
Hellebrandt, Santa, Przemyśl, Austria-Hungary. Dynamo-electric machine.....	493,718	Mar. 21	1517	{ 387 388 }	62	1685
Heller, Bernard. (See Küchler, Karl, assignor.)						
Heller, Eugene K., Sauk City, Wis. Cash-register.....	499,885	June 20	1915	465	63	1752
Heller, Julius, Teplitz, Austria-Hungary. Alcohol-stove.....	500,765	July 4	373	96	64	69
Heller, Louis, Omaha, Nebr. Refrigerator.....	489,004	Jan. 3	43	12	62	11
Heller & Merz Company. (See Prochazka and Scharringhausen, assignors.)						
Heller, Thomas J., Easton, Pa. Plaster composition.....	502,096	July 25	2493		64	499
Heller, Thomas J., Easton, Pa. Plaster composition.....	502,097	July 25	2494		64	499
Hellings, William P., Aurora, Nebr. Fly-screen.....	492,014	Feb. 21	1531	382	62	1084
Hellström, Carl D., Sala, Sweden. Centrifugal liquid-separator.....	496,412	May 2	34	9.10	63	625
Hellwig, Maurice, Brooklyn, N. Y. Brush-machine.....	505,397	Oct. 10	1038	259	65	210
Hellyer, Henry A. C., and W. T. Lawless, Ottawa, Canada. Shade and shade-holder.....	503,537	Aug. 15	2144	532	64	986
Helm, John F. (See Rowland and Helm.)						
Helm, Thomas W., assignor of one-half to J. T. Carter, Danville, Va. Combined clothes-brush, flask, and drinking-cup.....	490,964	Jan. 31	3190	815	62	698
Helmann, Otto, et al. (See Buckley, John P., assignor.)						
Helmer, James L., Rome, N. Y. Cheese-press.....	490,284	Jan. 24	2081	543	62	466
Helmer, James L., Rome, N. Y. Cheese-press.....	496,413	May 2	35	10	63	625
Helmer, Nicolas, New York, N. Y. Liberating ozone.....	509,163	Nov. 21	1938	474	65	1153
Helmig, John, Jr. (See Oppenheimer, Albert C., assignor.)						
Helms, Charles H., Poughkeepsie, and C. Reinders, New York, N. Y. Machine for shaping and cutting counters.....	507,814	Oct. 31	3445	846	65	699
Hemenger, Arthur, Algonac, Mich. Diving-armor.....	496,686	May 2	467	126	63	705
Hemesath, John G., Covington, Ky. Vegetable-reducer.....	498,262	May 30	3020	752	63	1222
Hemingray, Ralph G., Covington, Ky., and J. C. Gill, Muncie, Ind. Insulator for telegraph-wires.....	496,652	May 2	421	113	63	695
Hemingway Manufacturing Company. (See Rowland, John R., assignor.)						
Hemingway Manufacturing Company. (See Rowland and Helm, assignors.)						
Hemje, Charles, Annapolis, Md. Lamp-heater.....	495,199	Apr. 11	1094	272	63	221

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Hemmer, Michael. (See Dirnberger, John, assignor.)						
Hemp, Lewis W., St. Louis, Mo. Liquid-measuring can	504,525	Sept. 5	357	90	64	1336
Hemp, Lewis W., St. Louis, Mo. Combined minnow bucket and trap	504,526	Sept. 5	358	91	64	1337
Hemp, Lewis W., St. Louis, Mo. Self-measuring tank	504,527	Sept. 5	360	91	64	1337
Hempel, John F., assignor of one-half to S. J. Turnvall, Grand Rapids, Mich. Thill-coupling	502,491	Aug. 1	413	97	64	642
Hemphill, James, and J. Fawell, Pittsburg, Pa. Crane	489,634	Jan. 10	1002	261	62	223
Hemphill, James, and J. Fawell, Pittsburg, Pa. Crane	489,635	Jan. 10	1003	261	62	224
Hempy, Isaac, W. J., and T. G., Le Roy, Kans. Corn-harvester	511,268	Dec. 19	2457	599 600	65	1894
Hempy, Thomas G. (See Hempy, Isaac, W. J., and T. G.)						
Hempy, Wilbur J. (See Hempy, Isaac, W. J., and T. G.)						
Hemsteger, Jacob B., Piqua, Ohio. Automatic feed for perforating-machines	497,178	May 9	1260	320	63	863
Hench, Samuel N. (See Reese, Hench, and Dromgold.)						
Hench, Samuel N. (See Richey, Hench, and Dromgold.)						
Henck, John B., Jr., Brooklyn, N. Y. Mop-wringer	490,561	Jan. 24	2513	647	62	552
Hencks & Son, D. S. (See Weese, Tolbert, assignor.)						
Hendershot, Theodore H., and E. H. Ackerman, Griswold, Iowa. Draft-equalizer	497,981	May 23	2575	644	63	1128
Hendershott, Lowell, Kansas City, Mo. Sliding door	494,142	Mar. 28	2247	572	62	1838
Henderson, Amos, <i>et al.</i> (See Ménégat, Napoléon D., assignor.)						
Henderson, David S., Brantford, Canada. Machine for sharpening clippers	505,899	Oct. 3	156	40	65	31
Henderson, Edward E., Sanford, Fla. Wagon running-gear	508,420	Nov. 14	725	179	65	906
Henderson, Fredrick J., Chicago, Ill. Feed-water purifier	494,143	Mar. 28	2248	573	62	1839
Henderson, George. (See Noble and Henderson.)						
Henderson, Henry R. (See Wood, James C., assignor.)						
Henderson, Henry T., Keokuk, Iowa. Washing-machine	491,063	Jan. 31	3352	855	62	732
Henderson, James, Dalvenie, near Truro, England. Surveying-instrument	510,339	Dec. 5	817	198	65	1565
Henderson, James P., <i>et al.</i> (See Haberthur and Mandel, assignors.)						
Henderson, John M., Salem, assignor of one-half to J. Johnson, New Albany, Ind. Car-coupling	503,082	Aug. 8	1402	346	64	838
Henderson, Norman M., Broxburn, Scotland. Treating or purifying paraffine-wax and apparatus therefor	490,199	Jan. 17	1924	500	62	424
Henderson, Robert H. C. (See Medley, John A., assignor.)						
Henderson, William, Chicago, Ill. Metallic bar for window-sashes, &c	497,543	May 16	1875	473	63	988
Henderson, William G., Washington, D. C. Support for phonograph speaking-tubes or other purposes	493,719	Mar. 21	1518	388	62	1686
Henderson, William T. (See Rush, Stephen P., assignor.)						
Hendrick, James S. (See Smith and Hendon.)						
Hendrick, Joel H., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Vehicle-wheel	490,438	Jan. 24	2317	601	62	512
Hendrick, Joel H., Springfield, and J. P. Kelly, Chicopee, assignors to Warwick Cycle Manufacturing Company, Springfield, Mass. Saddle for velocipedes	499,675	June 13	1544	372	63	1674
Hendrickson, Blake, <i>et al.</i> (See Brintnall, Thomas M., assignor.)						
Hendrickson, Blake, <i>et al.</i> (See Brintnall and Bradley, assignors.)						
Hendrickson, Charles, New Brighton, N. Y. Tennis-net	497,662	May 16	2061	514	63	1021
Hendrickson, John F., Boston, Mass. Railway-switch	507,616	Oct. 31	3122	763	65	638
Hendrix, William W., Bowling Green, Ky. Electric-railway switch and crossing	511,017	Dec. 19	2046	506	65	1816
Hendrix, William W., Bowling Green, Ky. Electric-railway trolley	511,018	Dec. 19	2048	506 507	65	1816
Hendrix, William W., Bowling Green, Ky. Electric-railway trolley	511,019	Dec. 19	2049	507	65	1817
Hendrix, Zadox B., assignor of one-half to W. P. Brickley, Anderson, Ind. Mail-bag fastening	505,045	Sept. 12	1214	313	64	1513
Henius, Max W., Brooklyn, N. Y., assignor to D. H. Fanning, Worcester, Mass. Corset-stay	503,909	Aug. 22	2738	687	64	1114
Henkel, Julius A., Greenville, Mich. Refrigerator	505,358	Sept. 19	1718	443 444	64	1619
Henkle, Louis R. (See Keene, Milton W., assignor.)						
Henkle, Thomas B., Indianapolis, Ind. Ice-tongs	496,158	Apr. 25	2596	653	63	529
Henley, Micajah C., Richmond, Ind. Pulley-lathe	506,398	Oct. 10	1044	259 260	65	211
Henn, Edwin C., Bloomfield, assignor to Standard Manufacturing Company, Hartford, Conn. Valve	505,792	Sept. 26	2490	628	64	1778
Henne, Louis. (See Willmann, Joseph, assignor.)						
Henneberg, Hermann O., assignor to Siemens & Halske, Berlin, Germany. Lightning-arrester	493,926	Mar. 21	1860	474	62	1751
Hennegin, Herbert H., St. Louis, Mo. Sanding device for cars	510,258	Dec. 5	702	169	65	1543
Henneman, Karel F., The Hague, Netherlands. Gas coffee-roaster	510,068	Dec. 5	384	85	65	1482
Hennes, Lambert, South Sioux City, Nebr. Combined bookcase and washstand	511,237	Dec. 19	2402	585	65	1884
Henney, James, Cloverport, Ky. Continuous brick-kiln	510,135	Dec. 5	494	112	65	1503
Henning, Benjamin S., New York, N. Y. Railway	504,351	Sept. 5	57	16	64	1282
Henning, Henry M., Minocqua, Wis. Watch guard or chain holder	505,657	Sept. 26	2269	575	64	1737
Henninger, Theodor, St. Paul, Minn. Mouthpiece for musical instruments	491,646	Feb. 14	960	241	62	956
Heurie, Joseph, Benton, Kans. Vehicle spring	495,489	Apr. 18	1563	393	63	327
Henry, Archie J. (See Henry, James M., assignor.)						
Henry, Charles H. (See Long and Henry.)						
Henry Dieston & Sons. (See Dieston, Thomas S., assignor.)						
Henry, Fred H. (See Bolton, Gilman B., assignor.)						
Henry, Fred H., Wakefield, Mass., assignor of one-half to Wakefield Rattan Company, of Massachusetts. Car-seat	500,204	June 27	2443	596	63	1857
Henry Huber Company. (See Beaumont, Thomas C., assignor.)						
Henry Huber Company. (See Boyle, James E., assignor.) (Reissue.)						
Henry, James M., Evans' Mills, assignor to A. J. Henry, Watertown, N. Y. Vending-machine	505,793	Sept. 26	2491	628 629	64	1778
Henry, John, Iderton, assignor to P. A. Harding and D. Smith, London, Canada. Lever track-jack	491,049	Jan. 31	3337	851	62	729
Henry, John C., New York, N. Y. Truck for electric locomotives	493,089	Mar. 7	494	123	62	1457
Henry, John C., New York, N. Y. Electric railway	494,477	Mar. 28	2771	695	62	1935
Henry, John C., New York, N. Y. Driving-gear for motors	494,478	Mar. 28	2773	695	62	1935
Henry, John C., New York, N. Y. Electric-car truck	494,479	Mar. 28	2774	696	62	1935
Henry, John C., New York, N. Y. Overhead electric railway	499,112	June 6	627	150 151	63	1499
Henry, John C., New York, N. Y. Gearing for electric-railway cars	499,633	June 13	1485	357	63	1664
Henry, John C., New York, N. Y. Closed conduit for electric railways	500,065	June 20	2184	532	63	1800

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Henry, John C., New York, N. Y. Electric locomotive	500,066	June 20	2186	{ 532 533	{ 63	1800
Henry, John C., New York, N. Y. Electric locomotive	500,067	June 20	2188	{ 533 533	{ 63	1800
Henry, John C., New York, N. Y. Electric-railway system	500,068	June 20	2189	{ 533 534	{ 63	1801
Henry, John C., New York, N. Y. Regulator for dynamo-electric machines	504,216	Aug. 29	3251	{ 811 811	{ 64	1226
Henry, John C., New York, N. Y. Electric locomotive	509,311	Nov. 21	2192	{ 527 528	{ 65	1202
Henry, John C., New York, N. Y. Supply system for electric railways	509,312	Nov. 21	2195	{ 528 528	{ 65	1203
Henry, John C., Westfield, N. J. Car-brake	497,544	May 16	1876	{ 473 473	{ 63	988
Henry, John C., Westfield, N. J. Electro-magnetic car-brake	499,543	June 13	1347	{ 319 320	{ 63	1640
Henry, John C., Westfield, N. J. Regulator for electric machines	499,544	June 13	1349	{ 320 320	{ 63	1641
Henry, John C., Westfield, N. J. Power-transmitting mechanism	500,069	June 20	2191	{ 534 535	{ 63	1801
Henry, John C., Westfield, N. J. Electric-railway trolley	500,070	June 20	2192	{ 534 535	{ 63	1801
Henry, John C., Westfield, N. J. Overhead electric railway	501,009	July 4	747	{ 196 196	{ 64	136
Henry, John C., Westfield, N. J. Underground electric conductor	508,613	Nov. 14	1037	{ 256 256	{ 65	967
Henry, John C., Westfield, N. J. Recorder of speed of driven shafts	508,614	Nov. 14	1039	{ 256 256	{ 65	967
Henry, John C., Westfield, N. J. Electric railway	508,615	Nov. 14	1040	{ 257 257	{ 65	967
Henry, John C., Westfield, N. J. Electric car-lighting system	508,616	Nov. 14	1041	{ 257 257	{ 65	968
Henry, Louis, and L. N. Dalysson, Newark, N. J. Socket-switch for incandescent electric lamps	489,739	Jan. 10	1161	{ 302 302	{ 62	256
Henry, Marcus S., Minneapolis, Kans. Seeder	496,782	May 2	621	{ 166 166	{ 63	730
Henry, Michael, Dayton, Ohio. Hand-guard for freezer-machines	498,263	May 30	3021	{ 753 753	{ 63	1322
Henry, Mike, assignor of one-half to W. E. Oliver, Wesson, Miss. Collar-button	506,399	Oct. 10	1048	{ 261 261	{ 65	212
Henry, William A. (See Evans and Henry.)						
Hensel-Colladay Company. (See Adams, Thomas, assignor.)						
Hensel, George F., Philadelphia, Pa. Pendant for dress-trimmings	491,350	Feb. 7	490	{ 125 125	{ 62	841
Hensel, George F., Philadelphia, Pa. Upholstery ball, tassel, &c.	509,661	Nov. 28	2822	{ 681 681	{ 65	1333
Hensel, Rudolph T. E., Dresden, Germany. Manufacture of electrodes for primary or secondary batteries	496,517	May 2	199	{ 63 63	{ 65	655
Henshaw, Thomas, Philadelphia, Pa. Plugging-bench for making metallic fence-railings	506,431	Oct. 10	1109	{ 275 275	{ 65	224
Hensley, Joseph B. (See Noble and Hensley.)						
Henson, Marvin T., assignor to B. Gillespie and J. W. Macy, Sidney, Ohio. Vise	493,625	Mar. 14	1374	{ 348 348	{ 62	1641
Henthorne, Henry, Newark, Ohio. Railway-car attachment	495,801	Apr. 18	2056	{ 520 520	{ 63	412
Hentz, James W., Baltimore, Md. Guard for cable-crossings	507,497	Oct. 24	2889	{ 711 711	{ 65	581
Henwood, Horace E. (See Moakler, John W., assignor.)						
Hepburn, Lewis L., assignor to Marlin Fire Arms Company, New Haven, Conn. Breech-loading gun	502,489	Aug. 1	409	{ 96, 97 96, 97	{ 64	642
Heppell, Richard W., Dunkirk, N. Y. Sash-lock	506,780	Oct. 17	1676	{ 432 432	{ 65	344
Heppenstall, James E., Lockhart, Tex. Index	495,155	Apr. 11	1026	{ 256 256	{ 63	208
Hérard, Joseph, Paris, France. Metallic curtain with stained-glass panes	510,507	Dec. 12	1099	{ 265 265	{ 65	1633
Herb, Charles A., and H. Meyer, Alton, Ill. Switch-signal	490,387	Jan. 24	2247	{ 584 584	{ 62	501
Herbert Booth King & Brother Publishing Company. (See Harrison, John, assignor.)						
Herbert, Henry F., Rock Point, Pa. Pump	496,653	May 2	421	{ 113 113	{ 63	695
Herbert, Michael E., St. Joseph, Mo. Hot-water boiler	489,807	Jan. 10	1261	{ 331 331	{ 62	276
Herbert, Michael E., St. Joseph, Mo. Hot-water boiler	492,289	Feb. 21	1947	{ 487 487	{ 62	1171
Herbert, Michael E., St. Joseph, Mo. Fire-box for steam-boilers	492,290	Feb. 21	1948	{ 487 487	{ 62	1171
Herbert, Thomas. (See Morley, Robert, assignor.)						
Herbrand Company. (See Fetzner, James J., assignor.)						
Hercules Iron Works. (See Levey, Butler, and MacDonald, assignors.)						
Herdman, Frank E., Indianapolis, Ind. Electric elevator	492,160	Feb. 21	1755	{ 437 438	{ 62	1130
Herdman, Frank E., Indianapolis, Ind. Elevator. (Reissue)	11,327	Apr. 25	2984	{ 745 745	{ 63	603
Herdman, Frank E., Indianapolis, Ind. Elevator	506,911	Oct. 17	1888	{ 471 471	{ 65	382
Herdman, Frank E., Indianapolis, Ind. Elevator	507,617	Oct. 31	3124	{ 764 764	{ 65	638
Herdman, Frank E., Indianapolis, Ind. Elevator	510,913	Dec. 19	1865	{ 458 459	{ 65	1783
Herdman, Frank E., Indianapolis, Ind. Elevator	510,914	Dec. 19	1868	{ 459 459	{ 65	1784
Herdman, Frank E., Indianapolis, Ind. Elevator	510,915	Dec. 19	1871	{ 459 459	{ 65	1785
Herdman, James A., Lincoln, Nebr. Listing-cultivator	501,940	July 25	2251	{ 562 562	{ 64	454
Hering, Carl, Philadelphia, Pa. Variable-speed electric motor	489,709	Jan. 10	1111	{ 287 287	{ 62	246
Herman, Frederick, Acquackanonck, N. J. Lubricator	505,828	Oct. 3	39	{ 10 10	{ 65	10
Herman, Fredrick, Martinsville, Miss. Joint for railway-rails	504,981	Sept. 12	1113	{ 285 285	{ 64	1493
Herman, Gustavus. (See Edison, Thomas A., assignor.)						
Herman, John C., St. Louis, Mo. Nut-lock	493,213	Mar. 7	680	{ 174 174	{ 62	1492
Herman, John C., assignor to American Nut-Lock Company, St. Louis, Mo. Metal bending and twisting machine	499,733	June 20	1646	{ 396 397	{ 63	1706
Herman, Ludwig, Cleveland, Ohio. Chain	490,109	Jan. 24	2275	{ 591 591	{ 62	506
Herman, Ludwig, Cleveland, Ohio. Animal-trap	491,309	Feb. 7	415	{ 107 107	{ 62	826
Herman, Reinhold, Crafton, Pa. Pipe-coupling	502,038	July 25	2402	{ 605 605	{ 64	481
Hermans, Walter L. (See Gee, Horace L., assignor.)						
Hermite, Eugene, Paris, and A. Dubosc, Rouen, France. Method of and apparatus for electrolyzing solutions	501,783	July 18	1999	{ 494 494	{ 64	394
Hermon, William A. (See Wright and Hermon.)						
Hern, John. (See Rashleigh and Hern.)						
Herrndon, George P., Birmingham, Ala. Preserving-can	499,734	June 20	1649	{ 397 397	{ 63	1706
Hero Electric Company. (See Archer, Frank M., assignor.)						
Herold, Jan. (See Lexa and Herold.)						
Herr, Albert W., Washington, D. C. Curtain-fixture	502,074	July 25	2459	{ 618 618	{ 64	492
Herr, Homer A., Philadelphia, Pa. Coin-actuated automatic check-delivery apparatus	506,400	Oct. 10	1049	{ 261 262	{ 65	212
Herran y Bolado, Jose, Aguas Calientes, Mexico. Type-writing machine	506,816	Oct. 17	1732	{ 435 436	{ 65	34
Herrburger, Joseph, Paris, France. Piano-action	506,366	Oct. 10	982	{ 244 244	{ 65	198
Herren, Albert. (See Dawdy and Herren.)						
Herrick, Albert B., Schenectady, N. Y., assignor to General Electric Company, Boston, Mass. Means for taking readings of meter-dials	504,159	Aug. 29	3149	{ 787 787	{ 64	1207
Herrick, Albert B., Schenectady, N. Y., assignor to General Electric Company, Boston, Mass. Rheostat	504,160	Aug. 29	3151	{ 787 787	{ 64	1207
Herrick, Albert B., Schenectady, N. Y., assignor to General Electric Company, Boston, Mass. Electric switch	504,528	Sept. 5	362	{ 91, 92 91, 92	{ 64	1337

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Herrick, Albert B., Bayonne, N. J., assignor to A. C. Fraser, trustee, Brooklyn, N. Y. Electric signal for railways	507,125	Oct. 24	2245	{ 554 555 }	65	462
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Hammock attachment	490,250	Jan. 17	2012	526	62	441
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Belt-clasp	494,293	Mar. 28	2487	627	62	1883
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Attachment for hammock-ropes	495,200	Apr. 11	1096	272	63	221
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Horse-blanket buckle	499,458	June 13	1208	288	63	1616
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Blanket buckle	500,894	July 4	568	147	64	103
Herrick, George D. (See Denegar, Thomas E., assignor.)						
Herrick, Harrison E., Merrimac, N. H. Spring-back for vehicle-seats	503,319	Aug. 15	1815	450	64	925
Herring, H. R., et al. (See West, John S., assignor.)						
Herring, James H., Murphy, Tex. Stalk cutter	510,789	Dec. 12	1605	400	65	1726
Herrington, Ephraim, assignor of one-half to R. P. Horton, Atlanta, Ga. Spring-motor	494,203	Mar. 28	2344	593	62	1857
Herrington, Horatio D., Leslie, Mich. Gate	504,780	Sept. 12	781	197	64	1429
Herrinton, Edward E., Grand Rapids, Mich. Folding bed	495,970	Apr. 25	2310	584	63	475
Herrmann, Albert, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Indigo-blue dye	490,408	Jan. 24	2273		62	506
Herrmann, Charles P., Milwaukee, Wis. Latch	491,285	Feb. 7	361	90	62	817
Herrmann, Ernest. (See Cohen and Herrmann.)						
Herrmann-Rabich Fan and Motor Manufacturing Company. (See Rabich, William, assignor.)						
Herron, James B., et al. (See Hoff, Herman, assignor.)						
Herron, James B., assignor, by mesne assignments, to H. S. Park, Chicago, Ill. Soda-water apparatus. (Reissue)	11,313	Mar. 14	1376	349	62	1642
Herschler, Charles, Paris, France. Atomizer	495,735	Apr. 18	1957	493	63	395
Herschler, Charles, Paris, France. Sterilized and drinkable water	501,784	July 18	2003	494	64	394
Herschler, Charles G., assignor to Society Geneste, Herscher et Co., Paris, France. Centrifugal ventilator	511,140	Dec. 19	2249	552	65	1856
Hersey, Fred E. (See Hawkes and Hersey.)						
Hersey, George H., Passaic, N. J., assignor to Hart & Crouse, Utica, N. Y. Hot-water or steam heater	494,676	Apr. 4	232	58, 59	63	47
Hersey Manufacturing Company. (See Tilden, James A., assignor.)						
Hersey Manufacturing Company. (See Winton, Henry D., assignor.)						
Hershman, Nicholas W. (See Snyder, Frank T., assignor.)						
Hershock, Jacob B., Wilmington, Del. Washing-machine	496,936	May 9	897	235	63	800
Hertel, Max E., and A. Beck, Chicago, Ill.; said Hertel assignor to said Beck. Bicycle-support	505,162	Sept. 19	1409	363	64	1562
Herth, George J., and G. Bonenberger, Evansville, Ind. Mine trap-door	508,879	Nov. 14	1437	356	65	1043
Hertzog, Oscar S. (See Hoopes and Hertzog.)						
Herzberg, Morris, Chambers county, Ala., and T. L. Norman, West Point, Ga. Wood-screw	493,585	Mar. 14	1304	332	62	1628
Herzberg, Nachman H., assignor of one-half to A. Cahn, New York, N. Y. Fire-escape	501,343	July 11	1302	325	64	250
Herzig, Emil. (See Thies and Herzig.)						
Herzler, Martin J., Belleville, Ill. Washing-machine	498,115	May 23	2775	695	63	1164
Herzog, Conrad, London, England. Measuring-vessel	495,037	Apr. 11	796	201	63	167
Herzog, George, Joliet, Ill. Windmill	504,035	Aug. 29	2952	739	64	1170
Herzog, Nathan, Columbus, Ohio. Boat	511,141	Dec. 19	2252	553	65	1856
Hescock, Henry W., Hubbard, Ohio. Evaporating-pan	500,233	June 27	2489	608	63	1865
Heskett, Harrison H., Minneapolis, Minn. Fishing-reel	496,654	May 2	422	113	63	695
Heslop, William, Wakefield, England. Machinery for pressing boats from sheet metal	493,720	Mar. 21	1522	{ 389 390 }	62	1626
Heslop, William, Wakefield, England. Machinery for pressing or stamping boats from sheet metal	504,878	Sept. 12	936	{ 241 242 }	64	1461
Hesp, William S. (See Currier, Hesp, and Crum.)						
Hespe, William C. (See Gerland, Frederick J. M., assignor.)						
Hess, Edward B., New York, N. Y., assignor to National Cash Register Company, Dayton, Ohio. Cash-register	498,716	May 30	3796	{ 936 937 }	63	1358
Hess, Fritz, Locle, Switzerland. Embossed plate for enameled watch-dials	493,927	Mar. 21	1861	474	62	1751
Hess, George A., Maquoketa, Iowa. Gate	497,663	May 16	2062	514	63	1021
Hess, George A., Maquoketa, Iowa. Trough for watering stock	511,142	Dec. 19	2253	553	65	1856
Hess, Goldsmith & Co. (See Haytock, Benjamin, assignor.)						
Hess, Goldsmith & Co. (See Smith and Minchin, assignors.)						
Hess, Henry K., Syracuse, N. Y. Printing-telegraph for cash-recording systems	505,293	Sept. 19	1616	{ 419 420 }	64	1601
Hess, John A., Philadelphia, Pa. Measuring-faucet	506,502	Oct. 10	1232	306	65	247
Hess, Martin, New York, N. Y. Package-envelope	502,966	Aug. 8	1233	303	64	807
Hess, Oliver I., Mount Pleasant, Pa. Type-writing machine	495,135	Apr. 11	988	248	63	202
Hess Postal Facility and Supply Company. (See Hook, Harry L., assignor.)						
Hess, William F., San Francisco, Cal. Press for packing bank-notes or other currency	500,766	July 4	374	97	64	70
Hess, William T. (See Stockwell, Millard E., assignor.)						
Hess, William T., Grand Rapids, Mich. Trimming-machine	490,848	Jan. 31	2988	765	62	660
Hesse, Carl, and J. C. M. Sternberg, Long Island City, N. Y., assignors of one-half to Owl Cigar Company, of New York. Cigar-wrapper cutter	503,701	Aug. 22	2433	{ 605 606 }	64	1053
Hesse, Ernst A. C., Brooklyn, N. Y. Sofa-bed	501,602	July 18	1697	423	64	341
Hesse, Frank K., assignor to Codman & Shurtleff, Boston, Mass. Dental engine	489,416	Jan. 3	655	{ 177 178 }	62	141
Hesse, Friedrich, et al. (See Koch, Johann T., assignor.)						
Hesse, Gustaf E., assignor of five-eighths to W. W. Share and V. F. Lässoe, Brooklyn, N. Y. Converter system for electric railways	511,524	Dec. 26	2893	705	65	1988
Hesse, Gustav, Long Island City, N. Y. Cigar-wrapping machine	492,203	Feb. 21	1815	{ 454 455 }	62	1143
Hessong, James, Chillicothe, Ohio. Wagon-body	505,464	Sept. 26	1897	480	64	1667
Hester, Charles T., assignor to H. Guinard, New York, N. Y. Saddle	510,654	Dec. 12	1437	354	65	1693
Hester, Joseph W., assignor of one-half to J. L. Grace, Citronelle, Ala. Nut-lock	506,231	Oct. 10	758	187	65	155
Heston, Nathan C. (See Grant and Heston.)						
Heston, William, Alliance, Ohio. Ice-scraper for trolley-wires	507,539	Oct. 31	2976	730	65	610
Hesz, Josef J., Vienna, Austria Hungary. Brick structure	497,959	May 23	2537	{ 633 634 }	63	1121
Hetherington-Carruthers, Sophia, Sydney, New South Wales. Electro-medical appliance	500,767	July 4	376	97	64	70

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Hetherington, Frederick A., assignor to United States Camera Company, Indianapolis, Ind.	502,857	Aug. 8	1039	255	64	772
Photographic camera	502,967	Aug. 8	1234	303	64	807
Hettick, Russell D., W. T. Wilson, and E. Rowe, Indiana, Pa. Ladder	491,351	Feb. 7	491	126	62	841
Hettmansperger, Louis F. (See Linville and Hettmansperger.)	501,186	July 11	1046	265	64	205
Hetu, Arthur, Holyoke, Mass. Bevel-square	501,187	July 11	1047	265	64	205
Hetz, Peter, Brooklyn, assignor to J. M. Waterbury and C. Marshall, New York, N. Y.	491,647	Feb. 14	960	241	62	956
Twine-ball-gaging device	504,217	Aug. 29	3252	811	64	1226
Hetz, Peter, Brooklyn, assignor to J. M. Waterbury and C. Marshall, New York, N. Y.	507,730	Oct. 31	3299	807	65	671
Tension-regulator for twine-bobbins	500,391	June 27	2739	673	63	1909
Hetzer, Otto, Weimar, Germany. Floor						
Heuer, Ferdinand. (See Ohse, Wilhelm, assignor.)	507,126	Oct. 24	2253	555	65	463
Heuler, Georg L., St. Louis, Mo. Suspender attachment	511,334	Dec. 26	2576	627	65	1929
Heulings, Samuel M., assignor to Star Milk Cooler Company, Haddonfield, N. J. Milk-cooling apparatus	500,329	June 27	2646	647	63	1893
Heumader, Christian, St. Joseph, Mo. Combined trunk, wardrobe, &c						
Hewes, Henry M. (See Mason, Joseph H., assignor.)						
Hewes, Lewis J. (See Gates and Hewes.)						
Hewes, Lewis J., assignor to Gates Iron Works, Chicago, Ill. Ore-elevator	507,126	Oct. 24	2253	555	65	463
Hewett, George C., Washington, D. C. Making coke	511,334	Dec. 26	2576	627	65	1929
Hewison, Ions G. (See Gaudron, Edward N., assignor.)						
Hewitt, David, Muskegon, Mich. Fire-alarm	500,329	June 27	2646	647	63	1893
Hewitt, Elisha. (See Fredin, Perjoan, assignor.)						
Hewitt, Hezekiah, Birmingham, England. Machinery for rolling metals	499,545	June 13	1350	320	63	1641
Hewitt, Philander, Cambria, Mich. Stock-rack	491,886	Feb. 14	1330	329	62	1029
Hewitt, William, Brantford, Canada. Cultivator	496,605	May 2	330	91	63	679
Hewitt, William M., Sharptown, Ind. Plow or cultivator tooth	494,420	Mar. 28	2689	675	62	1921
Hewlings, A. J., et al. (See Sanginetti, Percy A., assignor.)						
Hey, Johann F., Strasburg, Germany. Means for supporting journal-boxes	493,499	Mar. 14	1150	294	62	1597
Hey, Michael, Philadelphia, Pa. Steam-trap	508,708	Nov. 14	1180	291	65	995
Heyde, Edward, assignor to Wickes Brothers, Saginaw, Mich. Riveting-machine	493,928	Mar. 21	1862	475	62	1751
Heyden, F. von, Nachfolger. (See Berlinerblau, Joseph, assignor.)						
Heyden, F. von, Nachfolger. (See Seifert, Bruno R., assignor.)						
Heydenreich, Ernst C., Mount Clemens, Mich. Elevator-brake	504,161	Aug. 29	3155	788	64	1208
Heylman, William R., Rich Hill, Mo. Elevated cable railway	493,500	Mar. 14	1151	294	62	1597
Heys, John J. (See Bresnahan and Heys.)						
Heys, John J., assignor of one-half to M. V. Bresnahan, Lynn, Mass. Heel-pressing machine	497,497	May 16	1814	456	63	976
Heysinger, Isaac W., Philadelphia, Pa. Pneumatic tire	500,205	June 27	2444	596	63	1857
Heysinger, Isaac W., Philadelphia, Pa. Envelope-opener	504,352	Sept. 5	58	16	64	1282
Heysinger, Isaac W., Philadelphia, Pa. Combined paper-weight and clamping device	506,232	Oct. 10	759	167	65	155
Heysinger, Isaac W., Philadelphia, Pa. Eraser	509,899	Dec. 5	94	22	65	1427
Heysinger, Isaac W., Philadelphia, Pa. Combined paper-weight and clamp	509,900	Dec. 5	96	22	65	1428
Heywood Bros. & Co. (See Messmer, Alexander L. H., assignor.)						
Heywood, Frank E., Worcester, Mass. Box-fastener	499,740	Jan. 10	1163	302	62	256
Hiatt, Ella L., Dublin, Ind. Folding handle for dust-pans	502,296	Aug. 1	65	15	64	578
Hibberd, Charles, Melbourne, assignor to T. W. Holland, Fitzroy, Victoria. Window	504,806	Sept. 12	823	209	64	1438
Hibbs, Augustine A. (See Reagan, Sanpp, and Hibbs.)						
Hibson, Albert R., Brooklyn, N. Y., assignor to National Folding Box and Paper Company, East Orange, N. J. Folding box	511,078	Dec. 19	2138	528	65	1834
Hickey, John J., New York, N. Y. Weighing-scale	499,993	June 20	2071	501	63	1780
Hickey, Peter J., and C. F. Norris, New York, N. Y. Cover for manholes	508,471	Nov. 14	801	198	65	921
Hickman, James B., et al. (See Woods, Edward D., assignor.)						
Hickman, Luther S. (See Jones, Wesley C. P., assignor.)						
Hickok, Henry M. and R. M., Woonsocket, S. D. Draft-equalizer	501,141	July 11	974	248	64	192
Hickok, Robert C., et al. (See Krieghoff, Anton, assignor.)						
Hickok, Rufus M. (See Hickok, Henry M. and R. M.)						
Hickory Wheel Company. (See Elliott, Sterling, assignor.)						
Hicks, Bohn C., Chicago, Ill. Hook for stock-cars	491,803	Feb. 14	1204	301	62	1004
Hicks, Bohn C., Chicago, Ill., assignor to Hicks Stock Car Company, of West Virginia. Stock-car	495,586	Apr. 18	1710	430	63	353
Hicks, Bohn C., Chicago, Ill., assignor to Hicks Stock Car Company, of West Virginia. Stock-car	504,692	Sept. 5	624	159	64	1388
Hicks, Charles A., et al. (See Merrill, Anson P., assignor.)						
Hicks, Frank M. (See Quast, Charles, assignor.)						
Hicks, George C., Boston, Mass. Tube-closer for steam-boilers	495,700	Apr. 18	1897	477	63	383
Hicks, George C., Boston, Mass. Tube-closer for steam-boilers	504,582	Sept. 5	444	113	64	1353
Hicks, George C., Boston, Mass. Damper-governor	508,709	Nov. 14	1182	291	65	995
Hicks, George F. H., Chicago, Ill. Match-safe and cigar-cutter	491,841	Feb. 14	1257	313	62	1016
Hicks, Henry C., Chicago, Ill. Traction-engine	493,267	Mar. 14	774	198	62	1528
Hicks, James J., London, England. Thermometer	496,783	May 2	624	167	63	731
Hicks, James J., London, England. Thermometer	498,651	May 30	3676	909	63	1338
Hicks, John T. (See Boardman, Arthur F., assignor.)						
Hicks, John T., Somerville, Mass., assignor to Hotel Security Checking Company, Portland, Me. Method of and means for cash-registering and account-checking	500,071	June 20	2194	535	63	1802
Hicks, Lewis C., assignor of one-half to M. Vincent, Onawa, Iowa. Dumping-wagon	504,304	Aug. 29	3390	848	64	1253
Hicks, Nehemiah, Wilkesville, assignor to G. Draper & Sons, Hopedale, Mass. Cap-spinning frame	510,861	Dec. 12	1776	436	65	1755
Hicks, Oliver H., Chicago, Ill. Apparatus for making bundles of toilet paper	492,204	Feb. 21	1818	455	62	1144
Hicks, Oliver H., Chicago, Ill., assignor to Morgan Envelope Company, Springfield, Mass. Rolled paper and fixture therefor	498,900	June 6	273	63, 64	63	1441
Hicks, Oliver H., and R. F. Troy, Chicago, Ill.; said Troy assignor to said Hicks. Electric door-operating apparatus	505,270	Sept. 19	1570	410	64	1592
Hicks, Oliver H., and R. F. Troy, Chicago, Ill.; said Troy assignor to said Hicks. Electric door-operating apparatus	505,271	Sept. 19	1574	410	64	1592
Hicks, Oliver H., and R. F. Troy, Chicago, Ill.; said Troy assignor to said Hicks. Electric door-operating apparatus	507,269	Oct. 24	2515	620	65	508
Hicks, Simeon J., Englewood, Ill. Mortising-machine	493,501	Mar. 14	1153	294	62	1598
Hicks, Simeon J., Englewood, Ill. Mortising-tool	502,120	July 25	2531	635	64	506

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Hicks Stock Car Company. (See Hicks, Bohn C., assignor.)						
Hicks, Thomas H., Detroit, Mich. Magnetic core for armatures	492,355	Feb. 21	2055	513	62	1192
Hicks, Thomas H., assignor of one-half to G. F. Case, Detroit, Mich. Bipolar electrical machine	491,106	Feb. 7	70	19	62	762
Hickson, George W., <i>et al.</i> (See Irving, Samuel, assignor.)						
Hide, Arthur C., London, England. Velocipede-wheel	496,937	May 9	899	{ 235 236 }	63	800
Heatzman, Arthur H., assignor of one-half to H. D. Heatzman, Baltimore, Md. Electric-railway conduit	498,169	May 23	2847	712	63	1177
Heatzman, Arthur H., assignor of one-half to A. Brown, G. R. Wannewetsch, and H. D. Heatzman, Baltimore, Md. Meat-hanger	511,238	Dec. 19	2403	585	65	1884
Heatzman, Harry D. (See Heatzman, Arthur H., assignor.)						
Heatzman, Harry D., <i>et al.</i> (See Heatzman, Arthur H., assignor.)						
Hieronimus, William. (See Nieman and Hieronimus.)						
Hiett, George, Fremont, Ohio. Cane-stripper	494,743	Apr. 4	344	87	63	68
Higbee, Clinton A., Philadelphia, Pa. Bolt and nut	501,941	July 25	2253	562	64	454
Higbee, Clinton A., Philadelphia, Pa. Tool for trimming screw-threads	501,942	July 25	2253	{ 562 563 }	64	454
Higbee, Clinton A., J. Braun, and H. Deck, assignors to said Higbee and J. Braun & Sons, Philadelphia, Pa. Tool for cutting down screw-threads	501,943	July 25	2255	563	64	454
Higbee, Frederick S., Pataskala, Ohio. Dumping-wagon	510,426	Dec. 12	962	231	65	1607
Higbie, Frances, Brooklyn, N. Y. Lamp-stove and attachment therefor	495,802	Apr. 18	2057	520	63	413
Higbie, Frances, Brooklyn, N. Y. Clamp-joint	509,232	Nov. 21	2053	495	65	1176
Higbie, Nathan B., Chicago, Ill. Grain-cleaner or oat-sifting machine	493,429	Mar. 14	1031	266	62	1577
Higgason, John W., Belleville, Kans. Tire-heater	497,875	May 23	2406	600	63	1099
Higgins, William H., Bolton, England. Making sodium acetate	511,143	Dec. 19	2254		65	1857
Higginbottom, Joseph L. (See Beck, Lewis B., assignor.)						
Higginbottom, James, Liverpool, England. Centrifugal dressing-machine	490,652	Jan. 31	2687	692	62	601
Higginbottom, James, and O. Stuart, Liverpool, England. Middlings-purifier	490,285	Jan. 24	2083	{ 543 544 }	62	467
Higgins, Addie B., <i>et al.</i> (See Mitchell, William H., assignor.)						
Higgins, Atkins. (See Hopkins and Higgins.)						
Higgins, Campbell P. (See Knight and Higgins.)						
Higgins, Campbell P., New York, N. Y. Sectional mandrel	503,960	Aug. 29	2836	708	64	1149
Higgins, Campbell P., New York, N. Y. End-welding machine for headers or other tubes	503,961	Aug. 29	2837	{ 708 709 }	64	1149
Higgins, Campbell P., New York, N. Y. Die for forming polygonal tubes	503,962	Aug. 29	2839	709	64	1150
Higgins, Campbell P., New York, N. Y. Embossing and punching machine	503,963	Aug. 29	2841	{ 710 711 }	64	1150
Higgins, Campbell P., New York, N. Y. End-placing machine for headers or other tubes	503,964	Aug. 29	2842	{ 711 712 713 }	64	1150
Higgins, Campbell P., New York, N. Y. Metal-working apparatus	503,965	Aug. 29	2843	{ 712 713 }	64	1151
Higgins, Campbell P., New York, N. Y. Machine for making ends for headers or other purposes	503,966	Aug. 29	2846	713	64	1151
Higgins, Charles W., assignor of three-fourths to J. B. and H. E. Knudson, Fernwood, and L. C. B. Holmboe, Chicago, Ill. Air-brake mechanism for railway-cars	503,083	Aug. 8	1405	347	64	839
Higgins, Dennis F., Jersey City, N. J. Wing-rail frog	501,070	July 11	842	{ 218 219 }	64	169
Higgins, Eben L., G. W., and E. E., Minneapolis, Minn. Wood-cart	498,056	May 23	2687	673	63	1147
Higgins, Edward S., and H. C. Jenkins, London, England. Joint for type-writing machines	502,190	July 25	2645	667	64	529
Higgins, Elmer E. (See Higgins, Eben L., G. W., and E. E.)						
Higgins, Emma L. (See Drake and Higgins, assignors.)						
Higgins, Frederick A. (See Drake and Higgins.)						
Higgins, George W. (See Higgins, Eben L., G. W., and E. E.)						
Higgins, James D., Boston, Mass. Device for protecting elevator-shafts	497,447	May 16	1721	{ 434 435 }	63	960
Higgins, John H. (See Williams, Eben B., assignor.)						
Higgins, Martin, Niles, Ohio. Lock	491,352	Feb. 7	493	126	62	841
Higgins, Martin, Niles, Ohio. Boiler	494,861	Apr. 4	540	{ 136 137 }	63	105
Higgins, Rozander S., Neoga, Ill. Feed-trough	489,808	Jan. 10	1263	321	62	277
Higgins, William F., Portland, Ore. Pavement	510,259	Dec. 5	704	170	65	1543
Higgins, William H., Forest City, Pa. Bracket	501,618	July 18	1726	430	64	346
Higgins, William O., Kingwood, Ind. Rock-drill	508,313	Nov. 7	546	134	65	858
Higginson, Henry C., Newburg, N. Y. Manufacture of whiting	491,353	Feb. 7	494	127	62	842
Higginson, Henry C., Newburg, N. Y. Apparatus for manufacturing whiting	499,994	June 20	2073	502	63	1780
Higginson, Henry C., Newburg, N. Y. Manufacturing whiting	499,995	June 20	2074	502	63	1780
Higgs, James R., New Hartford, N. Y. Tool for cutting cue-tips	509,599	Nov. 28	2725	658	65	1315
High, Maurice F., Lebanon, Pa. Nut-machine	491,175	Feb. 7	190	48	62	784
Higham, Charles C., St. Louis, Mo., assignor to Westinghouse Air Brake Company, Pittsburgh, Pa. Truck-brake	492,923	Mar. 7	243	61, 62	62	1407
Higham, Daniel, Boston, Mass. Electric-arc-lighting system	510,260	Dec. 5	705	170	65	1543
Higham, Howard H., Philadelphia, Pa. Manufacture of hooped boxes	497,876	May 23	2408	{ 600 601 }	63	1099
Higham, Howard H., Philadelphia, Pa. Bottle-case	497,877	May 23	2409	601	63	1099
Higham, Howard H., Philadelphia, Pa. Case for carboys	497,878	May 23	2410	601	63	1099
Hight, William S., assignor to Frey-Sheckler Company, Bucyrus, Ohio. Brick or tile machine	504,781	Sept. 12	782	{ 197 198 }	64	1430
Higman, George N., <i>et al.</i> (See Stephens, Jesse A., assignor.)						
Hilburn, Frank P., Annapolis, Mo. Switch-lock	499,459	June 13	1209	288	63	1617
Hilde, Hermann, Rosswein, Germany. Glass-blowing apparatus	493,867	Mar. 21	1764	{ 449 450 }	62	1733
Hildebrand, Winfield B. (See Steiner, Charles E., assignor.)						
Hildebrandt, Edwin S., Baltimore, Md. Cable-railway curve	494,635	Apr. 4	172	42	63	35
Hildenbrand, Henry, St. Louis, Mo. Collar-stuffing machine	503,479	Aug. 15	2062	514	64	970
Hilder, Gottfrid J., St. Cloud, Minn. Multicharge-gun	493,382	Mar. 14	962	248	62	1563
Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Actuating mechanism for doffer-combs of carding-engines	492,533	Feb. 28	2350	583	62	1264
Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames	498,265	May 30	3025	753	63	1223
Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames	498,266	May 30	3028	754	63	1223

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Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.....	498,267	May 30	3030	754	63	1223
Hildreth, Charles L., assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.....	498,268	May 30	3031	755	63	1224
Hildreth, Charles L., S. G. Stephens, Lowell, and C. Whitaker, Tyngsborough, assignors to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames. Hildreth, Fred, <i>et al.</i> (See Burnham, Arthur M., assignor.)	498,264	May 30	3022	753	63	1222
Hildreth, William O., Lawrence, assignor to Stanley Manufacturing Company, Boston, Mass. Sole-sewing machine.....	503,084	Aug. 8	1408	347	64	839
Hiler, Giles P., Grand Haven, Mich. Hanger for electric lamps.....	507,364	Oct. 24	2680	348	65	541
Hilker, August F., Biggs, Cal. Swimming-shoe.....	509,535	Nov. 23	2631	349	65	1294
Hill, Arthur A., New York, N. Y. Composing-stick.....	499,546	June 13	1352	321	63	1642
Hill, Charles, Seattle, Wash. Safe or vault.....	501,142	July 11	975	249	64	192
Hill, Charles E. (See Close, Walter R., assignor.)						
Hill, Charles S., Chicago, Ill. Lavatory apparatus.....	500,234	June 27	2490	608	63	1865
Hill, Clark C., Newport, R. I. Carbon-holder.....	508,314	Nov. 7	547	134	65	859
Hill, Ebenezer, South Norwalk, Conn. Apparatus for storing and distributing gas.....	497,545	May 16	1877	473	63	988
Hill, Ebenezer, South Norwalk, Conn. Valve-gear for steam-engines.....	510,685	Dec. 12	1438	355	65	1694
Hill, Edward J., London, England. Match-box.....	496,261	Apr. 25	2756	689	63	558
Hill, Edwin, Toronto, Canada. Setting and holding plate-glass for beveling.....	506,401	Oct. 10	1053	262	65	213
Hill, Edwin, Toronto, Canada. Machine for beveling plate-glass.....	507,127	Oct. 24	2253	555	65	463
Hill, Elijah R., New Albany, Miss. Pump.....	492,678	Feb. 28	2582	639	62	1311
Hill, Frank D. (See Wallace, Edward L., assignor.)						
Hill, Frederick B., assignor to Hills Cold Storage Company, Limited, London, England. Refrigerating apparatus.....	505,359	Sept. 19	1720	444	64	1620
Hill, Frederick B., assignor to Hills Cold Storage Company, Limited, London, England. Refrigerating and ice-making machine.....	507,004	Oct. 17	2032	503	65	410
Hill, Frederick B., assignor to Hills Cold Storage Company, Limited, London, England. Manufacture of ice and apparatus therefor.....	507,005	Oct. 17	2034	503	65	411
Hill, Frederick B., assignor to Hills Cold Storage Company, Limited, London, England. Refrigerating apparatus.....	511,239	Dec. 19	2404	586	65	1885
Hill, George H., Reading, Mass. Sunshade for bicycles or other vehicles.....	494,333	Mar. 28	2551	643	62	1895
Hill, George S., Bradford, assignor to J. Reece, Boston, Mass. Sewing-machine.....	494,460	Mar. 28	2775	696	62	1936
Hill, Harry W., Cleveland, Ohio. Clutch-operating mechanism.....	503,853	Aug. 22	2653	664	64	1097
Hill, Harry W., Cleveland, Ohio. Self-rolling journal-box.....	511,144	Dec. 19	2255	553	65	1857
Hill, Harvey S., Ithaca, Mich. Bridle.....	505,658	Sept. 26	2269	575	64	1737
Hill, Herbert P. (See Irons and Hill.)						
Hill, Ira M., assignor of one-half to R. Crosbie, Boston, Mass. Weighing-scale.....	497,241	May 9	1357	345	63	882
Hill, Job W., Manchester, N. H. Stop and waste valve.....	502,563	Aug. 1	526	126	64	663
Hill, Joel E., Germantown, N. C. Filter.....	492,161	Feb. 21	1757	438	62	1131
Hill, John. (See Hodgson, Charles, assignor.)						
Hill, John C., Pottersville, N. J., assignor of one-half to G. W. Browne, Easton, Pa. Casting.....	507,365	Oct. 24	2681	659	65	541
Hill, John J., Chicago, Ill. Device for facilitating copying.....	499,953	Jan. 17	1511	395	62	341
Hill, John J., Chicago, Ill. Device for facilitating copying.....	499,954	Jan. 17	1512	395	62	341
Hill, John J., Chicago, Ill. Copy-holder.....	496,122	Apr. 25	2545	641	63	519
Hill, John L. (See Eglis, William, assignor.)						
Hill, John M. (See Laird, Archibald F., assignor.)						
Hill, John M. (See Laird and Hill.)						
Hill, John W. (See Hills, Henry A. and B. U., assignors.)						
Hill, Joseph, Williamsport, Pa. Rotary steam-engine.....	507,128	Oct. 24	2257	556	65	464
Hill, Joseph B. (See Hill, Samuel C., assignor.)						
Hill, Joseph S., Lafayette, Ind. Tower-wagon.....	499,189	June 6	748	177	63	1520
Hill, Julian P., Buffalo, N. Y. Ball-throwing device.....	491,558	Feb. 14	817	207	62	927
Hill, Leonard B., Boston, Mass. Harness-saddle.....	502,121	July 25	2532	635	64	506
Hill, Lyman L., assignor to H. C. Bradley, Bridgeport, Conn. Wood-turning lathe.....	491,941	Feb. 14	1414	353	62	1047
Hill, Norfleet, St. Louis, Mo., assignor to W. F. Bulkeley, Cleveland, Ohio. Device for keeping scores in progressive games.....	496,564	May 2	274	73	63	669
Hill, Oscar M., Santa Paula, Cal. Centrifugal honey-extractor.....	494,421	Mar. 28	2690	675	62	1921
Hill, Owen M., <i>et al.</i> (See Ricke, George H., assignor.)						
Hill, Peter, assignor of two-thirds to W. B. and M. Roche, Newark, N. Y. Dust-pan.....	490,200	Jan. 17	1925	500	62	424
Hill, Samuel C., assignor to J. B. Hill, Washington, D. C. Railway-spike.....	491,050	Jan. 31	3338	851	62	729
Hill, Thomas. (See Glydon, George, assignor.)						
Hill, Thomas, Jersey City, N. J. Wheel-vehicle.....	490,562	Jan. 24	2514	647	62	552
Hill, Thomas, assignor to Adams Tobacco Press Company, Quincy, Ill. Tobacco-press.....	489,741	Jan. 10	1165	302	62	256
Hill, Thomas, assignor to Smith-Hill Foundry and Machine Company, Quincy, Ill. Elevator controlling mechanism.....	497,719	May 16	2150	537	63	1037
Hill, Warren S., Hyde Park, Mass. Fan-motor.....	508,710	Nov. 14	1183	292	65	996
Hill, Warren S., Boston, Mass., assignor to W. S. Hill Electric Company, of Maine. Controlling-switch for electric motors.....	494,565	Apr. 4	58	14	63	12
Hill, Warren S., Hyde Park, assignor to W. S. Hill Electric Company, Boston, Mass. Circuit-controller for electric motors.....	494,781	Apr. 4	408	101	63	80
Hill, Warren S., Hyde Park, Mass., assignor to W. S. Hill Electric Company, Portland, Me. Electric generator.....	508,860	Nov. 14	1439	357	65	1044
Hill, Warren S., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Multiple thermal cut-out.....	495,038	Apr. 11	797	202	63	168
Hill, William E., Kalamazoo, Mich. Log stop and loader.....	496,938	May 9	900	236	63	800
Hill, William E., Kalamazoo, Mich. Log-unloader.....	505,829	Oct. 3	40	11	65	11
Hill, William E., Kalamazoo, Mich. Log-splitter.....	508,221	Nov. 7	398	96	65	832
Hill, William E., Kalamazoo, Mich. Steam-feed for sawmills.....	509,737	Nov. 28	2936	710	65	1354
Hill, William K., assignor of one-half to W. S. Farrington, Syracuse, N. Y. Egg cup and cooker.....	499,426	June 13	1154	277	63	1606
Hillabold, Charles D., assignor of one-half to M. S. Bentz, Canton, Kans. Cutter-bar for harvesters.....	497,320	May 16	1522	383	63	924
Hillabold, Tilman, assignor of one-half to W. C. Hillabold, Chicago, Ill. Folding umbrella.....	500,330	June 27	2647	648	63	1893
Hillabold, William C. (See Hillabold, Tilman, assignor.)						
Hillas, Isaac, Morley, England, assignor to Schaum & Uhlinger, Philadelphia, Pa. Jacquard mechanism for looms.....	497,879	May 23	2410	601	63	1100
Hille, Adolph W. (See Hinchman and Hille.)						
Hille, Gustav L., Bolton, England. Machine for cutting caoutchouc sheets.....	490,824	Jan. 31	2956	758	62	653

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Hille, Moritz. (See Lehmann, Friedrich A., assignor.)						
Hillenbrand, Julius, assignor to L. Joseph, Mannheim, Germany. Water-pressure blowing apparatus.	495,333	Apr. 11	1306	328	63	260
Hillenbrand, Julius, assignor to L. Joseph, Mannheim, Germany. Hydraulic ram.	495,334	Apr. 11	1307	328	63	260
Hiller, John H., Hyde Park, Mass. Snow-guard.	502,490	Aug. 1	411	97	64	642
Hillgren, Andreas, Geneva, Switzerland. Inkstand.	489,636	Jan. 10	1004	261	62	224
Hillhouse, Charles B. (See Stoner, John B., assignor.)						
Hilliard Cyclometer Company. (See Hilliard, John S., assignor.)						
Hilliard, John S., Philadelphia, Pa. Cash register and indicator.	506,233	Oct. 10	761	188	65	155
Hilliard, John S., assignor to Hilliard Cyclometer Company, Philadelphia, Pa. Cyclometer.	508,941	Nov. 21	1573	386 387	65	1083
Hilliard, Thomas M., New York, N. Y. Sponge and soap holder.	505,360	Sept. 19	1722	445	64	1620
Hilliker, Ryerson W., Kansas City, Kans. Adjustable appliance for hanging window-shades.	497,880	May 23	2411	602	63	1100
Hilling, Louis. (See Bond and Hilling.)						
Hills, Burton U. (See Hills, Henry A. and B. U.)						
Hills Cold Storage Company. (See Hill, Frederick B., assignor.)						
Hills, Elmer E., Dixon, Ill. Type-writing machine.	492,800	Mar. 7	46	11	62	1368
Hills, Henry A. and B. U., Frankfort, Mich., assignors of one-half to J. W. Hill, Chicago, Ill. Shingle-edging machine.	494,922	Apr. 4	624	159	63	121
Hills, James E. (See Williams, Frank E., assignor.)						
Hills, Lorenzo, Pittsburg, Tex. Cattle-guard.	501,785	July 18	2006	495	64	395
Hills, Louis, New York, N. Y. Insulator.	495,552	Apr. 18	1655	417	63	343
Hills, Louis, New York, N. Y. Electric-arc lamp.	498,269	May 30	3034	755	63	1224
Hills, Robert E. (See Delaney, Thomas A., assignor.)						
Hills, Silas B., Jermyn, Pa. Paint-brush.	498,392	May 30	3239	806	63	1260
Hills, William D., Salem, Ill. Tire-tightener.	494,334	Mar. 28	2553	643	62	1896
Hillsley, George, <i>et al.</i> (See Ahrens, John T., assignor.)						
Hillson, Joseph, Cambridge, Mass. Tin pan.	501,248	July 11	1136	288 289	64	222
Hillyard, Beryman. (See Moss and Hillyard.)						
Hilsher, Ellen, Penfield, Pa. Kitchen utensil.	508,711	Nov. 14	1185	292	65	996
Hilsinger, Adin W. (See McGill and Hilsinger.)						
Hilsinger, Adin W., Orange, N. J. Hat blocking and stretching machine.	490,563	Jan. 24	2516	647	62	552
Hilton, John W., assignor of one-half to B. P. Newell, Cincinnati, Ohio. Stove or heater.	494,899	Apr. 4	459	114	63	88
Hilton, John W., assignor of one-half to B. P. Newell, Cincinnati, Ohio. Stove or heater.	501,143	July 11	977	249	64	192
Hilton, William, Du Bois, Pa. Combined ironing-table and washing-machine.	496,655	May 2	425	113	63	696
Hilton, William, Du Bois, Pa. Washing-machine.	498,652	May 30	3677	909	63	1338
Himebaugh, Adelbert C. (See Sheffield, George S., assignor.)						
Himelspark, George. (See Leech and Himelspark.)						
Himle, Andrew L., administrator. (See Haugen, Engebret P.)						
Hinchliffe, John. (See Healy and Cundell, assignors.)						
Hinchman, George N. (See Schmitt and Hinchman.)						
Hinchman, James B., and A. W. Hille, Denver, Colo.; said Hille assignor to said Hinchman. Car-coupling.	493,268	Mar. 14	777	199	62	1528
Hinchman, John C., Summit, N. J. Automatic time printer and indicator.	496,310	Apr. 25	2836	708 709	63	574
Hincks & Johnson. (See Rishor, Christopher J., assignor.)						
Hinckley, Henry D., Hartford, Conn. Vending-machine.	496,656	May 2	426	114	63	696
Hinckley, Howard, Trenton, N. J. Slack-adjuster for car-brakes.	496,606	May 2	332	91	63	680
Hinckley, Howard, Trenton, N. J. Slack-take-up for car-brakes.	496,607	May 2	335	92	63	680
Hinckley, Howard, Trenton, N. J. Slack-adjuster for railway-brakes.	507,905	Oct. 31	3588	885 886	65	724
Hinckley, Howard, Trenton, N. J. Slack-adjuster for air-brakes.	508,421	Nov. 14	726	179	65	907
Hinckley, Howard N., <i>et al.</i> (See Cleasby, William H., assignor.)						
Hinckley, Samuel P., Portland, Me. Steam-piston packing.	511,423	Dec. 26	2743	663	65	1959
Hind, Edward O. (See Hind, William R. and E. O.)						
Hind, William R. and E. O., St. Louis, Mo. Hinged cover for show-barrels.	503,930	Aug. 22	2766	693	64	1119
Hindermeyer, Anthony J., assignor to M. A. and M. W. Hunter, Philadelphia, Pa. Converting malleable iron into steel.	492,679	Feb. 28	2584		62	1311
Hinds, Franklin P., Boston, Mass., assignor to Hot Water Fountain Company, of Maine. Water-fountain.	503,417	Aug. 15	1958	486 487	64	952
Hinds, Jesse L., assignor to Electric Engineering and Supply Company, Syracuse, N. Y. Electric switch.	511,240	Dec. 19	2407	586	65	1885
Hinds, William L., Des Moines, Iowa. Adjustable grate for stove-ovens.	504,836	Sept. 12	878	226	64	1450
Hine, Charles M., Allegheny, Pa., assignor, by mesne assignments, to Shields Company, New York, N. Y. Sewing-machine.	497,242	May 9	1358	345	63	882
Hine, James W., assignor to Fenton Metallic Manufacturing Company, Jamestown, N. Y. File.	504,782	Sept. 12	783	198	64	1430
Hine, James W., assignor to Fenton Metallic Manufacturing Company, Jamestown, N. Y. Voting-booth.	510,427	Dec. 12	964	231	65	1607
Hine, Lemon G. (See Fowler, Joseph C., assignor.)						
Hiner, James O., Monterey, Va. Vehicle-wheel.	501,420	July 11	1423	357	64	273
Hines, Elias F., and H. V. Gibson, Peoria, Ill. Clothes-drier.	492,015	Feb. 21	1532	382	62	1084
Hines, Joseph H., Philadelphia, Pa. Ornamenting metal.	510,340	Dec. 5	819		65	1565
Hines, Samuel. (See Zohe, Oscar E., assignor.)						
Hines, Thomas O., Jackson, Iowa. Beehive.	507,070	Oct. 17	2142	531	65	429
Hines, William, Middletown, Conn. Hammock.	501,944	July 25	2256	563	64	454
Hinkle, H. H., <i>et al.</i> (See Fowler, Lewis D., assignor.)						
Hinkle, H. O., <i>et al.</i> (See Fowler, Lewis D., assignor.)						
Hinkle, Wilber W., Hood's Mills, and I. H. Gaither, Cockeysville, Md. Double-shovel cultivator.	491,176	Feb. 7	191	49	62	784
Hinkle, Wilber W., Hood's Mills, and I. H. Gaither, Cockeysville, Md. Harrow.	492,680	Feb. 28	2584	639	62	1311
Hinkley, George M., assignor of one-half to Edward P. Allis Company, Milwaukee, Wis. Reciprocating circular sawing machine.	499,293	June 13	901	218 219	63	1561
Hinkley, George M., assignor of one-half to Edward P. Allis Company, Milwaukee, Wis. Log-turner.	510,790	Dec. 12	1612	401	65	1726
Hinkley, George M., D. B. Hanson, and W. H. Trout, assignors of one-half to Edward P. Allis Company, Milwaukee, Wis. Band-saw mill.	491,683	Feb. 14	1013	255 256 257	62	968
Hinkson, Edgar E. (See Cross, Liberty, assignor.)						
Hinman, Bertrand C. (See Waller and Hinman.)						
Hinman, William W., Elkhart, Ill. Churn.	504,385	Sept. 5	114	29	64	1292
Hinrichsen, Robert. (See Hambruch, Heinrich F., assignor.)						
Hinsey, Frederick W., assignor of one-half to E. E. Wilson, Eudora, Kans. Tinner's stake.	506,234	Oct. 10	764	188	65	156

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Hinson, James A., Chicago, Ill. Draw-bar attachment	500,331	June 27	2648	648	63	1893
Hinson, James A., Chicago, Ill. Car-coupling	503,208	Aug. 15	1626	399	64	893
Hinson, James A., Chicago, Ill. Car-coupling	509,372	Nov. 28	2208	559	65	1235
Hinson, Titus. (See Anderson, Eli, assignor.)						
Hinton, Charles W., Los Angeles, Cal. Car-coupling	493,402	Mar. 14	988	255	62	1569
Hintz, Frederick W., et al. (See Andresen, John C., assignor.)						
Hinz, Adolph F., San Francisco, Cal. Combined huller and scourer	495,803	Apr. 18	2058	521	63	413
Hinz, Hermann, Frankfort, Ky. Still	511,424	Dec. 26	2744	664	65	1959
Hinze, Adolph, New York, N. Y. Apparatus for dyeing	489,955	Jan. 17	1514	396	62	342
Hipkins, Stephen, Jr., Marlin's Ferry, Ohio. Mechanically-operated glass-mold	498,116	May 23	2776	695	63	1164
Hipkiss, Henry C. (See Wayne, Alfred, assignor.)						
Hipkiss, Samuel. (See Bash, Charles, assignor.)						
Hippert, William L., Galesburg, Ill. Single-cylinder double-acting force-pump	498,978	June 6	407	95	63	1463
Hipple, John K., and V. Wolf, Media, Pa. Vehicle-spring	507,129	Oct. 24	2260	556	65	464
Hipwell, John B., Philadelphia, Pa. Circular-knitting machine	511,335	Dec. 26	2578	627 628 629	65	1929
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Heater for curling-irons	496,565	May 2	276	73	63	669
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp-holding ring	499,386	June 13	1073	261	63	1592
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp	501,275	July 11	1180	299	64	230
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp-stove	506,432	Oct. 10	1111	275	65	224
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Gas-stove	510,136	Dec. 5	495	113	65	1503
Hipwood, George, H. C. Barrett, and S. Porter, Boston, Mass. Car-fender	507,655	Oct. 31	3196	782	65	651
Hird, James, Bristol, England. Music-leaf turner	498,009	May 23	2617	653	63	1135
Hirons, Charles F., Medford, Mass. Making dies or patterns for metal-working	497,982	May 23	2576		63	1128
Hirsch, Carl F., and A. Schilling, San Francisco, Cal. Gas-engine	507,436	Oct. 24	2795	684 685	65	564
Hirsch, Franz L. von, Dusseldorf, Germany. Bottle-stopper	489,637	Jan. 10	1005	262	62	224
Hirsch, Robert, and H. Meninger, Milwaukee, Wis. Composition and process of producing same for commutator-brushes	510,341	Dec. 5	820		65	1265
Hirschfeld, Ferdinand. (See Baum, Friedrich, assignor.)						
Hirschfeld, Louis, New York, N. Y. Chair and sofa-bed	507,270	Oct. 24	2517	621	65	509
Hirsh, Friedrich, and C. Thiede, Berlin, Germany. Engraving-machine	508,942	Nov. 21	1581	387 388	65	1084
Hirst, Charles S. (See McMorrow, John, Jr., assignor.)						
Hirt, Louis, Belleville, Ill. Copy-holder	511,145	Dec. 19	2257	553	65	1857
Hirt, Louis J., Arlington, Mass. Street-car	491,107	Feb. 7	71	19	62	762
Hirt, Louis J., Boston, Mass. Fender for street-railway cars	495,972	Apr. 25	2313	584	63	476
Hirt, Louis J., Boston, Mass. Radial car-truck	511,615	Dec. 26	3049	743	65	2015
Hirt, Louis J., Somerville, Mass. Fuel-economizer	507,906	Oct. 31	3591	886	65	725
His, Louis, New York, N. Y. Mold-forming knife	494,000	Mar. 21	1997	509	62	1777
His, Louis, New York, N. Y. Apparatus for molding propellers	495,804	Apr. 18	2060	521	63	413
Hiscox, Gardner D., Brooklyn, assignor, by mesne assignments, to Sterling Car Heating and Lighting Company, New York, N. Y. Car-heater	501,718	July 18	1889	470	64	374
Hise, George. (See Hise, Max and G.)						
Hise, John H., assignor, by mesne assignments, of one-half to G. R. Shatto, Los Angeles, Cal. Refrigerator	501,249	July 11	1137	289	64	222
Hise, Max and G., Grahamton Ky. Boiler	499,809	Jan. 10	1264	331	62	277
Hiser, Charles H. (See Lupfer and Hiser.)						
Hiser, Charles H., et al. (See Hiser, Sherman N., assignor.)						
Hiser, Daniel B. (See Thomas and Hiser.)						
Hiser, Sherman N., assignor of two-thirds to E. N. Lupfer and C. H. Hiser, Springfield, Ohio. Casket-top fastener	495,412	Apr. 11	1426	359	63	281
Hiser, Sherman N., assignor of two-thirds to E. N. Lupfer and C. H. Hiser, Springfield, Ohio. Casket-top fastener	500,577	July 4	62	18	64	13
Hisey, Charles S., Aurora, Ind., assignor to E. S. Rice, Chicago, Ill. Shell-placer	495,888	Apr. 18	2194	552 553	63	438
Hisey, Charles S., Aurora, Ind., assignor, by mesne assignments, to Standard Cartridge Company, of New Jersey. Cartridge-loading machine	505,423	Sept. 19	1834	472	64	1642
Hisgen, George, Fort Plain, N. Y. Keyhole-guard	504,583	Sept. 5	447	113 114	64	1353
Hiss, Nelson, Baltimore, Md. Elevator-indicator	489,005	Jan. 3	44	12, 13	62	12
Hitch, John E., Wilmington, Ohio. Bit-brace	495,335	Apr. 11	1309	329	63	261
Hitchcock, A. P. (See Loughton and Hitchcock.)						
Hitchcock, Albert L., Pawtucket, R. I. Weather-strip	496,876	May 9	796	210	63	781
Hitchcock, Charles A., Chicago, Ill., assignor to Adams & Westlake Company, of Illinois. Faucet	505,105	Sept. 19	1321	341	64	1547
Hitchcock, David S. (See Percy and Hitchcock.)						
Hitchcock, David S., assignor to Sunol Bicycle Company, Chicago, Ill. Mud-guard for bicycles	509,032	Nov. 21	1714	423	65	1111
Hitchcock, Dexter, et al. (See Weaver, William, assignor.)						
Hitchcock, Edward M. (See Askin, George P., assignor.)						
Hitchcock, George H., Danville, Ill. Stuffing-box	501,344	July 11	1303	325	64	250
Hitchcock, Howard H., et al. (See Wheat, John J., assignor.)						
Hitchcock, Lewis D., Hartford, Conn. Type-writing machine	504,473	Sept. 5	263	68, 69	64	1319
Hitchcock, Luke R., Four Mile, N. Y. Sucker-rod socket and elevator	511,525	Dec. 26	2896	705	65	1988
Hitchcock, Robert, and H. D. Waite, Watertown, N. Y. Sponge-cup	490,653	Jan. 31	2689	692	62	601
Hitchcock, William R., Douglas, Ill. Leveler for road-engine boilers	506,691	Oct. 17	1516	380	65	314
Hitchon, Alfred, Accrington, England. Device for adjusting the bends of traveling-flat carding-engines	494,422	Mar. 28	2392	675	62	1921
Hitchon, Alfred, Accrington, England. Apparatus for driving the flats of traveling-flat carding-engines	501,836	July 18	2072	511	64	406
Hitchon, Alfred, Accrington, England. Securing card-clothing to carding-engine flats and machine therefor	511,146	Dec. 19	2258	554	65	1857
Hitt, Adrian. (See Cobin and Hitt.)						
Hitt, Adrian, Anderson, Ind. Window	491,310	Feb. 7	416	107	62	826
Hitt, Adrian, Jersey City, N. J., assignor of one-half to I. J. Cobin, New York, N. Y. Hand-car	505,830	Oct. 3	42	11, 12	65	11
Hitt, Marcellus M., Luray, Va. Fountain attachment for pens	497,179	May 9	1264	320	63	864

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Hitt, Samuel E., Rockford, assignor, by mesne assignments, of one-half to W. I. Hitt, Chicago, Ill. Shaft-mount for armatures	509,620	Nov. 28	2752	664	65	1320
Hitt, W. Irving. (See Hitt, Samuel E., assignor.)						
Hix, Oliver P., Rockland, Me., assignor to Consolidated Brake Adjuster Company, Chicago, Ill. Car-brake	508,109	Nov. 7	214	56	65	798
Hizer, George W., Denver, Colo. Checkrein attachment	511,697	Dec. 26	3175	777	65	2038
Hjul, Hans H. (See Christensen, Jorgen, assignor.)						
Hoad, Edwin A. (See Jackson, John, assignor.)						
Hoadley, George M. (See Bemis and Hoadley.)						
Hoag & Co., I. P. (See Thacker and Down, assignors.)						
Hoare, Edwin S., Forest Hill, England. Test-tube	500,206	June 27	2449	597	63	1858
Hoare, George, Newark, N. J. Armature for dynamo-electric machines	492,681	Feb. 28	2585	639 640	62	1312
Hobart, Arthur S., and A. W. Eldredge, Big Rapids, Mich. Rubber eraser	591,421	July 11	1424	357	64	273
Hobart, Burdick H., and E. A. Rockwell, Troy, Pa. Plalter	501,619	July 18	1727	430	64	347
Hobbs, Davis D., assignor of three-fourths to A. N. Meade and J. T. Hobbs, Cleveland, Ohio. Gas-engine	506,£17	Oct. 17	1736	437	65	355
Hobbs, Horace, <i>et al.</i> (See Ramien, Edgar F., assignor.)						
Hobbs, Horace, assignor of one-half to A. W. Friese, Milwaukee, Wis. Extensible dental-engine bracket	509,901	Dec. 5	99	22	65	1428
Hobbs, John T., <i>et al.</i> (See Hobbs, Davis D., assignor.)						
Hobbs, Thomas L., Westlake, La. House-siding	506,912	Oct. 17	1890	471	65	383
Hobbs, Zachariah T., Apple Creek, Ohio. Lamp-post	498,792	June 6	62	15	63	1400
Hobby, Delzon G., Albion, assignor of one-half to F. D. Hamlin, Medina, N. Y. Gage-runner attachment	496,566	May 2	277	73	63	669
Hodday, William A., Hurley, Wis. Pedal attachment for organs or pianos	489,810	Jan. 10	1265	332	62	277
Hobson, Charles, Watsonville, Cal. Cultivator	497,124	May 9	1183	302	63	850
Hochhausen, William, Brooklyn, N. Y. Ammeter	501,144	July 11	978	249	64	193
Hochhausen, William, Brooklyn, N. Y. Electric-elevator switch	506,367	Oct. 10	983	244 245	65	198
Hochhausen, William, Brooklyn, N. Y. Speed-reducing and power-multiplying hydraulic gear for electric-railway cars	510,600	Dec. 12	1286	314	65	1665
Hochhausen, William, Brooklyn, N. Y. Alternating-current motor	510,601	Dec. 12	1288	314 315	65	1666
Hochmuth, Franz, Dresden, Germany. Apparatus for turning malt	505,945	Oct. 3	219	57	65	43
Hochrentener, Henry, New York, N. Y. Fabric-holding frame for embroidering-machines	503,320	Aug. 15	1816	450	64	926
Hockstein & Weinberg. (See Vogel, Hermann W., assignor.)						
Hock, John A. (See McManus and Hock.)						
Hockensmith, Franklin C., Irwin, Pa. Wheel	500,578	July 4	63	18	64	13
Hocking, Joseph F., <i>et al.</i> (See Hanson, Joseph H., assignor.)						
Hocking Valley Manufacturing Company. (See Cartmell, Edson B., assignor.)						
Hocking Valley Manufacturing Company. (See Kissner, Leonard, assignor.)						
Hoddinott, John W., Ruxton Heights, Md. Thill-coupling	500,895	July 4	569	148	64	104
Hoddinott, John W., Ruxton, Md. Thill-coupling	510,175	Dec. 5	564	131	65	1516
Hodgdon, Oscar O., assignor of one-half to H. H. Darby, St. Louis, Mo. Dish-cleaner	498,549	May 30	3505	866 867	63	1308
Hodge, Harmon S., assignor of one-half to W. P. Cutting, Metropolis City, Ill. Hat and coat hook	490,768	Jan. 31	2869	736	62	635
Hodge, Martin P., Jersey City, N. J., assignor of one-half to L. L. Frazier, Brooklyn, N. Y. Taper attachment for lathes	502,401	Aug. 1	251	60	64	612
Hodge, William H., Philadelphia, Pa. Washbasin	510,021	Dec. 5	310	69	65	1468
Hodgen, Samuel P., Pittsfield, Ill. Latch	503,085	Aug. 8	1409	348	64	840
Hodges, George S. (See Tracy and Hodges.)						
Hodges, Nathaniel D. C., Plainfield, N. J., assignor to American Lightning Protection Company, Sioux City, Iowa. Lightning-rod	505,106	Sept. 19	1323	341	64	1547
Hodges, Pliny F., Goochland Court-House, Va., assignor to G. A. Prevost, trustee, Washington, D. C. Corn-harvester	489,680	Jan. 10	1063	277 278	62	237
Hodges, William W., Cleveland, Ohio. Car-brake	490,711	Jan. 31	2780	714	62	619
Hodgkins, James H., Cambridge, Mass. Toe-weight	498,955	June 6	362	87	63	1456
Hodgkinson, Thomas C., assignor to H. T. Tompsitt, Melbourne, Victoria, and J. M. Creed and E. H. Belisario, Sydney, New South Wales. Electro-medical apparatus	500,539	June 27	2966	728	63	1950
Hodgkinson, William D., Newthorpe, England. Haulage-clip	497,664	May 16	2063	514	63	1021
Hodgson, Albert, Middletown, Kans. Cultivator	508,712	Nov. 14	1186	292	65	996
Hodgson, Charles, assignor to himself and J. Hill, Middlesbrough, England. Construction of ingot-molds	496,736	May 2	551	148	63	718
Hodgson, John G. (See Norton and Hodgson.)						
Hodgson, William, Nanticoke, Pa. High or low water alarm	502,191	July 25	2647	668	64	529
Hodgson, William. (See Froehlich, Amadens A., assignor.)						
Hodson, Charles F., New York, N. Y. Portable house	507,680	Oct. 31	3227	790	65	657
Hodson, Jubal E., Redwood Falls, Minn. Fence-post	492,088	Feb. 21	1638	407	62	1106
Hoe, Robert, <i>et al.</i> (See Crowell, Luther C., assignor.)						
Hoe, Robert, <i>et al.</i> (See Shattuck, Edwin L., assignor.)						
Hoe, Robert, <i>et al.</i> (See Sheldon, Edward F., assignor.)						
Hoefler, August. (See Stover and Hoefler.)						
Hoefler, Emil A. (See Stover and Hoefler.)						
Hoefler, Frederick W. (See Stover and Hoefler.)						
Hoefler, Frederick W., Freeport, Ill. Handle	489,560	Jan. 10	902	235	62	204
Hoefler, Frederick W., Freeport, Ill. Spring-hinge	501,786	July 18	2007	495	64	395
Hoefler, Frederick W., Freeport, Ill., assignor to C. G. and W. J. Shepard, Buffalo, N. Y. Wire handle	491,648	Feb. 14	961	242	62	957
Hoefler, Adolph, and F. L. G. Chapman, Stevens Point, Wis. Safety-gate for draw-bridges	491,177	Feb. 7	192	49	62	784
Hoek, Jacob, <i>et al.</i> (See Bryant, Noah, assignor.)						
Hoell, Ole E. O., Chicago, Ill. Inhaling apparatus	506,368	Oct. 10	990	246	65	200
Hoelzer, Theodore, Toledo, Ohio. Muffle-kiln	490,825	Jan. 31	2957	759	62	653
Hoenes, Charles S., Milwaukee, Wis. Automatic railway-switch	511,425	Dec. 26	2747	664	65	1959
Hoenig, Joseph, Lockport, N. Y. Machine for reducing piles preparatory to rolling	490,021	Jan. 17	1638	426	62	866
Hoepfner, Carl, Berlin, Germany. Electrolytic production of metals	507,130	Oct. 24	2261	556	65	464
Hoerle, Christian G., assignor to Union Hardware Company, Torrington Conn. Truck for roller-skates	508,617	Nov. 14	1042	257	65	968
Hoeschen, Henry, Omaha, Nebr. Coin-controlled vending-machine	502,817	Aug. 8	981	239	64	762
Hofacker, Martha, New York, N. Y. Bedstead	490,201	Jan. 17	1926	501	62	424
Hofbauer, Frank X., Newark, N. J. Magneto-electric machine	502,670	Aug. 1	722	173	64	698
Höfer, Carl F. W., assignor to Siemens & Halske, Berlin, Germany. Electric switch	501,071	July 11	844	219	64	169

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Höfer, Heinrich, Hagen, Germany. Refining iron and apparatus used therefor	502,492	Aug. 1	414	98	64	643
Hoff, Augustus and H. Brooklyn, N. Y. Physician's vial-case	505,222	Sept. 19	1501	391	64	1579
Hoff, Henry. (See Hoff, Augustus and H.)						
Hoff, Herman, Chicago, Ill., assignor to himself, H. Willand, and J. B. Herron. Sirup-dispensing apparatus	500,897	July 4	570	148	64	104
Hoff, John A., assignor to Lansberg Brake Company, St. Louis, Mo. Automatic fluid-pressure-brake mechanism	495,088	Apr. 11	884	224	63	185
Hoffheimer, Harry W., Chicago, Ill. Cash-register	500,898	July 4	572	149	64	104
Hoffman, Austin D., Minneapolis, Minn., assignor to Standard Syndicate, of Minnesota. Shaft-lubricator	508,222	Nov. 7	399	97	65	832
Hoffman, Carl, Roseburg, Oreg. Receptacle for growing plants	499,996	June 20	2075	503	63	1781
Hoffman, Carroll B., et al. (See Culver, Frank S., assignor.)						
Hoffman, Charles O., et al. (See Kelley, Calhoun L., assignor.)						
Hoffman, Frank E. (See Norton and Hoffman.)						
Hoffman, James H. (See Aronson, Louis, assignor.)						
Hoffman, Jeremiah M., Cressona, Pa. Combined window-cornice and curtain-support	499,547	June 13	1353	321	63	1642
Hoffman, John J., assignor of three-fourths to W. E. Duryea, Glen Cove, N. Y. Paper box	508,570	Nov. 14	979	240	65	956
Hoffman, John J., assignor of three-fourths to W. E. Duryea, Glen Cove, N. Y. Paper box	508,571	Nov. 14	980	240	65	356
Hoffman, Joseph, Schenectady, N. Y., assignor to General Electric Company, of New York. Insulating compound and manufacturing the same	505,916	Oct. 3	180		65	35
Hoffmann, Carl. (See Richter and Hoffmann.)						
Hoffmann, Carl, Berlin, Germany. Regulating parallel-circuited alternate-current machines	510,862	Dec. 12	1777	437	65	1755
Hoffmann, Carl, assignor to Siemens & Halske, Berlin, Germany. Automatic cut-out	502,518	Aug. 1	454	110	64	650
Hoffmann, Carl, assignor to Siemens & Halske, Berlin, Germany. Two-pole switch	502,519	Aug. 1	456	110	64	650
Hoffmann, Carl, assignor to Siemens & Halske, Berlin, Germany. Electric-arc lamp	506,503	Oct. 10	1233	306 307	65	248
Hoffmann, Carl, assignor to Siemens & Halske, Berlin, Germany. Electrically-operated jumper-drill	509,373	Nov. 28	2309	559	65	1235
Hoffmann, Carl, assignor to Siemens & Halske, Berlin, Germany. Dynamo-electric machine	509,662	Nov. 28	2823	681	65	1333
Hoffmann, Carl, and E. Richter, assignors to Siemens & Halske, Berlin, Germany. Utilizing electric motors for operating machinery	496,567	May 2	278	74	63	669
Hoffmann, Edmund H., Newark, N. J. Circulating system of advertising	495,736	Apr. 18	1958	494	63	395
Hoffmann, Ernest G., New York, N. Y. Machine for manufacturing metal balls, &c	504,083	Aug. 29	3019	754 755	64	1183
Hoffmann, Ernest G., New York, N. Y., assignor to Standard Caster and Wheel Company, of West Virginia. Caster-wheel	501,719	July 18	1891	470	64	375
Hoffmann, Ernst A., Del Norte, Colo. Potato-digger	492,016	Feb. 21	1533	382	62	1084
Hoffmann, Frank H. and H. H., Chicago, Ill. Blank book	501,276	July 11	1182	299	64	230
Hoffmann, Gustav, Tischdorf, Germany. Potato-planting machine	491,887	Feb. 14	1331	329	62	1030
Hoffmann, Gustav, Gottesberg, Germany. Coke-oven	492,400	Feb. 28	2125	511 532	62	1219
Hoffmann, Herman H. (See Hoffmann, Frank H. and H. H.)						
Hoffmann, Hugo, Berlin, Germany. Preparing kola powder	508,015	Nov. 7	56		65	768
Hoffmann, Louis. (See Schweissinger, Otto, assignor.)						
Hoffmann, Meinhard. (See Gans and Hoffmann.)						
Hoffmann, Meinhard, Mainkur, near Frankfurt-on-the-Main, assignor to L. Cassella & Co., Frankfurt-on-the-Main, Germany. Naphthylene-diamine disulpho-acid	498,882	June 6	238		63	1435
Hoffmann, Paul W. (See Quinn and Hoffmann.)						
Hoffmann, Philip C., assignor to American Phosphate and Chemical Company, Baltimore, Md. Treating phosphates	496,687	May 2	468		63	705
Hoffmeier, Gottlieb, Wilmington, Del. Door-check	507,618	Oct. 31	3126	765	65	639
Hoffritz, Charles F., Dayton, Ohio. Hinge	504,162	Aug. 29	3156	788	64	1208
Hoffstadt, Joseph, assignor to Franz Clouth, Rhenish Rubber Manufactory, Cologn-Nippes, Germany. Packing	511,734	Dec. 26	3234	793	65	2049
Hoffstaedt, Frank N., and J. F. Springer, Firth, Nebr. Reel-carrier	489,742	Jan. 10	1167	303 304	62	256
Hoffstaetter, Ernest, Jr., and H. Stillgebauer, New York, N. Y. Brake-shoe	503,138	Aug. 15	1511	371	64	871
Hofman, John. (See Rogers and Hofman.)						
Hofmann, Adolph W., Brooklyn, N. Y. Watchcase-die	503,600	Aug. 22	2275	568	64	1024
Hofmann, Friedrich, Baracconne, near Turin, Italy, assignor to Maschinenfabrik Rüti, formerly Kasper Honegger, Rüti, Canton of Zurich, Switzerland. Drop-box-changing mechanism for power-looms	500,768	July 4	377	97	64	70
Hofmann, Otto, Lissa, Germany. Money-tray	491,649	Feb. 14	962	242	62	957
Hogann, Silas J. (See Hawley and Hogan.)						
Hogan, Thomas J. (See Parke, Clark, and Hogan.)						
Hogan, Thomas J., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Apparatus for operating fluid-pressure devices	499,735	June 20	1651	397 398	63	1707
Hoge, Edgar S., Morris, Ill. Wire stretching and reeling device	495,505	Apr. 18	2061	521	63	413
Hogeboom, Franklin R., New Haven, Conn. Game apparatus	503,793	Aug. 22	2575	641	64	1082
Hogeland, Israel, Chicago, Ill. Vehicle-shaft	504,783	Sept. 12	785	198	64	1430
Hogg, James A., Independence, and H. G. Green, Cleveland, Ohio. Potato-digger	489,650	Jan. 10	1021	266	62	228
Hogg, John H., Civil District No. 16, Obion County, Tenn. Post-driver	502,075	July 25	2461	612	64	493
Hogg, William J. (See Coley, Joseph, assignor.)						
Hogg, William T., assignor of two-thirds to W. S. Brown and H. E. Joyce, Dayton, Ohio. Plow	507,271	Oct. 24	2519	621	65	509
Hoggson & Pettis Manufacturing Company. (See Hoggson and Bement, assignors.)						
Hoggson, Samuel J., New Haven, Conn. Making piano or organ keyboards	493,027	Mar. 7	404	101	62	1438
Hoggson, William J., and E. P. Bement, assignors to Hoggson & Pettis Manufacturing Company, New Haven, Conn. Chuck	493,502	Mar. 14	1156	295	62	1598
Hogue, Leyren E., Greenville, Pa. Injector	495,336	Apr. 11	1309	329	63	261
Hogue, Orville J. (See McLeran, Alvord M., assignor.)						
Hogue, Parker P., Cincinnati, Ohio. Injector	501,422	July 11	1425	357	64	273
Höhe, Engbreth. (See Steenstrup, Ludvig, assignor.)						
Hohenreiner, Josef, Munich, Germany. Chimney-door	491,735	Feb. 14	1092	276	62	983
Hohenstein, Henry, and B. J. Apple, Savannah, Ga. Bicycle-canopy	490,229	Jan. 17	1974	518	62	434
Hohner, Matthias, Trossingen, Germany. Harmonica-case	499,831	June 20	1822	443	63	1736
Hohner, Matthias, Trossingen, Germany. Mouth harmonica	501,837	July 18	2073	512	64	407
Hohulin, John. (See Hohulin, Timotheus and J.)						
Hohulin, Timotheus and J., assignors of one-half to E. Suchert and W. Voelpel, Morton, Ill. Farm-gate	509,374	Nov. 28	2311	559	65	1235
Hoit, George B. (See Flora, Ellsworth E., assignor.)						
Hoit, Jacob R., Grinnell, Iowa. Hanger for clothes-lines	499,323	June 13	954	230	63	1570

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Hoitt, Augustus J., <i>et al.</i> (See Collyer, Charles W., assignor.)						
Hoyer, Thomas G., New York, N. Y. Preservative drier	501,327	July 11	1107		64	275
Hokanson, August, St. Paul, Minn. Molding-knife	507,540	Oct. 31	2978	730	65	610
Hoke Engraving Plate Company. (See Cornelison, John H., assignor.)						
Hoke Engraving Plate Company. (See Hoke, Joseph W., assignor.) (Reissue.)						
Hoke, John I., South Bend, Ind. Harrow	509,434	Nov. 28	2444	{ 588 589 }	65	1262
Hoke, Joseph W., deceased, assignor, by mesne assignments, to Hoke Engraving Plate Company, St. Louis, Mo. Relief-type production. (Reissue.)	11,363	Sept. 5	632	161	64	1389
Holben, Levi, Sacramento, Cal. Pump-engine	511,426	Dec. 26	2749	664	65	1959
Holben, Oliver, Philadelphia, Pa. Combined pencil-sharpening and erasing implement	503,794	Aug. 22	2576	611	64	1082
Holbrook, Edward H., Jr. (See Lloyd, Marshall B., assignor.)						
Holbrook, Giles J., Jersey City, N. J. Æolian harp	493,773	Mar. 21	1616	411	62	1705
Holcomb, Eugene R., Portland, Oreg. Electric water-wheel regulator	502,624	Aug. 1	628	151	64	682
Holcomb, George C., assignor of one-half to W. A. Wells, North Adams, Mich. Land-roller	497,243	May 9	1360	345	63	882
Holcomb, Thomas D., Brooklyn, N. Y. Carpet-lining, packing, &c.	493,929	Mar. 21	1863	475	62	1752
Holcombe, John H. L., U. S. Navy. Combined electric switch and door-lock	491,426	Feb. 7	596	150	62	862
Holden, Cummings M., Tremont, Me., assignor of one-half to E. M. Gorden, Everett, Mass. Computing weighing scale	503,931	Aug. 22	2768	693	64	1120
Holden, Daniel L., New York, N. Y. Ice-making machinery	490,475	Jan. 24	2381	616	62	525
Holden, Daniel L., New York, N. Y. Refrigerating apparatus	493,721	Mar. 21	1524	{ 390 391 }	62	1686
Holden, George H. (See Heaton and Holden.)						
Holderman, Fred, Bowling Green, Ohio. Reversing mechanism for counter-shafts	495,806	Apr. 18	2064	521	63	414
Holecek, Albert, Hurley, Wis. Saw-setting machine	505,880	Oct. 3	124	32	65	25
Holfert, Max, Dayton, Ohio. Sign	490,654	Jan. 31	2690	{ 692 693 }	62	601
Holiman, William M., Knickerbocker, Tex. Flooring or ceiling jack	503,764	Aug. 22	2535	630	64	1074
Holl, George. (See Ford, Eugene A., assignor.) (Reissue.)						
Holl, Paul E., Pittsville, Wis. Car-coupling	496,877	May 9	797	210	63	731
Holladay, Fred H. (See Packard, Clarence A., assignor.)						
Holland, Annie J., Boston, Mass. Doll	503,967	Aug. 29	2847	714	64	1151
Holland, C. G., <i>et al.</i> (See Fontaine, Patrick H.)						
Holland, Charles E. (See Ayton and Perry, assignors.)						
Holland, Edward K., Clifton, W. Va. Regenerative salt-furnace	502,360	Aug. 1	186	44	64	600
Holland, Franklin. (See Corscaden and Holland.)						
Holland, Henry, Detroit, Mich. Oil-burner	511,241	Dec. 19	2410	577	65	1885
Holland, Henry P., San Francisco, Cal. Rotary engine	502,818	Aug. 8	983	239	64	762
Holland, John P., Newark, N. J. Submarine gun	491,051	Jan. 31	3340	851	62	729
Holland, John P., Newark, N. J. Steering apparatus for submarine vessels	492,960	Mar. 7	298	75	62	1418
Holland, Michael J., Jersey City, N. J. Fire-extinguisher	497,180	May 9	1264	321	63	864
Holland, Thomas W. (See Hibberd, Charles, assignor.)						
Holland, Timothy, Chicago, Ill. Mantel hot-water heater	491,108	Feb. 7	72	20	62	762
Holland, Willis A., Colbert, Ind. Ter. Horse-collar fastener	499,736	June 20	1655	398	63	1707
Hollander, Alva L., Millis, Mass. Dust-pan	490,875	Jan. 31	3029	779	62	669
Hollander, Alva L., Millis, Mass. Dust-pan	504,474	Sept. 5	266	69	64	1320
Hollander, Alva L., Millis, assignor to Steel Edge Stamping and Retinning Company, Boston, Mass. Dust-pan	504,879	Sept. 12	938	242	64	1461
Holley, Joseph, Brooklyn, N. Y. Box	489,253	Jan. 3	425	118	62	94
Hollenback, Bert. (See Evans and Hollenback.)						
Hollenbeck, Frank A., Batavia, assignor to Syracuse Arms Company, Syracuse, N. Y. Breakdown gun	505,794	Sept. 26	2492	629	64	1778
Holler, John M., Albany, N. Y. Vehicle-spring	498,270	May 30	3036	755	63	1225
Holler, John M., Albany, N. Y. Running-gear for vehicles	501,072	July 11	846	219	64	170
Holley, Clarence E., Presque Isle, Me. Vehicle running-gear	505,548	Sept. 26	2061	526	64	1697
Holley, Seymour H., Marquette, Mich. Stone-channeling machine	508,016	Nov. 7	57	16, 17	65	768
Holliday, George H., Ironton, Ohio, and D. A. Brawley; said Holliday assignor to D. B. Brawley, Charleston, W. Va. Tile-frame	503,369	Aug. 15	1897	470	64	941
Holliday, John W., Paris, Ky. Sully	492,725	Feb. 23	2652	657	62	1326
Hollinger, Isaac K., Covington, Ohio. Wire fence	502,076	July 25	2462	619	64	493
Hollings, John C. (See O'Neill, James A., assignor.)						
Hollingshead, William B., Bronxville, assignor of one-half to H. S. Blackmore, Mount Vernon, N. Y. Ejector	510,389	Dec. 5	908	217	65	1583
Hollingsworth, Charles M., Cleveland, Ohio. Vapor-stove	489,477	Jan. 10	768	203	62	177
Hollingsworth, Charles M., Cleveland, Ohio. Vapor-stove	490,655	Jan. 31	2691	693	62	601
Hollingsworth, Charles M., Cleveland, Ohio. Vapor-stove	490,656	Jan. 31	2692	693	62	602
Hollingsworth, Charles M., Evanston, Ill. Flying toy	510,137	Dec. 5	496	113	65	1503
Hollingsworth, Jesse. (See Hart, Joseph E., assignor.)						
Hollingsworth, Joseph, and C. Banister, Waco, Tex. Feed-regulator for cotton-gins	509,536	Nov. 28	2621	634	65	1294
Hollingsworth, Thomas H., Scotland Neck, N. C. Trimming attachment for sewing-machines	510,342	Dec. 5	821	199	65	1565
Hollis, Orlando B., Spokane, Wash. Harvester-header	506,504	Oct. 10	1236	307	65	248
Hollis, William. (See Ermold and Hollis.)						
Hollister, Kinner N., Delavan, Wis. Lamp-chimney attachment	499,548	June 13	1355	321	63	1642
Holloway, Charles T. (See Callaghan, William S., assignor.)						
Holloway, Charles T., Baltimore, Md. Chemical fire-engine	493,028	Mar. 7	406	101	62	1433
Holloway, Charles T., Baltimore, Md. Rocking-chair	509,628	Nov. 28	2825	682	65	1334
Holloway, Nixon, Lincolnville, Ind. Chicken-brooder	493,586	Mar. 14	1305	333	62	1629
Holloway, William H., Brazil, Ind. Cloth-measuring machine	507,006	Oct. 17	2035	504	65	411
Hollowell, Robert T., Danville, Ind. Self-serving table	490,286	Jan. 24	2085	544	62	467
Holly, Edgar P., assignor to himself and A. M. Cushing, Springfield, and W. B. C. Pearsons, Holyoke, Mass. Cash-register	493,793	June 6	63	16, 17	63	1400
Holly, Peter B., <i>et al.</i> (See Seip, Thomas A., assignor.)						
Holman, Calvin J., assignor of two-thirds to E. K. Bowen and W. H. Winegardner, Chicago, Ill. Vehicle-wheel	509,809	Nov. 28	3059	738	65	1378
Holman & Co., A. J. (See Holman, William A., assignor.)						
Holman, Silas W., Boston, Mass. Telephone-cable	491,109	Feb. 7	74	20, 21	62	763
Holman, Silas W., Boston, Mass. Diaphragm-holder for telephones	496,224	Apr. 25	2697	676	63	547
Holman, Silas W., Boston, Mass. Transmitting telephone	505,917	Oct. 3	181	46	65	35
Holman, Silas W., Boston, Mass. Simultaneous telegraphy and telephony	510,508	Dec. 12	1100	{ 265 266 }	65	1633
Holman, William A., assignor to A. J. Holman & Co., Philadelphia, Pa. Easel-album	491,942	Feb. 14	1417	354	62	1047

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Holman, William L., <i>et al.</i> (See Green, John, assignor.)						
Holmboe, Leonard C. B., <i>et al.</i> (See Higgins, Charles W., assignor.)						
Holmes, Alexander R., New York, N. Y. Electric fire and stable alarm and horse-releaser.	507,322	Oct. 24	2610	642	65	527
Holmes, Booth & Haydens. (See Shipley, Ralph J., assignor.)						
Holmes, Britain. (See Holmes and Beugler.)						
Holmes, Daniel M., Arlington, N. J., assignor to J. R. Van Derver, New York, N. Y. Machine for coating confectionery.	490,769	Jan. 31	2870	{ 736 737	62	636
Holmes, Daniel M., Arlington, N. J., assignor to J. R. Van Derver, New York, N. Y. Machine for coating confectionery.	492,205	Feb. 21	1820	{ 455 456	62	1144
Holmes, Daniel M., Arlington, N. J., assignor to J. R. Van Derver, New York, N. Y. Cake-coating machine.	493,403	Mar. 14	990	255	62	1569
Holmes, Edward and B., and E. F. Beugler, Buffalo, N. Y. Planing-machine.	509,435	Nov. 28	2446	{ 585 590	65	1262
Holmes, Edwin. (See Knowles, Charles V., assignor.)						
Holmes, Edwin C., <i>et al.</i> (See Brewer, Andrew T., assignor.)						
Holmes, Harriet E. (See Charnock, John M., assignor.)						
Holmes, Hector A. and W. M., Hoosick Falls, N. Y. Grain-binder.	497,278	May 9	1416	{ 359 360 361 362	63	890
Holmes, James, and K. Peterson, Jamestown, N. Y. Wood-carving machine.	507,007	Oct. 17	2036	504	65	411
Holmes, John. (See Holmes, Robert, assignor.)						
Holmes, John. (See O'Brien, Geraldine, assignor.)						
Holmes, John, Boston, Mass. Knit garment and manufacturing same.	504,108	Aug. 29	3073	769	64	1193
Holmes, John, Boston, Mass. Knitted garment and manufacturing same.	507,907	Oct. 31	3592	886	65	725
Holmes, John B., New York, N. Y. Twine reel and holder.	492,162	Feb. 21	1759	{ 438 439	62	1131
Holmes, Nathan L., Racine, Wis. Whiffletree.	496,608	May 2	337	92	63	681
Holmes, Nathan L., Racine, Wis. Adjustable carriage-pole.	496,609	May 2	339	92, 93	63	681
Holmes, Philip H., Gardiner, Me. Pulley.	492,801	Mar. 7	47	11	62	1368
Holmes, Richard B., Marcus, Iowa. Attachment for chimneys.	498,393	May 30	3239	806	63	1261
Holmes, Robert, Cañon City, Colo. Nut-lock.	501,345	July 11	1304	325	64	250
Holmes, Robert, Cañon City, Colo., assignor of one-half to J. Holmes, Old Mission, Mich. Nut-lock.	511,616	Dec. 26	3052	743	65	2015
Holmes, Simeon O., London, England. Press for preparing block-fuel.	506,193	Oct. 3	646	{ 164 165	65	125
Holmes, Thomas, Chicago, Ill. Automatic sprinkler.	495,337	Apr. 11	1310	329	63	261
Holmes, Thomas H., Philadelphia, Pa. Metallic packing for stuffing-boxes.	500,899	July 4	574	150	64	105
Holmes, Waldo E. (See McFarlane, Robert, assignor.)						
Holmes, Watson M. (See Holmes, Hector A. and W. M.)						
Holmes, Watson M., Hoosick Falls, N. Y. Grain-binder.	509,470	Nov. 28	2519	608	65	1275
Holmes, William C., assignor of one-half to J. J. Oram, Denver, Colo. Cuff-holder.	501,882	July 18	2154	534	64	420
Holmes, William E., assignor of one-half to L. E. Demelman, Boston, Mass. Life-saving device or fender.	495,632	Apr. 18	1786	449	63	366
Holmes, William J. (See Simmons and Holmes.)						
Holmes, William W., assignor to Consolidated Brake Adjuster Company, Chicago, Ill. Slack-adjuster for car-brakes.	490,352	Jan. 24	2198	{ 572 573	62	491
Holmes, William W., assignor to Q. & C. Company, Chicago, Ill. Railway-tie plate.	495,807	Apr. 18	2066	522	63	414
Holmes, William W., assignor to Q. & C. Company, Chicago, Ill. Power mechanism for circular saws.	511,269	Dec. 19	2459	600 528 529 530 531	65	1894
Holmström, Carl, assignor to Maxim-Nordenfelt Guns and Ammunition Company, Limited, London, England. Recoil-operated quick-firing gun.	509,313	Nov. 21	2196	765	65	1203
Holmstrom, Frank O., St. Paul, Minn. Spiral turning machine.	507,619	Oct. 31	3127	765	65	639
Holroyd, Thomas. (See Reid, Hanna, Holroyd, and Wheat.)						
Holsclaw, Wilford H., assignor to B. F. Avery & Sons, Louisville, Ky. Sulky-plow.	501,787	July 18	2008	495	64	395
Holstein, Carl. (See Streufert, Charles, assignor.)						
Holsten, John B., New York, N. Y. Supporting attachment for can floating pots.	498,653	May 30	3678	909	63	1338
Holt, Alfred A., Brooklyn, and J. P. Kooy, New York, N. Y. Flower-pot and stand.	495,808	Apr. 18	2067	522	63	414
Holt, Benjamin. (See Ingersoll, George W., assignor.)						
Holt, Benjamin, Stockton, Cal. Traction-engine.	489,811	Jan. 10	1266	332	62	277
Holt, Benjamin, Stockton, Cal. Traveling harvester.	496,311	Apr. 25	2839	709	63	574
Holt, Benjamin, Stockton, Cal. Traveling thrasher.	499,113	June 6	628	{ 151 152	63	1500
Holt, Benjamin, Stockton, Cal. Traction-engine.	499,114	June 6	630	152	63	1500
Holt, Benjamin, Stockton, Cal. Traveling harvester.	506,877	Oct. 17	1827	458	65	371
Holt, Charles C., assignor of one-half to T. Hall, Lawrence, Mass. Rail fastener.	502,361	Aug. 1	187	44	64	600
Holt, Charles F., assignor of one-half to W. S. Starr, New London, Conn. Ship's log.	495,587	Apr. 18	1712	431	63	354
Holt, Florence E., Stoneham, Mass. Garment-supporter.	492,356	Feb. 21	2057	513	62	1192
Holt, George H., Chicago, Ill. Fruit stemmer and grader.	506,042	Oct. 3	372	98, 99	65	73
Holt, James, Liverpool, England. Flushing system for water-closets, &c.	494,481	Mar. 28	2777	697	62	1936
Holt, Leopold, London, England. Pneumatic tire.	497,575	May 16	1924	484	63	996
Holt, Leopold, Frankfort-on-the-Main, Germany. Pneumatic tire.	509,164	Nov. 21	1939	474	65	1154
Holt, Leopold, Frankfort-on-the-Main, Germany. Pneumatic-tired wheel.	509,902	Dec. 5	101	23	65	1429
Holt, Leopold, Frankfort-on-the-Main, Germany. Pneumatic tire.	509,903	Dec. 5	102	23	65	1429
Holt, Leopold, Frankfort-on-the-Main, Germany. Pneumatic tire.	509,904	Dec. 5	103	23	65	1429
Holt, Samuel A., Salsburg, Kans. Draft-equalizer.	510,971	Dec. 19	1974	485	65	1804
Holt, Thomas, and H. Howson, Philadelphia, Pa., assignors to said Holt. Refrigerator.	495,747	Apr. 18	1959	494	63	395
Holt, William H., Busti, N. Y. Neck-yoke.	493,269	Mar. 14	778	199	62	1529
Holthaus, Emil, Barren Island, N. Y. Recording steam and water gage.	503,968	Aug. 29	2848	714	64	1152
Holthaus, Emil, Barren Island, N. Y. Combined drier and boiler.	504,269	Aug. 29	3336	854	64	1242
Holthaus, Emil, Barren Island, N. Y. Rendering-tank.	507,222	Oct. 24	2438	601	65	495
Holton, Thomas J., <i>et al.</i> (See Boyer, John M., assignor.)						
Holtum, Andrew, Racine, Wis. Mail-receptacle.	498,550	May 30	3509	867	63	1309
Holtz, William. (See Botsford and Holtz.)						
Höltzel, Heinrich, Esslingen, Germany. Drawing-pen and ink-reservoir.	509,905	Dec. 5	105	23	65	1429
Holtzer, Charles W., Brookline, Mass. Galvanic battery.	496,878	May 9	798	210	63	781
Holtzman, Daniel A., Myerstown, Pa. Perpetual calendar.	505,313	Sept. 19	1653	427	64	1607
Holum, John, Minneapolis, Minn. Car-coupling.	511,427	Dec. 26	2751	665	65	1960
Holyoke Envelope Company. (See Ball, James, assignor.)						
Holyoke Machine Company. (See Jeffers, William W. D., assignor.)						
Holzman, Michael, <i>et al.</i> (See Darley, John W., Jr., assignor.)						
Homan, Caleb N., Lawrence, Mass. Fender for electric cars, &c.	508,472	Nov. 14	802	198	65	921

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Homan, Ernest, London, England. Fireproof floor or ceiling	505,659	Sept. 26	2270	576	64	1738
Homan, Frank H., Patchogue, N. Y. Sash-weight	501,346	July 11	1305	325	64	251
Homan, William C., Meriden, Conn. Argand lamp	491,965	Feb. 14	1449	{ 360 361 }	62	1054
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Central-draft lamp	494,862	Apr. 4	541	137	63	105
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Draft-tube for central-draft lamps	494,863	Apr. 4	542	137	63	105
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Central-draft lamp	496,657	May 2	428	114	63	696
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Suspension device	509,621	Nov. 28	2753	664	65	1320
Hommel, Charles H., Sayville, N. Y. Wrench	491,888	Feb. 14	1332	330	62	1030
Hommel, Charles H., Sayville, N. Y. Detachable handle for pans, &c.	509,738	Nov. 28	2938	711	65	1354
Honig, Gustav and H. Hermann, Mo. Means for operating engines	510,394	Dec. 5	915	219	65	1584
Honig, Heinrich. (See Honig, Gustav and H.)						
Honiss, William H., assignor of one-half to W. H. Lorenz, Hartford, Conn. Feed mechanism	501,603	July 18	1699	423	64	342
Honman, Andrew, and V. Vulliez, Williamstown, Victoria. Process of and apparatus for the manufacture of white lead	489,254	Jan. 3	426	{ 118 119 }	62	95
Honman, Andrew, and V. Vulliez, Williamstown, Victoria. Manufacturing white lead	493,490	Apr. 18	1564		63	327
Hoobler, Samuel, Dayton, Ohio. Caster	498,271	May 30	3037	756	63	1225
Hood, Daniel C. (See Klahn, Emil, assignor.)						
Hood, Hiram Q., assignor of one-half to A. J. Jenni, Webb City, Mo. Washing-machine	506,505	Oct. 10	1237	307	65	249
Hood, Homer. (See Sinclair, Jeremiah C., assignor.)						
Hood, Horace W., Nashua, N. H. Sash-fastening	510,686	Dec. 12	1440	355	65	1694
Hood, John T., Sparta, Miss. Bed-spring	509,471	Nov. 28	2522	608	65	1275
Hood, Thomas F., and W. G. Smith, Huffman, Ala. Churn	501,423	July 11	1426	{ 357 358 }	64	274
Hood, William M., assignor to Pacific Cable Railway Company, San Francisco, Cal. Slot-brake for conduit railways	507,366	Oct. 24	2682	659	65	541
Hook, Harry L., Philadelphia, Pa., assignor to Hess Postal Facility and Supply Company, of West Virginia. Coin-controlled vending apparatus	503,139	Aug. 15	1512	372	64	872
Hook, Joseph, Grand Rapids, Mich. Leather-edge trimmer	503,348	Aug. 15	1860	460	64	934
Hook, William J., Union City, Ind. Hoop-driving machine	490,476	Jan. 24	2382	{ 616 617 200 201 202 203 384 }	62	526
Hooker, John, Beccles, England. Machinery for distributing type	493,270	Mar. 14	779		62	1529
Hooker, John, Beccles, England. Indicator mechanism for type-setting machines	495,588	Apr. 18	1714	432	63	354
Hooker, John, Beccles, England. Indicator mechanism for type-setting machinery	505,200	Sept. 19	1468	{ 379 380 381 382 383 384 }	64	1573
Hooker, William H., Jersey City, N. J. Ejector	511,079	Dec. 19	2142	528	65	1835
Hoolahan, Ambrose, Buffalo, N. Y. Punching-machine	493,890	Mar. 21	1796	458	62	1739
Hooper, Charles A. (See Taylor, Andrew, assignor.)						
Hooper, Edwin E. (See Thacher, Peter, assignor.)						
Hooper, Francis X., Baltimore, Md. Drying apparatus	499,460	June 13	1211	289	63	1617
Hooper, George W., assignor of three-fourths to J. H. Stewart, J. S. Baker, and A. Green, Rochester, N. Y. Electric-railway trolley	499,115	June 6	634	152	63	1501
Hooper, Rebecca E., San Francisco, Cal. Guide-shield for type-writing machines	493,503	Mar. 14	1157	295	62	1598
Hooper, William J. (See Price, George W., assignor.)						
Hoopes, David R. (See Robinson and Hoopes.)						
Hoopes, Herman, et al. (See Mullin, Bernard A., assignor.)						
Hoopes, Maurice, and O. S. Hertzog, Lynn, Mass. Trolley-wire support	506,043	Oct. 3	375	99	65	73
Hooten, Barton, et al. (See Palmer, Israel Y., assignor.)						
Hooton, Henry W., Salt Lake City, Utah Ter. Street-car	510,138	Dec. 5	498	{ 113 114 }	65	1503
Hooven, Alexander, Norristown, Pa. Iron or steel pile	508,881	Nov. 14	1440	351	65	1044
Hoover, Elias W., Chicago, Ill. Dust-collector	493,504	Mar. 14	1158	296	62	1598
Hoover, Jeremiah L., Fishertown, Pa. Farm-gate	489,533	Jan. 10	864	226	62	196
Hope Electric Appliance Company. (See Wright, Augustus, assignor.)						
Hope, John, Providence, R. I. Tool-holder	502,039	July 25	2403	605	64	482
Hope, John, Liverpool, England. Ship's recording-compass	505,361	Sept. 19	1723	{ 445 446 447 }	64	1620
Hopedale Electric Company of West Virginia. (See Usher, Edward P., assignor.)						
Hopedale Machine Company. (See Collins, John T., assignor.)						
Hopedale Machine Company. (See Coppinger, Martin, 2d, assignor.)						
Hopedale Machine Company. (See Draper and Rhoades, assignors.)						
Hopedale Machine Company. (See Rhoades, Alonzo E., assignor.)						
Hopewell, Andrew J., Edinburg, Va. Clock winding mechanism	509,375	Nov. 28	2312	560	65	1235
Hopkins, Adelbert C. (See Shephard and Hopkins.)						
Hopkins, Amos H., Goshen, Ind. Car-coupling	495,889	Apr. 18	2196	553	63	438
Hopkins, Archibald, Washington, D. C. Combined sitting and standing desk	505,765	Sept. 26	2452	617	64	1770
Hopkins, Candace A., Sarcoxie, Mo. Support for table-screens	505,201	Sept. 19	1473	384	64	1574
Hopkins, Charles B., Spokane, Wash. Automatic time-check for billiard-games	508,473	Nov. 14	803	{ 198 199 200 }	65	921
Hopkins, Charles W. (See Briggs and Hopkins.)						
Hopkins, Charles W., and J. Boland, Norwich, Conn. Safety-catch for firearms	505,569	Sept. 26	2119	536	64	1709
Hopkins, David P., Allegheny, Pa. Device for raising and lowering swinging sashes	509,376	Nov. 28	2317	561	65	1236
Hopkins, David P., Allegheny, Pa. Window frame and sash	509,377	Nov. 28	2319	561	65	1237
Hopkins, Edwin F., assignor to C. A. Stedman, Cleveland, Ohio. Carpet-tack	507,541	Oct. 31	2979	730	65	611
Hopkins, George E., Bellaire, Ohio. Torpedo-placer	499,116	June 6	635	153	63	1502
Hopkins, Harvey J. (See Nixon, James A., assignor.)						
Hopkins, Harvey J., et al. (See Ward, Wiley, assignor.)						
Hopkins, Harvey L. (See Nunamaker, John W., assignor.)						
Hopkins, Henry W. (See Hopkins, William D., assignor.)						
Hopkins, Henry W., Wilton, N. H. Pencil-sharpener	507,437	Oct. 24	2798	685	65	565

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Hopkins, Hiram L., Homer, Mich. Tube-expander	511,526	Dec. 26	2897	706	65	1989
Hopkins, Howard H., Goshen, Ind. Bicycle	506,194	Oct. 3	648	165	65	125
Hopkins, James A., Milton, Del. Truss	504,837	Sept. 12	879	226	64	1450
Hopkins, James L. (See Morgan, William, assignor.)						
Hopkins, Jason R., assignor of one-half to G. S. Prindle and P. G. Russell, Washington, D. C. Spindle-chuck	489,006	Jan. 3	45	13	62	12
Hopkins, Leslie, Miles Grove, Pa. Clothes-pounder	498,118	May 23	2781	696	63	1165
Hopkins, Nicholas J., Owen Sound, Canada. Car-coupling	489,517	May 23	2780	695	63	1165
Hopkins, Selden R., New York, N. Y. Bank or check book	489,561	Jan. 10	903	235	62	204
Hopkins, Selden R., New York, N. Y. Coupon-bond	489,956	Jan. 17	1515	396	62	342
Hopkins, Sylvanus C., Boston, and A. Higgins, Cambridge, Mass. Camera-tripod head	501,510	July 18	1555	391	64	314
Hopkins, Thomas J. (See Eyre and Hopkins.)						
Hopkins, William D., Goffstown, assignor of one-half to H. W. Hopkins, Wilton, N. H. Wood-sawing machine	492,746	Feb. 28	2680	665	62	1331
Hopkins, William S., Paris, Ill. Sleigh-runner	505,831	Oct. 3	45	12	65	11
Hopkinson, Henry, Nottingham, England. Injector	489,812	Jan. 10	1269	333	62	278
Hopkinson, Henry, Nottingham, England. Injector	489,813	Jan. 10	1270	333	62	278
Hopkinson, John E., London, England. Hose	489,478	Jan. 10	770	203	62	177
Hoppe, Reinhold, San Francisco, Cal. Surgical splint	504,218	Aug. 29	3253	812	64	1227
Hopper, Henry S., Detroit, Mich. Watch-guard	503,480	Aug. 15	2063	515	64	970
Hopper, John R., Rochester, N. Y. Lock-stop for elevators	497,321	May 16	1523	383	63	925
Hoppes, John J., Springfield, Ohio. Apparatus for purifying water	503,140	Aug. 15	1514	372	64	872
Hoppes, John J., and E. C. Gwyn, assignors to Hoppes Manufacturing Company, Springfield, Ohio. Device for purifying feed-water	503,209	Aug. 15	1628	399	64	893
Hoppes Manufacturing Company. (See Hoppes and Gwyn, assignors.)						
Horack, Charles L., Brooklyn, N. Y. Method of and apparatus for operating aqua-ammonia engines	493,722	Mar. 21	1527	391	62	1687
Hornel, August, and G. S. Junginger, New York, N. Y. Electric-arc lamp	511,049	Dec. 19	2089	517	65	1825
Horn, Albro R. (See Callaghan and Horn.)						
Horn, David L. (See Carrell, William S., assignor.)						
Horn, Ernest F. W., Antigo, Wis. Band-saw guide	492,511	Feb. 28	2322	576	62	1258
Horn, Ferdinand, Coshocton, Ohio. Forging axles	503,481	Aug. 15	2064	515	64	970
Horn, George A. (See Horn, Henrietta, assignor.)						
Horn, Henrietta, assignor of one-half to G. A. Horn, Newark, N. J. Adjustable pattern for drafting garments	490,022	Jan. 17	1640	426	62	366
Horn, Jeremiah M. (See Howell and Horn.)						
Horn, John J. (See Horn, William H., assignor.)						
Horn, Lewis W., et al. (See Butler, Maguler, assignor.)						
Horn, Norbert, assignor of eleven-twentieths to J. Teschner and E. Maynz, New York, N. Y. Barrel indicator, register, and recorder	509,083	Nov. 21	1808	444	65	1129
Horn, William H., assignor to himself and J. J. Horn, Philadelphia, Pa. Shoulder-brace	508,713	Nov. 14	1187	293	65	997
Hornberger, William H., Elkhart, Ind. Current-transformer	508,422	Nov. 14	728	180	65	907
Hornberger, William H., Elkhart, Ind. Electric-current transformer	510,640	Dec. 12	1358	332	65	1679
Hornbostel, Charles, New York, N. Y. Preparing fermented and distilled liquids, extracts, and solutions	508,882	Nov. 14	1441	475	65	1044
Horne, Abram B., Logan, Ohio. Brick-kiln	493,930	Mar. 21	1864	476	62	1752
Horne, Alexander, Cathcart, Scotland. Pressure-reducing valve	491,178	Feb. 7	194	50	62	785
Horne, Fred E., Malden, Mass. Hack-saw frame	499,227	June 13	801	190	63	1544
Horne, Frederick, Wilmslow, England. Means for the prevention of condensation on windows	507,731	Oct. 31	3301	807	65	671
Horne, Henry, assignor to Corbin Cabinet Lock Company, New Britain, Conn. Padlock	499,832	June 20	1823	443	63	1736
Horne, John W., Boston, Mass. Ledger or similar account-book	494,717	Apr. 4	299	75	63	60
Horner, Elwood T., assignor to Cambridge City Punch, Shear and Roll Company, Cambridge City, Ind. Metal-shears	494,566	Apr. 4	61	14	63	12
Horner, Elwood T., assignor to Cambridge City Punch, Shear and Roll Company, Cambridge City, Ind. Metal-rolling machine	494,567	Apr. 4	62	14	63	13
Horner, John, Dubois, Pa. Nut-lock	511,270	Dec. 19	2460	600	65	1894
Hornish, Harry C., Peoria, Ill. Stove or furnace	508,474	Nov. 14	807	200	65	922
Hornish, Harry C., Peoria, Ill. Stove or furnace	508,475	Nov. 14	810	201	65	923
Hornsby & Sons, Richard. (See Hornsby, Edwards, and Gibbon, assignors.)						
Hornsby, William, R. Edwards, and W. E. Gibbon, assignors to R. Hornsby & Sons, Limited, Grantham, England. Engine operated by the explosion of combustible mixtures	504,807	Sept. 12	824	209	64	1438
Hornung, Johannes, Plochingen, Germany. Filtering apparatus for beer or wine	499,833	June 20	1824	444	63	1736
Horovsky, Emil. (See Shaffer and Horovsky.)						
Horr, Maggie J. (See West, John E., assignor.)						
Horrie, David, Kaukauna, Wis. Railway-frog	491,842	Feb. 14	1261	313	62	1016
Horrocks, Joshua, Brooklyn, N. Y. Metal mat or like structure	501,788	July 18	2011	496	64	395
Horrocks, William, Herkimer, N. Y. Type-writer cabinet	503,418	Aug. 15	1960	487	64	952
Horrocks, William, Herkimer, N. Y. Clamping-machine	507,131	Oct. 24	2264	557	65	465
Horscroft, John, Moberly, Mo. Potato-planter	503,854	Aug. 22	2554	665	64	1097
Horsley, Charles A., et al. (See Wright, George H., assignor.)						
Horst, Samuel W. (See Sensenig, Aaron H., assignor.)						
Horst, Samuel W., Hummelstown, Pa. Wire-stretcher	494,568	Apr. 4	64	14	63	13
Horstman, Frank J., assignor of one-half to W. D. Wilmoth, J. A. Wilhelm, and C. H. Wheatcroft, New Harmony, Ind. Cuff-fastener	506,781	Oct. 17	1677	422	65	344
Hort, Emily F., et al. (See Miles, George B., assignor.)						
Horton, Calvin, Somerville, Mass. Method of and apparatus for handling or controlling quicksand	508,714	Nov. 14	1188	293	65	997
Horton, Charles H., Wellington, Ohio. Brick-machine	497,332	May 16	1525	384	63	925
Horton, Charles H., Wellington, Ohio. Mold-sander	509,033	Nov. 21	1715	424	65	1111
Horton, Emmet, Dundee, and F. E. Fitch, Elmira, N. Y. Boiler-cleaning apparatus	507,710	Oct. 31	3274	800	65	666
Horton, Everett C., Jersey City, N. J. Window	498,119	May 23	2782	696	63	1165
Horton, George W. (See Curtis, Charles G., assignor.)						
Horton, Gilbert D., Snohomish, Wash. Fly-catcher	491,427	Feb. 7	599	151	62	862
Horton, James, Chicago, Ill. Crane	508,476	Nov. 14	811	202	65	924
Horton, Peter D., assignor of one-half to S. R. and E. J. Osgood, Oakland, Cal. Inkstand	495,459	Apr. 11	1504	377	63	296
Horton, Peter D., assignor of one-half to S. R. and E. J. Osgood, Oakland, Cal. Inkstand	495,460	Apr. 11	1506	377	63	296
Horton, Robert P. (See Herrington, Ephraim, assignor.)						
Horton, William P., Jr., assignor of one-half to A. B. Jones, Cleveland, Ohio. Dental appliance for obtunding nerves	493,723	Mar. 21	1535	391	62	1688

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Hosack, Harold H. (See Voysey and Hosack.)						
Hosford, James E. (See Kirk and Hosford.)						
Hosford, William B., Mishawaka, Ind. Clutch-shifter	506,113	Oct. 3	485	126	65	95
Hoska, Albert F. (See Duncan, George T., assignor.)						
Hoskins, William, La Grange, and J. B. Weis, Chicago, Ill. Safety-paper for checks, &c.	511,271	Dec. 19	2461		65	1894
Hoskins, William W., Houston, Tex. Blind-stop	502,362	Aug. 1	188	45	64	600
Hosmer, Henry L., and W. R. Wilson, Clay Centre, Kans. Machine for seaming sheet metal.	500,900	July 4	576	150	64	105
Hoss, Charles W., St. Louis, Mo. Driving-rein	501,789	July 18	2012	496	64	395
Hoster, Charles E., et al. (See Iske, Anthony and A., assignor.)						
Hot Water Fountain Company. (See Hinds, Franklin P., assignor.)						
Hotchkiss, Albert E., Wallingford, Conn. Thill-coupling	509,165	Nov. 21	1940	475	65	1154
Hotchkiss, Albert S., Wallingford, Conn. Insect-powder distributor	493,587	Mar. 14	1306	333	62	1629
Hotchkiss, Clarence F., Binghamton, N. Y. Boring-machine	491,110	Feb. 7	75	21	62	763
Hotchkiss, Joseph V., Jay, assignor of one-half to H. Kehlenbeck, Pleasant, Ind. Cross-cut-saw						
Hotchkiss, Sydney S., Columbus, Ohio. Trimming-table for coffins, &c.	494,103	Mar. 21	2170	554	62	1810
Hotchkiss, Zeroy P., Oak Park, assignor to Automatic Telegraph Improvement Company, Chicago, Ill. Telegraphy	499,997	June 20	2076	503	63	1781
Hotel Security Checking Company. (See Hicks, John T., assignor.)	489,435	Jan. 3	692	186 187	62	149
Hotham, Marv F., Hillside, Pa. Lamp-chimney cleaner	510,791	Dec. 12	1614	402	65	1727
Hottle, Alfred S., et al. (See Woods, Edward D., assignor.)						
Hotzman, Charles W., Philadelphia, Pa. Sausage-stuffing machine	490,712	Jan. 31	2781	714	62	619
Hotze, Henry, St. Louis, Mo. Riding-saddle	497,665	May 16	2064	515	63	1021
Houck, Arlington W. (See Houck, William J. and A. W.)						
Houck, William J. and A. W., Newark, N. J. Trammel-point for beam-compasses	510,139	Dec. 5	501	114	65	1504
Hough, Franklin T. (See Coupland and Hough.)						
Hough, T. C. (See McAnarney, John S., assignor.)						
Houghtaling, William, assignor to Asberoft Manufacturing Company, Bridgeport, Conn. Attachment for steam-engine indicators	494,482	Mar. 28	2779	697	62	1936
Houghton, Charles B. (See Bate, Shadbolt, and Houghton.)						
Houghton, Edward J., and W. White, London, England. Commutating apparatus for dynamo-electric machines	492,291	Feb. 21	1950	487	62	1171
Houghton, George R. (See Bate, Shadbolt, and Houghton.)						
Houghton, Stephen C., San Francisco, Cal. Fare-register	496,688	May 2	470	126 127	63	705
Houghton, Thomas J., Lancaster, assignor to E. M. Vasey, C. T. and F. L. Weger, Philadelphia, Pa. Vehicle-pole tip	510,022	Dec. 5	312	70	65	1468
Houk, Robert T., assignor to National Cash Register Company, Dayton, Ohio. Cash-register	492,982	Mar. 7	331	83	62	1425
Houk, Robert T., assignor to National Cash Register Company, Dayton, Ohio. Cash-register						
House, Allen W., Homestead, Pa. Mantel	492,983	Mar. 7	334	84	62	1425
House, Frank J., Chicago, and F. X. Martin, Downer's Grove, Ill. Hammock	493,404	Mar. 14	991	256	62	1569
House, John, Crisfield, Md. Heating-lamp	490,287	Jan. 24	2086	544	62	467
House, Samuel M. J., Hillsborough, Va. Railway-rail brake	504,982	Sept. 12	1114	285	64	1404
Housel, Herbert A., Columbia City, Ind. Caster	501,010	July 4	749	196	64	136
Houseman, Harry A., Philadelphia, Pa. Circular-knitting machine	494,677	Apr. 4	234	59	63	48
Houser, Alonzo W., Edwardsdale, Pa. Slate-picker	489,957	Jan. 17	1516	396	62	342
Houser, George H. (See Bodkin, Charles W., assignor.)	495,809	Apr. 18	2069	522	63	415
Houser, James C. (See Fisher, Andrew S., assignor.)						
Housinger, Nicholas, Sylvia, Kans. Stack	507,008	Oct. 17	2041	505	65	412
Housley, Daniel W., Hepler, Kans. Apparatus for taking up the slack of wire fences	509,034	Nov. 21	1718	425	65	1112
Houston, George D., Rushville, Ill. Hay-loader	496,159	Apr. 25	2597	653	63	529
Houston, George D., Rushville, Ill. Corn-cultivator	510,916	Dec. 19	1874	460	65	1785
Houston, Joseph M. (See Young, William J., assignor.)						
Housworth, Robert. (See Marlow, Thomas F., assignor.)						
Houze, William P. (See McCrory and Houze.)						
Hovell, Thomas M., Elstree, assignor of one-half to F. B. Charlton, London, England. Animal-trap	502,254	July 25	2762	698 699	64	550
Hovey, Edward, Devil's Lake, N. D. Machine for working stubble-land	497,576	May 16	1925	484	63	996
Hovey, Elmer A., Chicago, Ill. Means for mounting pulleys in curves of cable railways	491,559	Feb. 14	818	207 208	62	927
How, Woodbury S., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental drill	503,744	Aug. 22	2506	624	64	1068
Howard, Amasa. (See Kidder, Amasa N., assignor.)						
Howard, Benjamin F., Sheep Ranch, Cal. Lubricator	496,262	Apr. 25	2758	690	63	559
Howard, Chañin S., Monroe, Iowa. Fence-wire-reel carrier	495,156	Apr. 11	1029	256	63	208
Howard, Charles, New York, N. Y. Vulcanizing and drying wood. (Reissue)	11,309	Feb. 21	2094	522	62	1199
Howard, Charles A., Pontiac, assignor to Peninsular Heater and Radiator Company, Detroit, Mich. Heater						
Howard, Charles D., Syracuse, N. Y. Draft-regulator	503,141	Aug. 15	1517	373	64	872
Howard, Charles D., Syracuse, N. Y. Combination-heater	491,752	Feb. 14	1116	282	62	988
Howard, Clarence C., New York, N. Y. Cuspidor-holder	498,057	May 23	2590	673	63	1148
Howard, Edward M., and T. J. Eagan, Scranton, Pa. Combined rail tie and chair	511,617	Dec. 26	3053	743	65	2015
Howard, Henry, Brookline, Mass. Method of and apparatus for concentrating sulphuric acid	498,883	June 6	239	56	63	1435
Howard, Henry H., East Orange, N. J. Box	509,664	Nov. 28	2826	682	65	1334
Howard, James H. (See Adams, Benjamin D., assignor.)	505,900	Oct. 3	157	40	65	31
Howard, John E., London, England. Manufacture of corks by grinding and machinery for the purpose						
Howard, Louis E., Plainfield, N. J. Electric-arc lamp	510,539	Dec. 12	1183	285	65	1647
Howard, Louis E., Plainfield, N. J. Electric-arc lamp	503,538	Aug. 15	2145	538	64	986
Howard Manufacturing Company. (See Howard, William C., assignor.)	503,539	Aug. 15	2148	539	64	986
Howard, Samuel A., et al. (See Butler, James L., assignor.)						
Howard & Son Company. (See Whiting, William F., assignor.)						
Howard Sterling Company. (See Wientge, Charles C., assignor.)						
Howard, Walter, Washington, D. C. Combined feed-regulator, band-cutter, and spreader	501,511	July 18	1557	391 392	64	315
Howard, Walter, Washington, D. C. Car heating and ventilating apparatus	503,745	Aug. 22	2507	624	64	1068
Howard, Walter, Washington, D. C. Grain-meter	503,746	Aug. 22	2510	625	64	1069
Howard, Walter, Washington, D. C. Spring-motor	504,808	Sept. 12	826	209 210	64	1438
Howard, Walter, Washington, D. C. Button-fastener	509,436	Nov. 28	2449	590	65	1262

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Howard, William, administrator. (See Howard, William C.)						
Howard, William C., Brooklyn, N. Y., assignor to Howard Manufacturing Company, Boston, Mass. Razor-strop	500,806	July 4	436	114	64	80
Howard, William C., deceased; W. Howard, administrator, Washington, D. C., assignor to T. S. Constantine, New York, N. Y. Mail-marking machine	506,506	Oct. 10	1238	307 308 309	65	249
Howard, William H., Pueblo, Colo. Apparatus for separating matte from slag	499,307	Jan. 3	497	137	62	108
Howard, William H., Pueblo, Colo. Combined skimmer and sweater	502,122	July 25	2533	635	64	506
Howard, William T., Baltimore, Md. Power-measuring instrument for steam-engines	501,654	July 18	1781	444 445	64	356
Howarth, Andrew and F. A., Oxford, Mass. Burr and shive extractor for carding-machines	495,413	Apr. 11	1427	359	63	281
Howarth, Francis A. (See Howarth, Andrew and F. A.)						
Howarth, Henry, assignor to Howarth Reversible Sash and Sash Center Company, Detroit, Mich. Transom-pivot	498,551	May 30	3510	867	63	1309
Howarth, Henry, assignor to Howarth Reversible Sash and Sash Center Company, Detroit, Mich. Transom-pivot	499,922	June 20	1967	478	63	1762
Howarth, Henry, assignor to Howarth Reversible Sash and Sash Center Company, Detroit, Mich. Transom-pivot	499,923	June 20	1968	478	63	1762
Howarth Reversible Sash and Sash Center Company. (See Howarth, Henry, assignor.)						
Howe, Archelaus M. (See Fuller, Melvin G., assignor.)						
Howe & Bassett. (See O'Neil, Daniel, assignor.)						
Howe, Charles A., Buchanan, Mich. Coin-controlled vending apparatus	502,722	Aug. 8	825	200	64	732
Howe, Charles W., Waltham, Mass. Wheel-fender	498,010	May 23	2618	654	63	1135
Howe, Charles W., Waltham, Mass. Life-guard for street-cars	511,428	Dec. 26	2752	665	65	1960
Howe, Daniel K., Portland, Oreg. Bookbinding	502,493	Aug. 1	415	98	64	643
Howe, Eugene L., Cleveland, Ohio. Hame-tug	499,007	Jan. 3	47	13	62	12
Howe, Eugene L., Cleveland, Ohio. Rapping-machine	497,498	May 16	1815	457	63	976
Howe, Eugene L., Cleveland, Ohio. Clip for singletrees or whiffletrees	497,923	May 23	2577	644	63	1128
Howe, Eugene L., Cleveland, Ohio, assignor of one-third to I. P. Rice, Chicago, Ill. Wheel	492,017	Feb. 21	1534	382	62	1085
Howe, Frank P., assignor to North Branch Steel Company, Danville, Pa. Forming true sharp corners on metal shapes	499,022	June 6	496	115	63	1477
Howe, Fred H., Norwalk, Ohio. Umbrella-stick	498,850	June 6	176	44	63	1424
Howe, Glenn G., Indianapolis, Ind., assignor to Ewart Manufacturing Company, Chicago, Ill. Chain	494,423	Mar. 28	2693	676	62	1921
Howe, Harlow H. (See Bush, Zachariah T., assignor.)						
Howe, Henry L., Canandaigua, N. Y. Triple valve for air-brakes	507,132	Oct. 24	2266	557 558	65	465
Howe, Henry L., Canandaigua, N. Y. Triple valve for air-brakes	507,133	Oct. 24	2271	558 559	65	466
Howe, Henry L., Canandaigua, N. Y. Triple valve for fluid-pressure brakes	507,134	Oct. 24	2276	559 560	65	467
Howe, Henry L., assignor of one-half to M. C. Beard, Canandaigua, N. Y. Triple valve for air-brakes	507,498	Oct. 24	2890	711 712	65	581
Howe, James. (See Beckett, Thomas T., assignor.)						
Howe, John B., Danbury, Conn. Hat-pouncing machine	490,788	Jan. 31	2902	746 747	62	642
Howe, John B., Danbury, Conn. Pouncing-head for hat-pouncing machines	495,491	Apr. 18	1565	393 394	63	327
Howe Scale Company of 1886. (See Braley, Samuel T., assignor.)						
Howe, Warren B., and F. B. Davidson, Chicago, Ill. Paper box	511,080	Dec. 19	2143	528 529	65	1835
Howe, William F., Evanston, Wyo. Electro-thermal bathing apparatus	507,367	Oct. 24	2684	660	65	542
Howe, William H., Watertown, Mass. Folding music-rack	501,908	July 11	1075	273	64	211
Howell, Commodore P., Chattanooga, Tenn. Nut-lock	510,023	Dec. 5	313	70	65	1468
Howell, David, Yonkers, N. Y. Attaching sweat-leathers to hats	508,315	Nov. 7	548	135	65	859
Howell, David, Yonkers, N. Y. Sewing-machine	508,715	Nov. 14	1189	293	65	997
Howell, Edward W., New York, N. Y. Stop-cock or turning plug	494,569	Apr. 4	64	15	63	13
Howell, Flavius J., Round Hill, Va. Reversible ticket-holder and bill-file	497,960	May 23	2539	634	63	1121
Howell, George B., Philadelphia, Pa. Flexible sealing-joint for fruit-jars	509,223	Nov. 21	2054	495	65	1176
Howell, Hugh M., Denver, Colo. Nut-lock	502,363	Aug. 1	189	45	64	601
Howell, James H. (See Jewell, John, assignor.)						
Howell, John A., Newark, N. J. Curtain or shade roll	503,601	Aug. 22	2277	568	64	1024
Howell, John A., assignor to C. N. Lockwood & Co., Newark, N. J. Curtain-roller for coaches	504,163	Aug. 29	3157	788	64	1209
Howell, Joshua D., Livonia, N. Y. Watchmaker's gage	503,238	Aug. 15	1671	411	64	901
Howell, Osborn G., and J. M. Horn, Arba, Ind. Pump	490,657	Jan. 31	2694	693 694	62	602
Howell, Whitfield G., Highland, N. Y. Game-board	505,314	Sept. 19	1654	427	64	1607
Hoves, Albert P., Worcester, assignor to F. W. Foster, Melrose, Mass. Faucet	493,774	Mar. 21	1617	412	62	1705
Hoves, Isaiah C., Kansas City, Mo. Railway-spike	490,439	Jan. 24	2318	601	62	513
Howgate, James R., Schenectady, N. Y. Lathe-chuck	503,374	Aug. 15	1903	471	64	940
Howland, Abiel G., Christchurch, New Zealand. Thill-coupling	497,919	May 23	2477	618	63	1111
Howland, Edmund S. (See Corning, Arthur M., assignor.)						
Howland, Herbert O. (See Beers and Howland.)						
Howland, Richard S., Providence, R. I. Secondary electric clock	499,737	June 20	1656	398	63	1707
Howson, Henry. (See Holt and Howson.)						
Hoy, Asa R., Indianapolis, Ind. Lubricator	492,018	Feb. 21	1535	383	62	1085
Hoyer, Isaiah W., Philadelphia, Pa. Composite plate for safes	498,058	May 23	2691	674	63	1148
Hoyt, Adrian H., assignor to Whitney Electrical Instrument Company, Manchester, N. H. Galvanometer	497,418	May 16	1722	435	63	961
Hoyt, Adrian H., assignor to Whitney Electrical Instrument Company, Manchester, N. H. Galvanometer	497,449	May 16	1724	435	63	961
Hoyt, Adrian H., Manchester, N. H., assignor to Whitney Electrical Instrument Company, Saco, Me. Electric measuring-instrument	497,521	May 16	1842	465	63	982
Hoyt, Adrian H., Manchester, N. H., assignor to Whitney Electrical Instrument Company, Saco, Me. Galvanometer	497,522	May 16	1844	465	63	982
Hoyt, Adrian H., Manchester, N. H., assignor to Whitney Electrical Instrument Company, Saco, Me. Galvanometer	500,264	June 27	2533	620	63	1873
Hoyt, Andrew J., Philadelphia, Pa. Gearing	507,681	Oct. 31	3229	790 791	65	657
Hoyt, Augustus J., trustee. (See Patten, Enos, assignor.)						
Hoyt, Benjamin W., Brooklyn, assignor to E. S. T. Kennedy, New York, N. Y. Steam drying and superheating apparatus for steam-boilers	490,965	Jan. 31	3191	816	62	699

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Hoyt Brim Shaping Company. (See Hoyt, Lucius H., assignor.)						
Hoyt Brothers & Co. (See Pease, Charles, assignor.)						
Hoyt, Buckingham S., New York, N. Y. Belt or garter fastening	495,633	Apr. 18	1787	449	63	366
Hoyt, Charles N., Brooklyn, N. Y. Calendar-table and calendar	505,901	Oct. 3	158	41	65	31
Hoyt, Charles N., Brooklyn, N. Y. Calendar	509,166	Nov. 21	1940	475	65	1154
Hoyt, Edward H. (See Cox, Charles H., assignor.)						
Hoyt, Eli T., Alganssee, Mich. Wire stretching and twisting tool	491,111	Feb. 7	76	31	62	763
Hoyt, Ezra S., Detroit, Mich. Automatic air-valve for hot-water radiators	508,017	Nov. 7	59	17	65	768
Hoyt, Frederick A. (See Rundlett and Hoyt.)						
Hoyt, George E., San Francisco, Cal. Igniting apparatus for gas-engines	508,618	Nov. 14	1043	258	65	963
Hoyt, George E., San Francisco, Cal. Gas-engine	510,140	Dec. 5	502	114	65	1504
Hoyt, George E., assignor to Palmer & Rey, San Francisco, Cal. Gas-engine	502,255	July 25	2765	699	64	551
Hoyt, Henry M., Spokane, Wash. Copying-press	493,271	Mar. 14	784	203	62	1329
Hoyt, James G., Haywards, Cal. Harness-buckle	504,693	Sept. 5	628	159	64	1328
Hoyt, Lucius H., assignor to Hoyt Brim Shaping Company, Danbury, Conn. Machine for shaping hat-brims	497,789	May 23	2264	568 569	63	1074
Hoyt, Sarah M., Chicago, Ill. Centrifugal screen	507,815	Oct. 31	3447	846 847	65	699
Hoyt, Will. F., Dowagiac, Mich. Seeding-drill	492,802	Mar. 7	48	11, 12	62	1368
Hubbard, Albert W., assignor to M. S. Carlier & Co., St. Louis, Mo. Pile-driver	506,637	Oct. 10	1423	357	65	285
Hubbard, Allen, Boston, Mass. Air-valve for radiators	491,112	Feb. 7	77	22	62	764
Hubbard, Charles F., Toronto, Canada. Baking-oven	489,743	Jan. 10	1168	304 305	62	257
Hubbard, Charles W., Jr. (See Taylor, James, assignor.)						
Hubbard, Charles W., Pittsburg, Pa. Die for making axes	499,998	June 20	2078	503 504	63	1781
Hubbard, Eber, Chicago, Ill. Press for making vessels from fibrous pulp	495,039	Apr. 11	799	202	63	168
Hubbard, Eber, Chicago, Ill., assignor to Willimantic Linen Company, Hartford, Conn. Machine for making spools from fibrous pulp	499,427	June 13	1155	277	63	1606
Hubbard, Eber, Chicago, Ill., assignor to Willimantic Linen Company, Hartford, Conn. Machine for dressing spools	501,512	July 18	1559	392	64	315
Hubbard, Eber, Chicago, Ill., assignor to Willimantic Linen Company, Hartford, Conn. Spool	501,513	July 18	1562	393	64	315
Hubbard, George M., assignor to W. & E. T. Fitch, New Haven, Conn. Currycomb	493,029	Mar. 7	406	101	62	1439
Hubbard, Moses G., Chicago, Ill. Car-truck	500,129	June 27	2318	561	63	1835
Hubbard, Moses G., Chicago, Ill. Street-car gear	503,142	Aug. 15	1519	373	64	873
Hubbard, William D. (See Williams, Harry R., assignor.)						
Hubbard, William H., and A. Goodrich, Auburn, N. Y. Shelving	490,288	Jan. 24	2087	544	62	468
Hubbell, A. C. (See McAllister, James, assignor.)						
Hubbell, Algernon S., Norwich, Conn. Bench-vise	511,429	Dec. 26	2755	665	65	1961
Hubbell, Edwin, assignor of one-half to H. R. Gering, Plattsmouth, Nebr. Sliding-door lock	490,251	Jan. 17	2013	526	62	441
Hubbell, Martin, Mount Kisco, N. Y. Railway-rail-joint connection	503,239	Aug. 15	1673	411	64	901
Hubbell, Myron R., Wolcott, Vt. Desk	496,057	Apr. 25	2449	618	63	501
Haben, Gustavus A., Springfield, Ohio. Switch for trolley-wires	507,732	Oct. 31	3302	808	65	672
Haben, Gustavus A., Springfield, Ohio. Trolley for electric railways	507,733	Oct. 31	3303	808	65	672
Haber, George W. (See Nebeker, Aquila, assignor.)						
Haber, George W., Philadelphia, Pa. Egg-beater	505,766	Sept. 26	2453	617	64	1770
Huber, Herman, Argentine, Kans. Blast-furnace	495,675	Apr. 18	1857	464	63	377
Huber, Louis C., Louisville, Ky. Weight-motor for blowers of carburetors	503,702	Aug. 22	2434	606	64	1054
Hubert, Augustin, Boston, Mass. Bicycle-paddock	511,430	Dec. 26	2756	666	65	1961
Huble, John E., Lancaster, Pa. Mechanical toy	495,183	Apr. 11	1069	265	63	216
Huble, John E., Lancaster, Pa. Sectional circular railway for mechanical toys	495,184	Apr. 11	1071	266	63	216
Huble, John E., Lancaster, Pa. Mechanical toy	495,185	Apr. 11	1075	266	63	217
Hubner, Alois J., and R. R. S. von Seeberg, Vienna, Austria-Hungary. Carriage-top	509,472	Nov. 28	2523	609	65	1275
Hübner, Heinrich, Hermsdorf, Germany. Miner's safety-lamp	499,117	June 6	636	153	63	1502
Huck, Francis E. (See McNeill and Huck.)						
Huddleston, Laura B., Winchester, Ind. Corpse-dressing table	503,969	Aug. 29	2849	714 715	64	1152
Hudel, Ferdinand F., and E. H. Liebenstein, Lake, Wis. Wheeled scraper	501,145	July 11	960	250	64	193
Hudgens, C. Dana, Kenton, Ohio. Bolt for jails	498,059	May 23	2692	674	63	1148
Hudnut, Benjamin G., Terre Haute, Ind. Corn product	491,428	Feb. 7	599	151	62	863
Hudson, Charles E., New York, N. Y. Calendar	510,262	Dec. 5	707	171	65	1543
Hudson, Daniel C., Berlin, Md. Plotter	492,682	Feb. 28	2587	640	62	1312
Hudson, David W., F. La Strong, and G. D. Bunch, Los Angeles, Cal. Manufacture of butter	489,814	Jan. 10	1271		62	279
Hudson, John L., assignor of one-half to H. Douglas, Atlanta, Ga. Nut-lock	497,666	May 16	2064	515	63	1021
Hudson, Robert. (See Stokes and Hudson.)						
Hudson, Thomas C., Providence, R. I. Fitting for flasks, bottles, &c	498,934	June 6	327	77	63	1450
Hudson, Tobias, assignor of one-half to J. F. Weyler and R. S. Weisenfeld, Baltimore, Md. Electric lamp	495,676	Apr. 18	1859	465	63	377
Huebel, Otto H. (See Manger and Huebel.)						
Huebner, Julius, Milwaukee, Wis. Game apparatus	507,323	Oct. 24	2613	643	65	528
Huefner, Jacob, Newark, N. J. Apple peeler, cutter, and corer	508,137	Nov. 7	285	65	65	807
Huelster, William W. (See Loucks and Huelster.)						
Huennekens, Fredrick W., Milwaukee, Wis. Bicycle	498,394	May 30	3240	806	63	1261
Huestis, Frederick W., Boston, assignor to G. E. Crafts, Newton, Mass. Pneumatic tire	498,794	June 6	71	17	63	1401
Huestis, Frederick W., Boston, assignor to G. E. Crafts, Newton, Mass. Bicycle-tire	508,943	Nov. 21	1583	388	65	1084
Huestis, Thomas B., assignor of two-thirds to W. H. Stanley and H. McKay, Boston, Mass. Machine for making toe-calks for horseshoes	508,544	Nov. 14	931	229	65	946
Huetter, Ernest. (See Urmay and Huetter.)						
Huettemann, Gottfried. (See Spiecker, Gustav, assignor.)						
Huwe, George A., assignor to Keys, Lee & Huwe Company, Cincinnati, Ohio. Machine for making shipping-tags	510,641	Dec. 12	1360	333 334	65	1679
Huey, John S., Chicago, Ill. Pocket-book	500,901	July 4	577	150	64	106
Huff, George R., and G. H. Vernon, St. Paul, Minn. Saw-filing machine	505,626	Sept. 26	2205	558 559	64	1725
Huff, Orison, Somerville, assignor of one-half to W. B. Draper, Cambridge, Mass. File	507,071	Oct. 17	2143	531	65	429
Huff, Orison, Somerville, assignor, by mesne assignments, to W. P. Marble, Chelsea, Mass. Stocking-supporter	508,883	Nov. 14	1443	357	65	1044
Huffman, William F., Hickory, N. C. Cash-register	489,228	Jan. 3	384	106	62	86
Hugelmeier, Louis W., assignor of one-third to J. Borgmeyer, Louisville, Ky. Potato-digger	509,378	Nov. 28	2322	562	65	1237
Hugershoff, William, New York, N. Y. Atomizer	495,249	Apr. 11	1181	296	63	237
Huggins, John C., deceased, Racine, Wis.; F. M. Wilson, administrator. Chaise	499,738	June 20	1657	392	63	1707

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Hughes, Benjamin F., Waggoner, Ill. Hay-loader.....	498,060	May 23	2693	{ 674 675 }	63	1148
Hughes, Frank P., et al. (See Duesbury, William A., assignor.)						
Hughes, George H. (See Swingle, Charles E., assignor.)						
Hughes, George M., and G. T. Reed, Baltimore, Md., assignors to Automatic Electric Light Extinguisher Company of Baltimore City. Automatic electric-light extinguisher.....	511,527	Dec. 26	2898	706	65	1989
Hughes, Gibbard R., London, England. Ring-gage.....	500,130	June 27	2321	561	63	1836
Hughes, Henry. (See Tellefsen and Hughes.)						
Hughes, James W., and C. K. Taylor, Washington, D. C. Feeding mechanism for envelopes.....	495,414	Apr. 11	1429	359	63	282
Hughes, John. (See Salter and Hughes.)						
Hughes, John B., Jasper, Ala. Car-coupling.....	496,939	May 9	901	236	63	800
Hughes, John B., Denver, Colo. Combination screw-driver and tool-handle.....	505,165	Sept. 19	1412	364	64	1562
Hughes, John W., et al. (See Broome, Henry, assignor.)						
Hughes, Jonathan, Waynetown, Ind. Gate.....	508,018	Nov. 7	60	17	65	769
Hughes, Joseph H. (See Bown and Hughes.)						
Hughes, Lemuel P., et al. (See Tiner, John F., assignor.)						
Hughes, Otis, Vernon, and J. S. Hull, Lock Spring, Ind. Ditching-machine.....	504,728	Sept. 12	676	{ 172 173 }	64	1410
Hughes, Patrick. (See Beach, Elias, assignor.)						
Hughes, Richard, Philadelphia, Pa. Combined ventilator and step-ladder fire-escape.....	505,465	Sept. 26	1898	489	64	1667
Hughes, Robert S., assignor of one-half to A. H. Tarbet, Denver, Colo. Amusement apparatus.....	511,272	Dec. 19	2462	600	65	1894
Hughes, Russell M., Louisville, Ky. Apparatus for the manufacture of vinegar.....	502,819	Aug. 8	984	{ 239 240 }	64	762
Hughes, Samuel, Lindsay, Canada. Railway-car ventilator.....	490,388	Jan. 24	2248	585	62	501
Hughes, Smith E., assignor of one-half to M. D. Baldy, Philadelphia, Pa. Pneumatic dispatch apparatus.....	504,164	Aug. 29	3159	789	64	1209
Hughes & Sons, Edward. (See Youngjohns, William, assignor.)						
Hugo, William H., Fort Bayard, N. Mex. Ter. Boot-jack.....	506,782	Oct. 17	1678	423	65	344
Huguley, Job C., Dallas, Tex. Car-coupling.....	489,607	Jan. 10	970	252	62	217
Hulbert, Henry C. (See Attix, Thomas F., assignor.)						
Hulett, George H., Cleveland, Ohio. Drop-bottom bucket.....	494,294	Mar. 23	2487	627	62	1823
Hulett, George H., Cleveland, Ohio. Machine for handling coal, ore, &c.....	495,040	Apr. 11	802	{ 202 203 }	63	168
Hull, Alfred A., assignor of one-half to J. Adkinson, Knoxville, Tenn. Wrench.....	501,462	July 11	1479	372	64	285
Hull, Henry P., Canton, Ohio. Fork.....	500,207	June 27	2450	597	63	1858
Hull, Jeremiah S. (See Hughes and Hull.)						
Hull, William S., Sheffield, Ala. Jail-door alarm.....	494,923	Apr. 4	626	159	63	121
Hull, William S., Sheffield, Ala. Jail lattice or opening.....	494,924	Apr. 4	628	159	63	121
Hull, William S., Sheffield, Ala. Electric hinge.....	499,428	June 13	1159	277	63	1607
Hull, William S., Sheffield, Ala., assignor of one-half to C. H. Sparks, St. Louis, Mo. Electric prison cell and guard.....	489,902	Jan. 10	1407	364	62	304
Hullah, Josiah, Amboy, Ill. Means for connecting stationary machines to portable engines.....	496,568	May 2	280	75	63	670
Hullings, Charles W., assignor of one-half to J. W. Thatcher, Philadelphia, Pa. Locomotive fire-box.....	490,629	Jan. 24	2647	{ 681 682 }	62	578
Hullings, Charles W., assignor of one-half to J. W. Thatcher, Philadelphia, Pa. Steam-boiler and fire-box therefor.....	495,939	Apr. 18	2264	570	63	451
Hult, Oscar W. (See Pihl and Hult.)						
Hultgren, William H., assignor of one-half to A. B. Ellithorpe, Chicago, Ill. Automatic slack-cable stop for elevators.....	494,810	Apr. 4	460	114	63	89
Hultgren, William H., assignor of three-fourths to Michigan Elevator and Engine Company, Detroit, Mich., and A. B. Ellithorpe, Chicago, Ill. Safety device for elevators.....	493,724	Mar. 21	1537	{ 391 392 }	62	1689
Hultgren, William H., assignor of three-fourths to Michigan Elevator and Engine Company, Detroit, Mich., and A. B. Ellithorpe, Chicago, Ill. Cable-fastening apparatus for hydraulic elevators.....	498,434	May 30	3304	824	63	1273
Hum, Edward K., Pittsburg, Pa. Lightning-rod ball.....	492,512	Feb. 28	2323	576	62	1258
Humans, William, Cambridge, Mass., assignor to American Magnetic Electric Company, Jersey City, N. J. Magneto-telephone switch.....	492,019	Feb. 21	1535	383	62	1085
Humason, Daniel L., assignor of one-fourth to J. B. Friedheim, Camden, Ark. Drier.....	504,270	Aug. 29	3338	{ 834 835 }	64	1243
Hume, Alexander. (See Williams, George L., assignor.)						
Hume, Charles S., Detroit, Minn. Hanger for electric lamps.....	489,815	Jan. 10	1271	333	62	279
Hume, Frank. (See Gerhardt, Lincoln, assignor.)						
Hume, Robert D. (See Murch and Gray, assignors.)						
Hume, Robert D., Gold Beach, Oreg. Can-lacquering machine.....	489,903	Jan. 10	1409	364	62	305
Hume, Robert D., Gold Beach, Oreg. Machine for forming can-bodies.....	493,588	Mar. 14	1307	{ 333 334 335 }	62	1629
Hume, Robert D., Gold Beach, Oreg. Can-body forming, soldering, and heading machine.....	506,878	Oct. 17	1828	{ 458 459 460 }	65	371
Hume, Thomas J., assignor of one-hundred-and-one two-hundredths to W. C. McPike and H. H. Bayley, Atchison, Kans. Cash indicator and register.....	506,176	Oct. 3	611	{ 156 157 }	65	119
Hume, William D., et al. (See Seates, George R., assignor.)						
Hummel, August, Chicago, Ill., assignor to C. C. Puffer, Rochester, N. Y. Manufacture of beer.....	492,292	Feb. 21	1951	488	62	1172
Hummel, Georg, Nuremberg, Germany. Conlomb-counter.....	491,560	Feb. 14	819	208	62	927
Hummer, Andrew, Maria Stein, Ohio. Thill-coupling.....	492,293	Feb. 21	1955	488	62	1172
Humphrey, Henry L., et al. (See Stark, James M., assignor.)						
Humphrey, Henry P., assignor to Lowell Oiler Company, Nashua, N. H. Journal-box for shafting.....	499,429	June 13	1161	278	63	1607
Humphrey, Ira P., Troy, N. Y. Knob attachment.....	499,834	June 20	1826	444	63	1737
Humphrey, John B., et al. (See Scales, William S., assignor.)						
Humphrey, Victor, Lexington, N. C. Bed-brace.....	489,479	Jan. 10	771	204	62	178
Humphrey, William T. (See Gulich and Humphrey.)						
Humphreys, Alexander C., assignor, by mesne assignments, to United Gas Improvement Company, Philadelphia, Pa. Apparatus for manufacturing gas.....	501,250	July 11	1140	{ 289 290 291 }	64	222
Humphreys, George. (See Vance, William H., assignor.)						
Humphries, David W., De Lamar, Idaho. Concentrator.....	504,923	Sept. 12	1013	261	64	1476
Humphries, George. (See Pfouts and Ball, assignors.)						
Humphries, George, London, England. Mechanism for converting motion.....	508,387	Nov. 7	667	164	65	882
Humphry, George, Belvidere, Ill. Foot-power hammer.....	494,335	Mar. 28	2554	643	62	1896

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Huncke, Max, Westport, Conn., assignor to Embalmers' Supply Company, of New Jersey. Antiseptic fluid for embalming	498,350	May 30	3181	63	1249
Hunleth, Frank J., <i>et al.</i> (See Sperry, Charles F., assignor.)						
Hunsinger, Jacob C., Laurel, assignor of one-half to J. N. Huston, Connersville, Ind. Car-coupling	497,920	May 23	2478	619	63	1111
Hunsinger, Jacob C., and W. Ensminger, Laurel, Ind. Car-brake	508,316	Nov. 7	550	135	65	859
Hunt, Alfred E. (See Richards and Hunt.)						
Hunt, Alfred E., Pittsburg, Pa. Manufacturing steel	493,090	Mar. 7	494	.....	62	1457
Hunt, Alfred E., Pittsburg, Pa. Testing rolled or forged metals	499,739	June 20	1658	399	63	1708
Hunt, Alfred E., Pittsburg, Pa. Refractory brick	504,584	Sept. 5	448	.....	64	1353
Hunt, Charles A., Jr., Lexington, N. C. Bed-brace	505,527	Sept. 26	2032	518	64	1691
Hunt, Charles M., Milwaukee, Wis. Bed-bottom	503,540	Aug. 15	2150	539	64	987
Hunt, Charles W., West New Brighton, N. Y. Car-truck	495,338	Apr. 11	1312	329	63	261
Hunt, Charles W., West New Brighton, N. Y. Car-truck	495,339	Apr. 11	1313	330	63	261
Hunt, Charles W., West New Brighton, N. Y. Drive-chain	500,332	June 27	2650	648	63	1893
Hunt, Charles W., West New Brighton, N. Y. Means for propelling chains	500,807	July 4	437	115	64	81
Hunt, Charles W. and W. F., West New Brighton, N. Y. Rotary cam-gear	498,552	May 30	3512	867 868 869	63	1309
Hunt, David F., Antrim, N. H., assignor of one-half to H. P. Elwell, Gloucester, Mass. Machine for winding thread on spools	503,086	Aug. 8	1410	348	64	840
Hunt, Edward P., assignor to J. H. Finley and J. Murphy, Buffalo, N. Y. Filter	504,434	Sept. 5	200	51	64	1308
Hunt, Frank M., Round Oak, Ga. Folding umbrella	508,717	Nov. 14	1194	296	65	998
Hunt, Gilbert, Walla Walla, Wash. Bag-holder	507,542	Oct. 31	2979	731	65	611
Hunt, Henry C., Newark, N. J. Rotary engine	501,146	July 11	983	250 251	64	194
Hunt, John, Beloit, Wis. Apparatus for transmitting motion	493,589	Mar. 14	1311	335	62	1630
Hunt, John G., Philadelphia, Pa. Toy	494,002	Mar. 21	2004	510	62	1779
Hunt, Jonathan H., Westborough, Mass. Velocipede-saddle	489,308	Jan. 3	498	138	62	108
Hunt, Joseph, Allentown, Pa. Grinding or pulverizing mill	493,164	Mar. 7	613	153 154	62	1479
Hunt, Preston R., Plattsville, assignor of one-half to A. J. Cory, Tawawa, Ohio. Corn-harvester	491,889	Feb. 14	1333	330 331	62	1030
Hunt, Rathbun J., Trumansburg, N. Y. Mail-pouch lifter	509,906	Dec. 5	105	24	65	1430
Hunt, T. H. (See Reeves, Dorus D., assignor.)						
Hunt, William F. (See Hunt, Charles W. and W. F.)						
Hunt, William H., and C. O. Morris, Trenton, N. J. Fence-post	500,392	June 27	2741	674	63	1910
Hunter, Andrew, Chicago, Ill., assignor of one-half to J. W. Ward, Pottsville, Iowa. Elastic tire	496,361	Apr. 25	2935	733	63	593
Hunter, Edwin. (See Rader and Hunter.)						
Hunter, George D., Auburn Park, Ill., assignor to Standard Cartridge Company, of New Jersey. Crimper for cartridge-shells	505,046	Sept. 12	1215	313 501 502	64	1513
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Mechanism for testing watch-balances and hair-springs	490,202	Jan. 17	1927	503 504 505	62	425
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Testing watch-balances and hair-springs	490,203	Jan. 17	1932	505 506 507	62	426
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Manufacture of timepiece-balances	490,204	Jan. 17	1936	508	62	426
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Stem winding and setting watch	503,482	Aug. 15	2065	515	64	971
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Mechanism for setting watch-jewels	503,483	Aug. 15	2066	515 293 294 295 296	64	971
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Profiling-machine	508,716	Nov. 14	1191	295 296	65	997
Hunter, Harry C. (See Hunter, Lytle J. and H. C.)						
Hunter, Harry C. (See Hunter, Lytle J., H. C., and J. H.)						
Hunter, Henry C., Alameda, Cal. Packing-vessel	492,803	Mar. 7	51	12	62	1368
Hunter, Henry C., Alameda, Cal. Packing	492,804	Mar. 7	51	12	62	1369
Hunter, Henry C., Alameda, Cal. Side-seaming strip for cans	492,805	Mar. 7	53	13	62	1369
Hunter, Henry C., Alameda, Cal. Packing-vessel	492,806	Mar. 7	54	13	62	1369
Hunter, Henry P., Manchester, N. H. Loom for weaving bags	494,204	Mar. 28	2345	593 594	62	1857
Hunter, James, Albany, N. Y. Steam-generator	498,272	May 30	3033	756	63	1225
Hunter, James, Pittsburg, Pa. Method of and apparatus for rolling iron bars, &c	511,147	Dec. 19	2260	554	65	1858
Hunter, John A., Philadelphia, assignor to Hunter Steel Company, Catasauqua, Pa. Converting iron or steel	498,061	May 23	2696	.....	63	1149
Hunter, John A., Philadelphia, assignor to Hunter Steel Company, Catasauqua, Pa. Converting iron into steel	498,062	May 23	2697	.....	63	1149
Hunter, John A., Philadelphia, assignor to Hunter Steel Company, Catasauqua, Pa. Increasing percentage of steel in low-carbon steel	498,063	May 23	2697	.....	63	1149
Hunter, John C., San Francisco, Cal. Tool-holder	502,564	Aug. 1	528	126	64	663
Hunter, John E., assignor to Culter & Proctor Stove Company, Peoria, Ill. Heating stove	499,023	June 6	496	116	63	1477
Hunter, John H., and F. Cajar, New York, N. Y. Pipe-hanger	499,549	June 13	1356	322	63	1642
Hunter, Joseph H. (See Hunter, Lytle J., H. C., and J. H.)						
Hunter, Lytle J., Covington, Ky., and H. C. Hunter, Winton Place, Ohio. Ticket-controlling machine	510,428	Dec. 12	966	231 232	65	1607
Hunter, Lytle J., Covington, Ky., H. C. and J. H. Hunter, Winton Place, Ohio. Ticket-controlling apparatus	493,931	Mar. 21	1866	476 477	62	1752
Hunter, Lytle J., Covington, Ky., H. C. and J. H. Hunter, Winton Place, Ohio. Ticket, transfer, and receipt controller	494,001	Mar. 21	1998	509	62	1778
Hunter, Maria W., <i>et al.</i> (See Hindermeyer, Anthony J., assignor.)						
Hunter, Marshall E., and J. O. Clark, Boston, Mass., assignors, by mesne assignments, to J. H. Mitchell, Philadelphia, Pa. Machine for molding oval or other shapes from plastic material	492,206	Feb. 21	1822	457	62	1145
Hunter, Mary A., <i>et al.</i> (See Hindermeyer, Anthony J., assignor.)						
Hunter, Orange D., Terryville, Conn., assignor to M. Gould's Son & Co., Newark, N. J. Trunk-catch	498,472	May 30	3367	839	63	1285

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Hunter, Rudolph M., Philadelphia, Pa. Photograph-album	496,976	May 9	946	248	63	808
Hunter, Rudolph M., Philadelphia, Pa. Music-sheet for mechanical musical instruments	497,323	May 16	1526	384	63	925
Hunter, Rudolph M., Philadelphia, Pa. Device for singeing cloth	508,944	Nov. 21	1584	388	65	1084
Hunter, Rudolph M., Philadelphia, Pa. Push-button	510,540	Dec. 12	1186	286	65	1647
Hunter, Rudolph M., Philadelphia, Pa. Telautograph	511,081	Dec. 19	2146	{ 529 } 530	{ 65 } 65	1835
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Dynamo-electric machine and motor	492,888	Mar. 7	183	44, 45	62	1395
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric search-light	493,358	Mar. 14	923	238	62	1555
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	493,359	Mar. 14	925	238	62	1555
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	493,360	Mar. 14	930	238	62	1557
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-locomotive regulation	494,705	Apr. 4	278	70, 71	63	56
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc light	495,461	Apr. 11	1507	378	63	296
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric measuring-instrument	496,312	Apr. 25	2841	{ 709 } 710	{ 63 } 63	575
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway	497,024	May 9	1023	262	63	820
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Overhead electric railway	497,025	May 9	1025	262	63	821
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	497,450	May 16	1725	435	63	961
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-railway trolley	498,435	May 30	3305	824	63	1273
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Trolley-wire curve	499,167	June 6	714	170	63	1514
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Overhead-trolley-wire switch	499,461	June 13	1212	289	63	1617
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	499,676	June 13	1546	372	63	1674
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric motor and dynamo-electric machine	500,132	June 27	2323	562	63	1836
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	500,657	July 4	202	53	64	39
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electrical measuring-instrument	501,589	July 18	1674	418	64	337
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electrical measuring-instrument	502,077	July 25	2463	619	64	493
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Method of and apparatus for the transmission of electrical energy	503,321	Aug. 15	1817	450	64	926
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric search-light	503,602	Aug. 22	2278	569	64	1024
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	504,271	Aug. 29	3340	835	64	1243
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	509,167	Nov. 21	1942	475	65	1154
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	509,168	Nov. 21	1945	476	65	1155
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Dynamo-electric regulator for an engine driving a generator	510,602	Dec. 12	1291	315	65	1666
Hunter, Rudolph M., assignor to Hale & Kilburn Manufacturing Company, Philadelphia, Pa. Folding leg for wardrobe-bedsteads	496,829	May 2	698	184	63	743
Hunter, Rudolph M., assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-bow fastener	496,830	May 2	699	184	63	744
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Electric locomotive	502,297	Aug. 1	66	15	64	578
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Electric railway	508,388	Nov. 7	669	164	65	882
Hunter Steel Company. (See Hunter, John A., assignor.)						
Hunter, William N., Cincinnati, Ohio, assignor to G. E. Adams, Chicago, Ill. Toy savings-bank	508,019	Nov. 7	61	17, 18	65	769
Hunting, Eben B. (See Mahaffey, James B., assignor.)						
Huntington, Lawson G., New York, N. Y., and R. J. Armour, Newark, N. J. Signal lamp or lantern	490,770	Jan. 31	2872	737	62	636
Huntington, Reuben M. (See Davis and Huntington.)						
Huntley, George W., Jr., Driftwood, Pa. Harness-tug	500,101	June 27	2322	562	63	1836
Huntley, Hosea H., assignor to M. Rooney and M. L. Huntley, Quincy, Ill. Operating mechanism for baling-presses	494,527	Mar. 28	2867	717	62	1952
Huntley, Mary L., et al. (See Huntley, Hosea H., assignor.)						
Huntman, Mary A., Stapleton, N. Y. Tellurian	491,017	Jan. 31	3273	836	62	715
Huot, Abel, New York, N. Y. Combined cigar-cutter and electric lighter	493,030	Mar. 7	407	102	62	1439
Hurd, Charles. (See Beardsley, Henry C., assignor.)						
Hurd, Charles, Duluth, Minn. Refrigerator	501,277	July 11	1183	{ 299 } 300	{ 64 } 64	261
Hurd, Charles S., Cleveland, Ohio. Automatic electric sprinkler and alarm	492,866	Mar. 7	151	36	62	1338
Hurd, Frank B., et al. (See Cox, James B., assignor.)						
Hurd, George B., et al. (See Cox, James B., assignor.)						
Hurd, Oscar P., Binghamton, N. Y. Rubber boot	508,619	Nov. 14	1045	258	65	969
Hurdle, Edgar F., et al. (See Miller, Henry O., assignor.)						
Hurlburt, Edward, Utica, N. Y. Starching-machine	499,228	June 13	802	{ 190 } 191	{ 63 } 63	1544
Hurlburt, Katherine M., Wethersfield, Conn. Ruling device	509,907	Dec. 5	107	24	65	1439
Hurlbut, Seth E., Chicago, Ill. Self-closing box	496,610	May 2	341	53	63	681
Hurley, Frank M., Bennington, Ohio. Music-leaf turner	507,816	Oct. 31	3448	847	65	700
Hurley, James H., Hartford, Conn. Beam-compass	499,999	June 20	2079	504	63	1782
Hurley, Michael D., Chicago, Ill. Hod	496,940	May 9	902	237	63	800
Hurley, William S., et al. (See Harper, Thomas, assignor.)						
Hurst, William, Rochdale, England. Machine for opening cotton	510,642	Dec. 12	1366	{ 334 } 335	{ 65 } 65	1620
Hurteau, Stephen, Montreal, Canada. Woodworking-machine	511,618	Dec. 26	3054	744	65	2015

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Hurtu, Jacques. (See Sorot, Hurtu, and Hautin.)						
Harwitz, Hermann, and A. Schapiro, Berlin, Germany. Roller copying-machine	510,643	Dec. 12	1370	335	65	1680
Huse, Leon C., assignor to Pitman Manufacturing Company, Laconia, N. H. Thickening-thread mechanism for circular-knitting machines	495,973	Apr. 25	2315	584	63	476
Husemann, Frederick W., Black Jack, Mo. Harvester	508,317	Nov. 7	550	135	65	859
Huson, John T., Denver, Colo. Wire-rope tramway	508,138	Nov. 7	267	65, 66	65	807
Huss, Charles H. (See Viner, August, assignor.)						
Huss, Rudolph W., Chicago, Ill., assignor to American Tire Company, Cleveland, Ohio. Pneumatic tire for velocipedes	490,658	Jan. 31	2696	694	62	603
Huss, Rudolph W., Chicago, Ill., assignor to H. A. Lozier, trustee, Cleveland, Ohio. Pneumatic tire	495,974	Apr. 25	2316	585	63	476
Huss, Rudolph W., Chicago, Ill., assignor to H. A. Lozier, trustee, Cleveland, Ohio. Pneumatic tire	495,975	Apr. 25	2318	585 586	63	477
Huss, Rudolph W., Chicago, Ill., assignor to H. A. Lozier, Cleveland, Ohio. Pneumatic tire	500,658	July 4	203	53	64	40
Huss, Rudolph W., assignor to C. G. Page, trustee, Chicago, Ill. Pneumatic tire	502,002	July 25	2337	586	64	470
Hussey, Charles A., New York, N. Y. Rheostat	502,040	July 25	2404	605	64	482
Hussey, George B., Providence, R. I. Life-raft	497,375	May 16	1606	406	63	941
Hussey, James V., Clarksville, Tenn. Attachment for watch-chains	498,654	May 30	3680	909	63	1339
Hussey, Levi, New York, and E. D. Harsen, Brooklyn, N. Y., assignors to Mining and Dredging Power Company, of West Virginia. Steam vacuum-dredger	497,427	May 16	1687	426	63	955
Huston, Abram F., Coatesville, Pa. Boiler-brace	508,718	Nov. 14	1195	296	65	998
Huston, Ashmead & Co. (See Huston, Clare A., assignor.)						
Huston, Charles L., Coatesville, Pa. Truck	490,598	Jan. 24	2566	660	62	562
Huston, Charles L., Coatesville, Pa. Metal-cutting machine	494,864	Apr. 4	544	137 138	63	106
Huston, Clare A., assignor to Huston, Ashmead & Co., Limited, Philadelphia, Pa. Gage for plate-printing presses	494,955	Apr. 4	667	172	63	129
Huston, James N. (See Hunsinger, Jacob C., assignor.)						
Huston, William H., Mexico, Mo., assignor of one-half to G. T. Dorsey, Litchfield, Ill. Combination-wrench	490,789	Jan. 31	2906	747	62	643
Hutchings, Elisha F. (See Bickle, Henry J., assignor.)						
Hutchings, George S. (See Skinner, Ernest M., assignor.)						
Hutchins, Adelbert E., Detroit, Mich. Automatic safety-switch	496,611	May 2	342	93, 94	63	682
Hutchins, Charles W., Springfield, Mass. Tuning-peg for stringed musical instruments	490,564	Jan. 24	2517	648	62	552
Hutchins, Eugene R., assignor to Hutchins Refrigerator Car Company, Chicago, Ill. Ice-tank for refrigerator-cars	497,376	May 16	1608	406	63	941
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Reversing mechanism for looms	491,776	Feb. 14	1163	291	62	996
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Swivel-loom	497,428	May 16	1689	426 427	63	955
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Pattern mechanism for looms	498,956	June 6	363	87, 88	63	1456
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Pattern mechanism for looms	506,818	Oct. 17	1739	438	65	355
Hutchins Refrigerator Car Company. (See Hutchins, Eugene R., assignor.)						
Hutchinson, Charles F., Baltimore, Md. Grate for stoves, furnaces, or ranges	509,224	Nov. 21	2056	496	65	1176
Hutchinson, Edgar W. (See Hutchinson, Henry W. and E. W.)						
Hutchinson, Henry W. and E. W., Kalamazoo, Mich. Adjustable window-curtain holder	511,431	Dec. 26	2756	666	65	1961
Hutchinson, Ira R., Fresno, Cal. Wrapping-machine	490,608	Jan. 24	2586	666 667	62	566
Hutchinson, Jacob F., Basalt, Idaho. Hay-derrick	502,078	July 25	2465	619	64	493
Hutchinson, James H., New York, N. Y. Radiator	493,590	Mar. 14	1312	335	62	1630
Hutchinson-Jenkins Steel Company. (See Jenkins, John B., assignor.)						
Hutchinson, Joseph. (See Gould, Frederick D., assignor.)						
Hutchinson, Joseph, New York, N. Y. Electrical connecting device	490,477	Jan. 24	2383	617	62	526
Hutchinson, Joseph, New York, N. Y. Switch for electric-light fixtures	493,268	Mar. 21	1765	450	62	1734
Hutchinson, Joseph, assignor to Edison General Electric Company, New York, N. Y. Incandescent-lamp socket	491,561	Feb. 14	821	208	62	928
Hutchinson, Joseph A., assignor of one-third to John T. Noye Manufacturing Company, Buffalo, N. Y. Engine-governor	495,089	Apr. 11	888	224 225	63	185
Hutchinson, Samuel P., Philadelphia, Pa. Furnace	492,020	Feb. 21	1537	383	62	1085
Hutchinson, William F., Passaic, N. J. Wood-cutting machine	507,490	Oct. 24	2897	712 713	65	582
Hutchison, Robert, Prestwick, Scotland. Lubricant	496,225	Apr. 25	2698		63	548
Hutt, James W., and A. J. Phillips, Toronto, Canada. Plunger for box-folding machines	494,811	Apr. 4	463	114 115	63	89
Hutt, Mahlon M. (See Harre and Hutt.)						
Huttenlocher, C. (See Engle and Thompson, assignors.)						
Hutter, Karl, New York, N. Y. Bottle-stopper	491,113	Feb. 7	79	22	62	764
Hutton, David S., Martinsburg, Iowa. Car-coupling	510,343	Dec. 5	822	199	65	1566
Hutton, John. (See Fowler and Hutton.)						
Hutton, Milton C., assignor of one-half to W. E. Chapman, Georgetown, Tex. Adjustable grate attachment	497,921	May 23	2479	619	63	1111
Huyck, Leonard W., assignor of one-half to E. Allen, Rochester, N. Y. Spindle attachment	503,240	Aug. 15	1674	412	64	902
Huyler, John S. (See Richmond, Alvan S., assignor.)						
Hvass, Charles, assignor of one-half to L. Kahner, New York, N. Y. Machine for wrapping cigar-bunches	501,073	July 11	846	219 220	64	170
Hyams, Hyam J., assignor of one-half to H. J. Myers, Dayton, Ohio. Bicycle-support	502,298	Aug. 1	71	15, 16	64	579
Hyatt, Frank T., et al. (See Weaver, William, assignor.)						
Hyatt, John W., Newark, N. J. Guide for rolls in roller-bearings	506,692	Oct. 17	1517	381	65	314
Hyde, Charles J. (See Jones, Milton B., assignor.)						
Hyde, Clarence L., Chicago, Ill. Construction of emery-wheels and supports therefor	489,149	Jan. 3	256	71	62	59
Hyde, Clarence L., Chicago, Ill. Emery-wheel and support	507,223	Oct. 24	2439	601	65	495
Hyde, Edward B., Elwood, Iowa. Grain-reel	501,424	July 11	1427	358	64	274
Hyde, Edward S., Dubuque, Iowa. Combined flush-tank and manhole	500,000	June 20	2020	504	63	1782
Hyde, Frank S., Sulphur Springs, Tex. Cotton-chopper	492,867	Mar. 7	152	36, 37	62	1389
Hyde, Hampden, Rochester, N. Y. Steam-generator	497,881	May 23	2112	602 603	63	1100
Hyde, Thomas B., Taylor, Tex. Exhaust-fan	489,159	Jan. 3	267	74	62	62
Hyde, Valentine M. (See Woiceski, Hyde, and Martens.)						
Hylan, John F., and R. L. Sinley, Brooklyn, N. Y. Bicycle-whistle	508,318	Nov. 7	552	136 391	65	860
Hyman, Gustave, assignor to Strauss, Sachs & Co., New York, N. Y. Harmonica	505,223	Sept. 19	1502	392	64	1579

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Hymans, Joseph, Del Rio, Tex. Picture-hanger	489,160	Jan. 3	268	74	62	62
Hymans, Joseph, Del Rio, Tex., assignor of one-half to G. Laube, Huron, S. D. Water-cooler	504,585	Sept. 5	449	114	64	1353
Hymas, Alfred, assignor of one-half to J. Brockley, Albany, N. Y. Core for car-wheel molds.	500,500	June 27	2892	711	63	1936
Hymas, Alfred, and J. Brockley, assignors to G. H. Thacher & Co., Albany, N. Y. Car-wheel	509,084	Nov. 21	1819	{ 445 446 }	65	1130
Hyndman, Nathan P. (See Wilson, John R., assignor.)						
Hynes, Julius W., assignor to J. H. McPhail, Nashville, Tenn., and F. Easthope, Cincinnati, Ohio. Box-loop attachment for sewing-machines	510,792	Dec. 12	1615	402	65	1727
Hyre, Edward B., Red Knob, W. Va. Car-coupling	503,855	Aug. 22	2654	665	64	1098
Hyre, Edward B., Elk Fork, W. Va. Ratchet-wrench	509,810	Nov. 25	3060	738	65	1378
Hyzer, Jacob B., Janesville, Wis. Ventilator	496,784	May 2	625	167	63	731
Iddings, Henry A., San Francisco, Cal. Railway-chair	495,340	Apr. 11	1315	330	63	262
Iddon, James, Leyland, England. Pneumatic tire	511,698	Dec. 26	3176	777	65	2038
Ide, Albert L., Springfield, Ill. Power transmission	500,579	July 4	64	18, 19	64	13
Ide, Alfred, Medina, N. Y. Wire-stretcher	504,353	Sept. 5	60	16	64	1282
Ide, Fred B., Troy, assignor to N. D. Ide, Corinth, N. Y. Hand-wrench	492,626	Feb. 28	2504	620	62	1296
Ide, Nathan D. (See Ide, Fred B., assignor.)						
Ideal Manufacturing Company. (See Bush, Hiram T., assignor.)						
Iden, Andrew J., Milwaukee, Wis. Steam cooking apparatus	493,091	Mar. 7	496	124	62	1457
Iden, Andrew J., Milwaukee, Wis. Combined step-ladder and ironing-board	493,092	Mar. 7	497	124	62	1457
Idol, Anderson M., High Point, N. C. Lady's work-table	510,509	Dec. 12	1102	266	65	1633
Ihle, Otto, Chemnitz, Germany, and R. Rothe, Canton, Ohio. Potato-planter	492,021	Feb. 21	1539	384	62	1086
Iles, Malvern W. (See Sheedy and Iles.)						
Iles, Malvern W., Denver, Colo. Process of and apparatus for the separation of matte from slag	494,570	Apr. 4	67	15	63	13
Iles, Malvern W., Denver, Colo. Apparatus for separating matte from slag	494,571	Apr. 4	70	16	63	14
Iles, Malvern W., Denver, Colo. Tuyere	497,072	May 9	1098	282	63	835
Iles, Malvern W., Denver, Colo. Treating flue-dust	500,580	July 4	66	19	64	13
Iles, Malvern W., Denver, Colo. Flooring for blast-furnaces	501,188	July 11	1048	265	64	206
Iles, Malvern W., Denver, Colo. Tuyere	505,549	Sept. 26	2063	526	64	1697
Iles, Malvern W., Denver, Colo. Tuyere	505,550	Sept. 26	2064	526	64	1698
Iles, Malvern W., Denver, Colo. Treating slag	505,551	Sept. 26	2065	527	64	1698
Iles, Malvern W., Denver, Colo. Apparatus for treating slag	505,552	Sept. 26	2066	527	64	1698
Iles, Urban G., Wellston, Mo. Ballot-registering device	500,001	June 20	2081	{ 504 505 }	63	1782
Ilsen, Susana, Miles City, Mont. Ventilated can-cover	497,961	May 23	2539	634	63	1121
Ilsen, Robert, Cologne-Bayenthal, Germany. Distilling mash	502,079	July 25	2467	620	61	494
Ill, Edward J. (See Nenninger, Robert F., assignor.)						
Illig, Heinrich, Bockenheim, Germany. Electric meter	489,161	Jan. 3	269	75	62	62
Illingworth, John. (See Lanagan, Michael A., assignor.)						
Imel, John. (See Brown, Imel, and Whitaker.)						
Immel, Frederick C., San Francisco, Cal. Sash-fastener	508,389	Nov. 7	671	164	65	882
Immisch Electric Navigation and Power Company. (See Immisch, Moritz, assignor.)						
Immisch, Moritz, London, England, assignor to Immisch Electric Navigation and Power Company, of New Jersey. Switch for electrical tram-cars	491,483	Feb. 7	691	{ 174 175 }	62	881
Immisch, Moritz, London, England, assignor to Immisch Electric Navigation and Power Company, of New Jersey. Switch for electric motors	493,361	Mar. 14	934	{ 239 240 }	62	1558
Immisch, Moritz, London, England, assignor to Immisch Electric Navigation and Power Company, of New Jersey. Thrust-bearing for propeller-shafts	508,170	Nov. 7	313	77	65	816
Inderlied, Edward C., Rock Rift, N. Y. Apparatus for charring and distilling wood	496,737	May 2	553	148	63	719
Indestructible Fuel Company. (See Johnson, Albert, assignor.)						
Indiana Manufacturing Company. (See Nethery, Joseph W., assignor.)						
Ingalls, Charles G., Colville, Wash. Tool for removing the hands of timepieces	507,817	Oct. 31	3451	847	65	700
Ingalls, Walter R., and F. Wyatt, New York, N. Y. Treating complex or sulphide ores	497,473	May 16	1760	63	966	
Ingalsbe, Adna R., Wheaton, Kans. Button-cabinet	492,683	Feb. 28	2589	640	62	1312
Ingard, Daniel L. (See Juvinall, Ingard, and Brinkerhoff.)						
Ingels, Lauron, Seattle, Wash. Horse-collar	511,699	Dec. 26	3177	777	65	2038
Ingersoll, Charles, Indianapolis, Ind. Oil-burner	503,970	Aug. 29	2850	715	64	1152
Ingersoll, Frank A., New York, N. Y. Adjustable tail-piece for guitars	500,581	July 4	66	19	64	14
Ingersoll, George W., assignor to B. Holt, Stockton, Cal. Grain-saving device in thrashers	490,807	Jan. 31	2930	752	62	647
Ingersoll, Harley. (See Hazelton, Elias, assignor.)						
Ingersoll-Sergeant Drill Company. (See Budro, Judson S., assignor.)						
Ingersoll-Sergeant Drill Company. (See Gregg, Richard, assignor.)						
Ingersoll, Simon, Glenbrook, assignor of three-fourths to Ayres Brothers, Stamford, Conn. Thrust-bearing for shafts	507,682	Oct. 31	3230	791	65	658
Ingham, Stephen. (See Rishworth, Ingham, and Vickers.)						
Ingle, Jacob O., Jr., Auburn, Tex. Wagon-seat spring	510,024	Dec. 5	314	70	65	1469
Ingle, Jacob O., Jr., T. R. Stedman, and R. J. Lawson, Auburn, Tex. Harrow-disk sharpener	508,719	Nov. 14	1195	296	65	998
Inglis, Charles A. (See Gerhart, William R., assignor.)						
Ingraham, Edmund, Philadelphia, Pa. Shedding mechanism for looms	503,375	Aug. 15	1904	472	64	942
Ingraham, James F., West Peabody, Mass. Life-guard or fender for cars	511,432	Dec. 26	2757	666	65	1961
Ingram, Arnold A., Wooster, Ohio. Fluid lens	509,379	Nov. 28	2324	562	65	1237
Ingram & Co., Matthai. (See Fowler, William R., assignor.)						
Ingram, Franklin W., and E. E. Carr, Chicago, Ill. Oscillating grate-bar	494,865	Apr. 4	546	{ 138 139 }	63	106
Insinger, Alfred, Philadelphia, Pa. Spool or quill winding machine	499,634	June 13	1488	357	63	1665
Insinger, Alfred, Philadelphia, Pa. Dish-cleaner	501,347	July 11	1306	{ 326 327 }	64	251
Inslee, Robert C., Boston, Mass. Barrel-washer	504,036	Aug. 29	2954	{ 739 740 }	64	1170
Inter State Complete Electric Construction Company. (See Wurdack, William, assignor.)						
International Printing Telegraph Company. (See Davis and Fowden, assignors.)						
International Printing Telegraph Company. (See Fowden, Robert A., assignor.)						
International Self Closing Gas Burner Company. (See Keeney, Charles H., assignor.)						
International Sheathing Lath Company. (See Toney, Squire, assignor.)						
International Steel Post Company. (See Rosback and Band, assignors.)						
Iona Manufacturing Company. (See Quinn and Hoffmann, assignors.)						
Ireland, Howard I., Philadelphia, Pa. Weather-indicating device	509,169	Nov. 21	1948	476	65	1156
Iretton, William, Camden, N. J. Machine for making cores	505,466	Sept. 26	1899	{ 489 490 }	64	1667
Irgens, Paul H., Christiania, Norway. Apparatus for carbureting air	493,165	Mar. 7	615	154	62	1479

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Irgens, Paul H., Christiania, Norway. Gas or petroleum engine.....	505,767	Sept. 26	2454	{ 617 618 }	64	1770
Irick, William M. (See Anderson and Irick.)						
Irish, Charles, Norrisville, Mich. Potato-planter.....	500,133	June 27	2327	{ 562 563 }	63	1837
Irish, Delos, and J. G. Williams, Salt Lake City, Utah Ter.; said Williams assignor to said Irish. Automatic circuit-breaker.....	492,807	Mar. 7	56	13	62	1369
Irons, Foster H., Toledo, Ohio. Pneumatic tire.....	494,003	Mar. 21	2004	510	62	1779
Irons, Henry A., and H. P. Hill, Greeley, Colo. Draft-equalizer.....	492,294	Feb. 21	1956	468	62	1172
Irons, James A. and J. E., Monaca, Pa. Railway-ferry.....	496,831	May 2	701	{ 185 186 }	63	744
Irons, John E. (See Irons, James A. and J. E.)						
Irving, Frank K., Brooklyn, assignor to Franklin Electric Company, New York, N. Y. Galvanic battery.....	496,658	May 2	429	115	63	696
Irving, James H., Jersey City, N. J. Fan.....	492,684	Feb. 28	2590	640	62	1312
Irving, Samuel, Iikeston, assignor of seven-tenths to J. Taylor, G. W. Hickson, and J. W. R. Smith, Nottingham, England. Lubricator.....	509,908	Dec. 5	108	24	65	1430
Irwin, Charles S., St. Joseph, Mo. Hydraulic steering apparatus.....	507,135	Oct. 24	2281	560	65	467
Irwin, James M. (See Lewis and Irwin.)						
Irwin, John P., Newark, Ohio. Gate.....	493,725	Mar. 21	1540	393	62	1689
Irwin, John P., Newark, Ohio. Gate-hinge.....	511,050	Dec. 19	2090	517	65	1825
Irwin, John S., Saltsburg, Pa. Label-former for glass-molds.....	490,966	Jan. 31	3193	816	62	699
Irwin, John S., Saltsburg, Pa. Ornamental glass article and making same.....	502,461	Aug. 1	354	85	64	631
Isaacs, Frederic H., Newark, N. J. Violin-rest.....	503,603	Aug. 22	2282	569	64	1025
Isaacs, Gustavus. (See Clarke, William H., assignor.)						
Isaacs, Harry L., et al. (See Ginn, William E., assignor.)						
Isaacs, William K., et al. (See Ginn, William E., assignor.)						
Isaacson, Harry M. (See Livingston, Edward, assignor.)						
Isaacson, John A., Moline, Ill. Wagon end-gate.....	507,620	Oct. 31	3130	766	65	639
Isachson, Norman, Marion, Idaho. Hook.....	499,118	June 6	637	153	63	1502
Isbell, Charles W., New York, N. Y. Gas apparatus.....	506,819	Oct. 17	1741	{ 438 439 }	65	356
Iseminger, Daniel H., Bloomington, Ill. Window-bracket.....	495,810	Apr. 18	2070	522	63	415
Iseminger, Daniel H., Bloomington, Ill. Clamp.....	506,114	Oct. 3	487	126	65	95
Isherwood, Alfred, New Bedford, Mass. Loom-shuttle.....	496,879	May 9	801	211	63	782
Ishöy, Frederik C. C., and H. P. Linderoth, Copenhagen, Denmark. Device for handling fermented liquids.....	490,565	Jan. 24	2518	648	62	553
Iske, Albert. (See Iske, Anthony and A.)						
Iske, Anthony and A., assignors to C. E. Hoster, H. E. Osborn, and M. B. Hartman, Lancaster, Pa. Cork-driver.....	491,052	Jan. 31	3341	852	62	729
Israel, Charles W. (See Williams, Robert E., assignor.)						
Ithaca Gun Company. (See Crass, Frederick L., assignor.)						
Ithaca Gun Company. (See Smith, Leroy H., assignor.)						
Ivarson, John F., Boston, Mass. Tripod-head.....	508,319	Nov. 7	554	136	65	860
Ivens, Edmund M., assignor to E. L. Ivens, New Orleans, La. Log-pulling apparatus.....	498,655	May 30	3621	910	63	1339
Ivens, Edmund M., assignor to E. L. Ivens, New Orleans, La. Baling-press.....	502,192	July 25	2648	{ 668 669 }	64	529
Ivens, Edmund M., assignor to E. L. Ivens, New Orleans, La. Apparatus for baling cotton.....	502,193	July 25	2650	{ 669 670 }	64	529
Ivens, Edmund M., assignor to E. L. Ivens, New Orleans, La. Cotton-baling apparatus.....	504,983	Sept. 12	1115	{ 285 286 }	64	1494
Ivens, Emily L. (See Ivens, Edmund M., assignor.)						
Ives, Archibald W., Boston, Mass. Sled.....	502,925	Aug. 8	1165	287	64	796
Ives, Blakeslee & Williams Company. (See Ives, Harry C., assignor.)						
Ives, Charles A., Minneapolis, Minn. Moth-proof bag.....	492,163	Feb. 21	1760	439	62	1132
Ives, Frederic E., Philadelphia, Pa. Photogravure-printing plate.....	495,341	Apr. 11	1316	330	63	262
Ives, Genie W., Syracuse, N. Y. Heating attachment for lamp-chimneys.....	502,364	Aug. 1	190	45	64	601
Ives, Harry C., assignor to Ives, Blakeslee & Williams Company, Bridgeport, Conn. Toy detachable animal and vehicle.....	499,430	June 13	1162	278	63	1607
Ivey, James B., Macon, Ga. Shaft-bearing for conveyers.....	493,726	Mar. 21	1541	393	62	1690
Ivey, James B., Macon, Ga. Wood-splitting machine.....	508,020	Nov. 7	63	18	65	769
Ivon, Louis A., Paris, France. Transposing device for pianos.....	502,907	Aug. 8	1124	277	64	789
Ivory, James W., Philadelphia, Pa. Rubber-dam clamp.....	499,550	June 13	1357	322	63	1642
Ivory, James W., Philadelphia, Pa. Teeth-separator.....	511,619	Dec. 26	3056	745	65	2015
Iwan, Henry. (See Iwan and Reiferscheid, assignors.)						
Iwan, Henry and L., Streator, Ill. Rotary chimney-cowl. (Reissue).....	11,375	Oct. 17	2179	539	65	436
Iwan, Louis. (See Iwan, Henry and L.) (Reissue.)						
Iwan, Louis, and W. Reiferscheid; said Reiferscheid assignor to H. Iwan, Streator, Ill. Revolving chimney-top.....	493,430	Mar. 14	1032	267	62	1577
J. and E. Stevens Company. (See Bailey, Charles A., assignor.)						
J. Cléret Pearl Button Manufacturing Company. (See Cléret, Jules, assignor.)						
J. A. Fay & Egan Company. (See Doane and Sofge, assignors.)						
J. L. Mott Iron Works. (See Hammann, Edward, assignor.)						
J. L. Mott Iron Works. (See Hammann and Susemihl, assignors.)						
J. L. Perry Machine Company. (See Perry, James L., assignor.)						
J. & P. Coats. (See Bullock, Edwin R., assignor.)						
J. S. Graham & Company. (See Graham and Kane, assignors.)						
Jack, Alexander, Evansville, Ind. Heater.....	492,726	Feb. 28	2653	657	62	1326
Jacks-Evans Manufacturing Company. (See Evans, Thomas S., assignor.)						
Jackman, Kendall and F. H., Genoa, Ill. Combined mower and tedder.....	495,677	Apr. 18	1860	465	63	377
Jackson, Alfred. (See Jackson, Frank S., J. T., T., and A.)						
Jackson, Amariah W., Chicago, Ill., assignor to Westinghouse Air Brake Company, Pittsburgh, Pa. Hose-coupling.....	495,890	Apr. 18	2197	553	63	439
Jackson, Ambrose F., Oklahoma, Okla. Ter. Plow.....	501,945	July 25	2257	{ 563 564 }	64	455
Jackson, Anthony W., Paris, Tenn. Wagon-bed raiser.....	506,507	Oct. 10	1244	309	65	250
Jackson, Byron, San Francisco, Cal. Traction-engine.....	502,820	Aug. 8	987	{ 240 241 }	64	763
Jackson-Cady Electric-Railway Signal Company. (See Cady, George L., assignor.)						
Jackson, Charles A., and F. I. Hammond, Providence, R. I. Ink-eraser.....	506,693	Oct. 17	1518	381	65	314
Jackson & Co., William H. (See Peck and McPherson, assignors.)						
Jackson, Edward H. (See Dabney, Owen P., assignor.)						
Jackson, Eliot G., Philadelphia, Pa. Rudder connection.....	502,723	Aug. 8	827	200	64	732

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Jackson, Eliza. (See Thomas, Henry H., assignor.)						
Jackman, Frank H. (See Jackman, Kendall and F. H.)						
Jackson, Frank S., J. T., T., and A., Toronto, Canada. Mowing-machine	491,736	Feb. 14	1093	{ 276 277 }	62	983
Jackson, George, Cohoes, assignor to W. F. Green, Troy, N. Y. Handle	502,223	Nov. 7	400	97	65	833
Jackson, George K., assignor of one-half to C. H. Stanard, Reece, Kans. Cultivator	498,656	May 30	3685	911	63	1339
Jackson, George W., Weston, W. Va. Self-waiting table	505,602	Sept. 26	2172	549	64	1719
Jackson, Jesse W., Jacksonville, Ill. Harrow	510,793	Dec. 12	1616	402	65	1727
Jackson, Joel G., Minneapolis, Minn. Die-stock	504,084	Aug. 29	3024	755	64	1184
Jackson, Joel G., Minneapolis, Minn., and A. L. Daniels, Marion, Iowa. Incandescent gas lamp	492,295	Feb. 21	1957	488	62	1173
Jackson, John, Lonsdale, R. I. Bottle-filling apparatus	502,969	Aug. 8	1247	305	64	809
Jackson, John, assignor of one-half to E. A. Hoad, London, England. Hydrostatic weighing-machine	507,009	Oct. 17	2043	{ 505 506 }	65	413
Jackson, John P. (See Kirk, Wallace R., assignor.)						
Jackson, John P., Liverpool, England. Gas-generator	497,097	May 9	1137	291	63	841
Jackson, John T. (See Jackson, Frank S., J. T., T., and A.)						
Jackson, Joseph L., Columbus, Kans. Hedge-trimmer	490,074	Jan. 17	1718	448	62	382
Jackson, Milton, assignor to Miller Lock Company, Philadelphia, Pa. Latch	491,053	Jan. 31	3342	852	62	730
Jackson, Milton H., Kokomo, Ind. Flying top	507,010	Oct. 17	2047	506	65	413
Jackson, Oswald. (See Grueter and Jackson.)						
Jackson, Peter H., San Francisco, Cal. Basement-ventilator	503,484	Aug. 15	2068	516	64	971
Jackson, Peter H., San Francisco, Cal. Metallic tie to resist progressive strains	504,924	Sept. 12	1015	{ 261 262 }	64	1476
Jackson, Sheldon E. (See Vail, Jackson, and Smith.)						
Jackson, Thomas. (See Jackson, Frank S., J. T., T., and A.)						
Jackson, Thomas B., assignor of one-half to D. T. Brown, Salem, Oreg. Bench-vise	504,586	Sept. 5	449	114	64	1354
Jackson, Willard P., Lynn, Mass. Machine for making book-covers	506,402	Oct. 10	1054	{ 262 263 }	65	213
Jackson, William B., Pueblo, Colo. Treating ores	490,659	Jan. 31	2698	694	62	603
Jackson, William B., Portland, Oreg. Machine for making spiral wire springs	502,968	Aug. 8	1236	{ 304 305 }	64	807
Jackson, William J., Philadelphia, Pa. Heater	492,207	Feb. 21	1825	{ 457 458 }	62	1145
Jacob, Frederick, Newark, assignor of one-fourth to H. Pattberg, Jersey City, N. J. Car-coupling	504,085	Aug. 29	3025	{ 755 756 }	64	1185
Jacobs, Burley A. (See Violet, Francis N., assignor.)						
Jacobs, Charles C., Amboy, Ill. Windmill-tower	503,048	Aug. 8	1354	335	64	830
Jacobs, Charles M. (See Moore and Jacobs.)						
Jacobs, Daniel, Grigsby, Kans. Snow-plow	489,008	Jan. 3	47	14	62	13
Jacobs, Eben A. (See Edison, Jacob, assignor.)						
Jacobs, Henry L., Columbus, Ohio. Metal wheel and making same	507,908	Oct. 31	3593	{ 886 887 }	65	725
Jacobs, Jacob. (See Reutlinger, Jean, assignor.)						
Jacobs, Jacob, New York, N. Y. Illuminating-tile	493,550	Mar. 14	1236	316	62	1615
Jacobs, Jacob, New York, N. Y. Yard-protector	511,700	Dec. 26	3178	778	65	2038
Jacobs, Jacob, New York, N. Y. Yard-protector	511,701	Dec. 26	3179	778	65	2039
Jacobs, Olaus B., Fremont, Wash. Car-axle bearing	501,790	July 18	2014	{ 496 497 }	64	396
Jacobs, Olaus B., Fremont, Wash. Bearing	505,107	Sept. 19	1324	341	64	1547
Jacobs, Olaus B., Fremont, Wash. Ball-bearing	509,739	Nov. 28	2939	711	65	1354
Jacobs, Oliver S., St. Mary's, Ohio. Digester	495,342	Apr. 11	1317	331	63	262
Jacobs, Ralph W., et al. (See Clark, Rosella, assignor.)						
Jacobsen, Emil, Berlin, Germany. Sulphur compound of hydrocarbon	495,343	Apr. 11	1319		63	262
Jacobsen, James and P., Menasha, Wis. Grinder for sharpening the metallic burrs of grinding-machines	506,694	Oct. 17	1519	381	65	314
Jacobsen, Peter. (See Jacobsen, James and P.)						
Jacobson, Abraham and J., New York, N. Y. Artificial claw for fur trimmings	500,002	June 30	2084	505	63	1782
Jacobson, Charles. (See Timolat and Jacobson.)						
Jacobson, James. (See Jacobson, Abraham and J.)						
Jacobson, John. (See English, Analdo M., assignor.)						
Jacobson, John, Boston, Mass. Mirror and making same	501,514	July 18	1563	393	64	315
Jacobson, Martin, Bernadotte, Minn. Four-horse equalizer	496,414	May 2	37	11	63	625
Jacobus, Lyman E., Romulus, N. Y. Lock	490,440	Jan. 24	2319	602	62	513
Jacobus, Lyman E., Romulus, N. Y. Sliding-door lock	490,441	Jan. 24	2320	602	62	513
Jacobus, Lyman E., Romulus, N. Y. Latch	491,706	Feb. 14	1051	265	62	975
Jacobus, Lyman E., Romulus, N. Y. Latch	510,176	Dec. 5	565	131	65	1516
Jacobus, Peter H., Millstadt, Ill. Car-mover	504,529	Sept. 5	365	92	64	1338
Jacoby, Harvey F., Toledo, Ohio. Beer-tap	498,657	May 30	3686	911	63	1340
Jacoby, Sigmund, New York, N. Y. Conveyor-belt	502,041	July 25	2406	605	64	482
Jacocks, Charles W., et al. (See Gilham, Robert J., assignor.)						
Jacot, Aristides H., Hoboken, N. J., assignor to Jacot & Son, New York, N. Y. Detent mechanism	489,480	Jan. 10	772	204	62	178
Jacot-Burmann, Henri, Bienne, Switzerland. Stop-watch	489,255	Jan. 3	427	119	62	95
Jacot & Son. (See Jacot, Aristides H., assignor.)						
Jacques, Alfred J., La Crosse, Wis. Band-cutting and grain-feeding machine	509,380	Nov. 28	2925	563	65	1237
Jacques, George L., Neillsville, Wis. Traction-engine	506,695	Oct. 17	1522	382	65	315
Jacques, Samuel L., et al. (See Trout, Emerson W., assignor.)						
Jacques, William W., Newton, assignor to American Bell Telephone Company, Boston, Mass. Granulated material for transmitting-telephones	495,090	Apr. 11	891		63	186
Jacques, William W., Newton, assignor to American Bell Telephone Company, Boston, Mass. Telephone-exchange system	510,863	Dec. 12	1779	{ 437 438 439 }	65	1755
Jadwin, Orlando H., Brooklyn, N. Y. Packing case or box	505,570	Sept. 26	2121	537	64	1709
Jaek, Emile, and M. Auerbach, Brooklyn, N. Y. Bronze-dusting machine	491,054	Jan. 31	3343	{ 552 553 }	62	730
Jaeger, Gustav L., Maywood, N. J. Manufacturing blotting-paper	495,976	Apr. 25	2322	{ 586 587 }	63	477
Jaeger, Michael. (See Eisele, Otto, assignor.)						
Jahn, Charles F. (See Thompson, James K., assignor.)						
Jahncke, Ernst A., London, England. Registering-receptacle for coins	500,769	July 4	378	98	64	70
Jahnson, Erick J., Chicago, Ill. Basket grate	500,003	June 20	2085	505	63	1782
Jakel, Ferdinand, Detroit, Mich. Water-heater	504,587	Sept. 5	450	{ 114 115 }	64	1354

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James, Alexander, Wellington, New Zealand. Sash-holder	506,318	Oct. 10	892	220	65	182
James, Charles W., Quincy, Ohio. Harness-loop	503,856	Aug. 22	2656	665	64	1098
James, Charles W., and W. R. Grimes, Marietta, Ohio. Moccasin	500,134	June 27	2329	563	63	1837
James Clinton Combination Clarinet Company. (See Clinton, James, assignor.)						
James, Cullen H., San Francisco, Cal. Locking attachment for oil-cans	508,477	Nov. 14	816	202	65	924
James, David. (See James, John A. and D.)						
James, David O. (See Grant, John, assignor.)						
James, Enoch. (See Martin and James.)						
James, Frederick R., et al. (See Oldfield, Joseph, assignor.)						
James, Frederick R., et al. (See Rodden, William H., assignor.)						
James, Harry. (See Gillespie and James.)						
James, Harry B. (See Thomas, Nathan M., assignor.)						
James, Homer, Sioux City, Iowa, assignor, by mesne assignments, to C. Meigs and R. Sears. Combined harrow and pulverizer	498,273	May 30	3039	756	63	1225
James, Howard K., and L. G. Mayer, Lawrenceburg, Ind. Combined spring and shackle	503,987	Aug. 8	1414	349	64	841
James, J. L., Jr., et al. (See Graves, Cashious M., assignor.)						
James, John A. and D. Coffeyville, Kans. Attachment for thrashing-machines	490,075	Jan. 17	1721	449	62	383
James, John E., Brooklyn, N. Y. Agitator	497,181	May 9	1265	321	63	864
James, John H., Nashville, Ark., assignor of five-eighths to W. F. Roberts, Jr., and F. D. Thomason, Chicago, Ill. Tanning process	506,696	Oct. 17	1525		65	316
James Lefell and Company. (See Bookwalter and Tyler, assignors.)						
James Lefell and Company. (See Sparks, Albert F., assignor.)						
James Lefell and Company. (See Woodward, Elmer E., assignor.)						
James S. Graham and Company. (See Graham, James S., assignor.)						
James, Samuel H., London, England. Shoal-alarm	493,826	Mar. 21	1704	434	62	1721
James Smith Woolen Machinery Company. (See Moulton, Hamilton L., assignor.)						
James, Thomas, et al. (See Allan, Edward T., assignor.)						
James, Thomas, Braddock, Pa. Railway	498,274	May 30	3041	757	63	1225
James, Thomas, Braddock, Pa. Motor connection and lock	501,904	July 18	2188	544	64	426
James, Thomas, Braddock, assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Discharge-valve for blowing-engines	490,146	Jan. 17	1841	480 481	62	408
James, Ulysses S. (See Stuart and James.)						
James, Will S., Fort Worth, assignor of one-half to W. D. Crothers, Brownwood, and W. L. Ward, Victoria, Tex. Stalk-breaker	494,528	Mar. 28	2869	717	62	1952
James, William A., assignor of one-fourth to Wilkin Manufacturing Company, Milwaukee, Wis. Skim-gate for molds	508,884	Nov. 14	1444	357	65	1044
James, William G., Harlem, Ill. Electric mat	490,353	Jan. 24	2199	573	62	491
James, William H., et al. (See Rodecker, Charles W., assignor.)						
Jandin, Henry, Lyons, France. Delivery-pump	495,344	Apr. 11	1320	331	63	262
James, Henry, Waterbury, Vt. Reed tube for musical instruments	490,115	Jan. 17	1783	465	62	397
Jankowski, Ludwig, Melno, Germany. Reaping-machine	508,945	Nov. 21	1589	389	65	1086
Janowitz, Julius, New York, N. Y. Corset-stay	496,313	Apr. 25	2843	710	63	576
Jansen, Alexander, San Francisco, Cal. Lounge	489,958	Jan. 17	1518	397	62	343
Jansen, Edward, New York, N. Y. Wall or ceiling covering	501,278	July 11	1184	300	64	230
Janssen, Hermann. (See Messinger, Vortmann, and Janssen.)						
Janssen, Hermann, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Salicylic-acid compound	492,868	Mar. 7	154		62	1389
Jantz, Gustave H., Cincinnati, Ohio. Attaching drums and sleeves to shafts	501,238	July 11	1108	281	64	217
Jaquc, Joseph, St. Louis, Mo. Tobacco-pipe	505,202	Sept. 19	1474	384	64	1574
Jaques, George W., New York, N. Y. Apparatus for coating sheet metal	506,044	Oct. 3	376	99 100	65	73
Jaques, Luther C., and G. F. Kester, Spokane, Wash. Vehicle-wheel	506,508	Oct. 10	1245		65	250
Jaquess, George H., Riverside, Cal. Extensible trestle	501,348	July 11	1309	327	64	251
Jaquette, Harry, Philadelphia, Pa. Beater or stirrer	509,665	Nov. 28	2828	683	65	1334
Jardine, Joseph B., San Francisco, Cal. Apparatus for treating or reducing bituminous substances	498,957	June 6	365	88	63	1456
Jarmin, James B., Osceola, Nebr. Check-row corn-planter	493,362	Mar. 14	937	240 241	62	1558
Jarmin, James B., Osceola, Nebr. Check-row corn-planter attachment	496,415	May 2	38	11	63	625
Jaros, Samuel, Hartford, Conn. Making seams	501,478	July 11	1502	378	64	289
Jarred, Bernard P. (See Stillwell, Elias, assignor.)						
Jarskouw, Wilhelm, assignor of one-fourth to F. G. Farnham, White Mills, Pa. Forming glass articles and blanks therefor	496,416	May 2	40	11	63	626
Jäschke, Henry, St. Louis, Mo. Pipe-organ	503,857	Aug. 22	2658	666	64	1098
Jasnowski, Philip, assignor of one-half to J. W. Goodson and P. M. Coffin, Detroit, Mich. Garbage-receptacle	498,011	May 23	2619	654	63	1136
Jauch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Cap for filling-nipples of lamp-founts	502,926	Aug. 8	1166	288	64	796
Jauch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Lamp-burner	508,572	Nov. 14	981	241	65	956
Jay, Etienne and S., Grenoble, France. Glove	490,354	Jan. 24	2200	573	62	491
Jay, Francis M., Guthrie, Okla. Ter. Window-screen	507,011	Oct. 17	2043	506	65	413
Jay, Stéphane. (See Jay, Etienne and S.)						
Jaynes, Charles P., Boston, Mass. Chest-protecting jacket	489,681	Jan. 10	1066	278	62	237
Jean, Thomas J. (See Glover and Jean.)						
Jeanotte, Joseph, Worcester, Mass. Valve	504,838	Sept. 12	880	226	64	1450
Jeansaume, Antoine, Paris, France. Machine for sawing blocks of stone	508,625	Nov. 14	1348	333 334	65	1027
Jeavons, William R. (See Lannert and Jeavons.)						
Jechoux, Justin H. S., Verri Noire, France. Perspectograph	499,387	June 13	1074	261	63	1592
Jefferies, Samuel, Stroud, England. Brick or tile cutting machine	501,620	July 18	1728	430 431	64	347
Jeffers, William W. D., Ticonderoga, N. Y., assignor to Holyoke Machine Company, Holyoke and Worcester, Mass. Machine for barking wood	510,795	Dec. 12	1618	403	65	1728
Jefferson, Charles W., Schenectady, assignor to E. Munsell & Co., New York, N. Y., and Elizabeth, N. J. Electrical insulating conduit	491,707	Feb. 14	1052	266	62	976
Jefferson, Charles W., Schenectady, assignor to E. Munsell & Co., New York, N. Y., and Elizabeth, N. J. Electric motor and dynamo mica insulator	491,708	Feb. 14	1053	266	62	976
Jefferson, Charles W., Schenectady, assignor to E. Munsell & Co., New York, N. Y. Making mica insulating-plates	497,324	May 16	1528	355	63	925
Jefferson, Charles W., Schenectady, assignor to E. Munsell & Co., New York, N. Y. Ring-armature	500,902	July 4	578	150 151	64	105
Jeffery, Joseph A., Shell Lake, Wis. Apparatus for moistening the air in hot-air furnaces	492,296	Feb. 21	1959	489	62	1173

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Jeffery, Thomas B., Chicago, Ill. Velocipede-saddle	496,880	May 9	803	211	63	782
Jeffery, Thomas B., Chicago, Ill. Pneumatic tire and device for inflating same	502,003	July 25	2339	586	64	470
Jefferys, William, East Orange, N. J. Manure-receptacle for cars, &c	489,309	Jan. 3	501	138	62	109
Jeffrey, Henry D., Winona, Minn. Washboiler	498,658	May 30	3688	911	63	1340
Jeffrey, Joseph A. (See Hahn, John H., Jr., assignor.)						
Jeffrey, Joseph A. (See Sheldrick, David J., assignor.)						
Jeffrey, Joseph A. (See Taplin, John L., assignor.)						
Jeffreys, Adam, San Francisco, Cal. Cable releasing device and crossing	500,903	July 4	579	151	64	106
Jeffreys, Lemuel A. (See Williams, Henry B., assignor.)						
Jeffries, Charles W., South Bend, Ind. Gear for children's carriages	490,289	Jan. 24	2089	545	62	468
Jefts, Frederick, Worcester, Mass., assignor, by mesne assignments, to Lugin Flexible Door Company, Portland, Me. Flexible door	508,720	Nov. 14	1196	297	65	998
Jehle, William, and W. A. Clark, Pana, Ill. Roofing	508,110	Nov. 7	215	56	65	798
Jellinghaus, Theodor, Camen, Germany. Piston	502,462	Aug. 1	356	85	64	631
Jenckes, Ray G., Terre Haute, Ind. Hominy-mill	504,784	Sept. 12	786	199	64	1430
Jencks, Calvin J., Reedsburg, assignor to W. C. Jencks, Argyle, Wis. Snap-hook	499,361	June 13	1033	250	63	1585
Jencks, Calvin J., assignor of one-half to J. B. Righter, Reedsburg, Wis. Snap-hook	501,621	July 18	1732	431	64	347
Jencks, Walter C. (See Jencks, Calvin J., assignor.)						
Jenisch, Waldemar, Bromberg, Germany, assignor to R. Leding, Washington, D. C. Insect-trap	495,091	Apr. 11	891	225	63	186
Jenkins, Anthony D., Philadelphia, Pa. Bicycle	490,252	Jan. 17	2014	527	62	441
Jenkins, Charles, Boston, Mass. Automatic air-valve	498,275	May 30	3042	757	63	1226
Jenkins, Daniel, Morriston, England. Apparatus for coating metal sheets	505,660	Sept. 26	2273	576 577	64	1738
Jenkins, Ebenezer C., Shrewsbury, Mass. Thread holder and cutter	491,260	Feb. 7	317	80	62	809
Jenkins, Ebenezer C., Shrewsbury, Mass. Spool-holder	491,261	Feb. 7	318	81	62	809
Jenkins, Ebenezer C., Shrewsbury, Mass. Combined thread holder and cutter	491,262	Feb. 7	319	81	62	810
Jenkins, Ebenezer C., Shrewsbury, Mass. Needle-threader for sewing-machines	500,235	June 27	2492	609	63	1866
Jenkins, Ernest H., Winfield, Md. Electric-railway trolley	489,481	Jan. 10	774	204	62	178
Jenkins, Fannie J., Boston, Mass. Flat-iron	510,025	Dec. 5	315	70	65	1469
Jenkins, Freeman C. (See Behel and Jenkins.)						
Jenkins, Gamaliel, Queensbury, N. Y. Car-coupling	494,424	Mar. 28	2695	676	62	1921
Jenkins, Harriet C. (See Jenkins, Isaac G., assignor.)						
Jenkins, Henry C. (See Higgins and Jenkins.)						
Jenkins, Isaac G., deceased; R. C. Jenkins, administratrix, assignor to H. C. Jenkins, Oswego, N. Y. Sheathing-lath machine	508,545	Nov. 14	932	230	65	947
Jenkins, John, assignor of one-half to St. Louis Stamping Company, St. Louis, Mo. Apparatus for rolling sheet metal	503,241	Aug. 15	1676	412	64	902
Jenkins, John B., Pittsburg, Pa., assignor to Hutchinson-Jenkins Steel Company, of West Virginia. Process and composition of matter for the manufacture of steel	490,660	Jan. 31	2702		62	603
Jenkins, John T., Massillon, Ohio. Furnace	500,905	July 4	561	151 152	64	106
Jenkins, Nicholas, Waterbury, Conn. Adjustable lamp-hanger	492,808	Mar. 7	57	14	62	1369
Jenkins, Rebecca C., administratrix. (See Jenkins, Isaac G.)						
Jenkins, Reuben. (See Foote, Charles H., assignor.)						
Jenkins, Samuel B., assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electrically-heated soldering-iron	491,311	Feb. 7	417	108	62	826
Jenkins, Samuel B., assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electrically-heated smoothing-iron	491,312	Feb. 7	418	108	62	826
Jenkins, Samuel B., assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electric curling-iron heater	491,313	Feb. 7	419	109	62	827
Jenkins, Samuel B., assignor to American Electric Heating Company, Boston, Mass. Electric broiler	497,790	May 23	2268	569	63	1074
Jenkins, Samuel B., assignor to American Electric Heating Company, Boston, Mass. Electric radiator	497,791	May 23	2268	570	63	1075
Jenkins, Samuel B., assignor to American Electric Heating Company, Boston, Mass. Electric flat-iron heater	497,792	May 23	2269	570	63	1075
Jenkins, Samuel B., assignor to American Electric Heating Company, Boston, Mass. Electric soldering-iron	497,793	May 23	2270	570	63	1075
Jenkins, Samuel B., assignor to American Electric Heating Company, Boston, Mass. Electric heater for flat-irons or other articles	497,794	May 23	2271	570	63	1075
Jenkins, Samuel B., assignor to American Electric Heating Company, Boston, Mass. Electric heater	497,795	May 23	2272	571	63	1075
Jenkins, Samuel B., assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrically-heated vessel	491,484	Feb. 7	693	175	62	881
Jenkins, Samuel B., assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Induction system of electrical heating	494,295	Mar. 28	2488	627	62	1883
Jenkins, Sylvester, Lansdale, Pa. Elevator for liquids	509,437	Nov. 28	2450	590 591	65	1263
Jenkins, William R., Bellefonte, Pa. Car-coupling	498,473	May 30	3368	839	63	1285
Jenkins, William R., Bellefonte, Pa. Rake	500,904	July 4	580	151	64	106
Jenkins, Wilton F., Richmond, Va. Supply system for electric railways	502,858	Aug. 8	1041	255	64	772
Jenkinson, James, Brooklyn, assignor to J. Mark, New York, N. Y. Vault or skylight cover	501,720	July 18	1892	470	64	375
Jenkinson, Samuel, Rochester, assignor to Vanderbilt Sash Balance Company, Canandaigua, N. Y. Sash-cord fastener	491,966	Feb. 14	1450	361	62	1054
Jenks, Edward W. (See Searle and Jenks.)						
Jenks, Henry F., Pawtucket, R. I. Pipe-wrench	494,529	Mar. 28	2870	718	62	1953
Jenks, Lilywelly H., assignor of one-half to J. Koenigsberg, New York, N. Y. Valve	495,415	Apr. 11	1430	360	63	282
Jenks, William J., et al. (See White, Wendell P., assignor.)						
Jenne, Christian J., and C. E. Willey, assignors to W. Carter, J. W. Dawson, and J. Merrick, Louisville, Ky. Electric cigar-lighter	509,085	Nov. 21	1820	446	65	1131
Jenner, Robert C., San Antonio, Tex. Hoof-cleaning tool	502,042	July 25	2407	606	64	433
Jenness, Helena E. (See Heale, Joseph S., assignor.)						
Jenni, Andrew J. (See Hood, Hiram Q., assignor.)						
Jennings, Abraham G. (See Spooner, Spencer, assignor.)						
Jennings, Arthur, Montreal, Canada. Wagon	498,553	May 30	3513	869	63	1309
Jennings, George F., Fall River, Mass. Hoisting apparatus	508,171	Nov. 7	314	78	65	816
Jennings, George W., assignor to G. W. Pope, Jr., Newton, Mass. Lawn-mower	507,543	Oct. 31	2980	731	65	611
Jennings Machine Company. (See Jennings, William C., assignor.)						
Jennings, Oscar E., et al. (See Losey, James, assignor.)						
Jennings, Oscar S., assignor of one-half to J. E. Beers, Danby, N. Y. Convertible chair and step-ladder	505,795	Sept. 26	2494	629	64	1778
Jennings, Stephen A., assignor to A. S. Kirk, Evanston, Ill. Car-door	495,250	Apr. 11	1182	296	63	237
Jennings, Stephen A., assignor to A. S. Kirk, Evanston, Ill. Car construction	496,881	May 9	805	211	63	782

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Jennings, William A., Metcalf, Ill. Pipe-wrench	509,909	Dec. 5	109	24	65	1430
Jennings, William B., <i>et al.</i> (See Dobbins and McKenney, assignors.)						
Jennings, William C., Camden, N. J., assignor to Jennings Machine Company, of New Jersey. Suspension device	489,638	Jan. 10	1006	262	62	224
Jennings, William S., assignor to B. & J. Car Coupler Company, Des Moines, Iowa. Car-coupling	500,501	June 27	2894	712	63	1936
Jennings, William T., Toronto, Canada. Rail for street-railways	494,144	Mar. 28	2249	573	62	1839
Jensen, Hans H., Omaha, Nebr. Dry closet	509,910	Dec. 5	110	25	65	1430
Jensen, Jens, Janesville, Wis. Rein-holder	505,528	Sept. 26	2032	518	64	1691
Jensen, John S., and E. Hayes, Chicago, Ill. Stovepipe-rack	490,076	Jan. 17	1723	449	62	384
Jensen, Otto, and R. Keck, Colorado Springs, Colo. Composition of glass	494,636	Apr. 4	173		63	35
Jergle, Josef, Vienna, Austria-Hungary. Electric-arc lamp	501,074	July 11	850	220	64	170
Jerome, Charles C., Chicago, Ill. Lubricator	493,727	Mar. 21	1543	393	62	1690
Jerome, Charles C., Chicago, Ill. Horseshoe	507,272	Oct. 24	2520	621	65	509
Jerome, Charles C., Chicago, Ill. Piston-rod packing	508,139	Nov. 7	270	66, 67	65	507
Jerome, Edgar, Norwalk, Conn. Toilet-paper holder	497,005	May 9	996	257	63	816
Jerome, Frances S., San Francisco, Cal. Trunk	499,835	June 20	1827	444	63	1737
Jerome, Samuel B., New York, N. Y. Horseshoe	506,820	Oct. 17	1743	439	65	356
Jervis, Oliver P., assignor of one-half to T. and C. T. Mackenzie, Baltimore, Md. Self-regulating oil-box	507,734	Oct. 31	3304	808	65	672
Jeslinghaus, Carl, Dusseldorf, Germany. Printer's lock-up	498,935	June 6	328	77	63	1450
Jessen, Jacob, Boston, assignor to F. W. Parsons, Osterville, Mass. Antifriction side bearing for cars	498,795	June 6	73	17, 18	63	1401
Jessup, Gilbert H., Tracy, Minn. Fire-screen	489,482	Jan. 10	775	{ 204 205 384 385 }	{ 62 62 }	178
Jessup, Nathan C., West Hampton Beach, N. Y. Sailing vessel	492,022	Feb. 21	1541	{ 384 385 }	{ 62 62 }	1086
Jessup, Robert W. (See Wheelan and Jessup.)						
Jester, Andrew E., Jester, Tenn., and J. G. Alexander, Bowie, Tex. Gate	508,573	Nov. 14	982	241	65	956
Jett, James, Walla Walla, Wash. Lawn-sprinkler	491,354	Feb. 7	495	127	62	842
Jewell, Dell W., and G., assignors of two-thirds to J. C. Guiteau, Batavia, N. Y. Car-coupling	506,235	Oct. 10	765	188	65	156
Jewell, Edward W., Wheaton, Ill. Combined ammeter and voltmeter	510,177	Dec. 5	566	{ 131 132 }	{ 65 65 }	1517
Jewell, George. (See Jewell, Dell W. and G.)						
Jewell, Ira H. (See Jewell, Omar H. and I. H.)						
Jewell, Ira H., Chicago, Ill. Apparatus for the purification of sewage or other impure liquids	506,879	Oct. 17	1836	459	65	373
Jewell, Ira H., Chicago, Ill. Sewage disposal	506,880	Oct. 17	1838	459	65	373
Jewell, John, assignor of one-half to J. H. Howell, Bristol, England. Portable fire-escape	503,971	Aug. 29	2852	715	64	1152
Jewell, Omar H. and I. H., Chicago, Ill. Filter	509,126	Nov. 21	1886	461	65	1143
Jewell, Richard. (See Smith, William E., assignor.)						
Jewell, William M., Chicago, Ill. Prime mover	494,782	Apr. 4	410	{ 102 103 }	{ 63 63 }	80
Jewett, Amos N., Ossawatimie, Kans. Incubator	509,035	Nov. 21	1719	425	65	1112
Jewett, Charles A. (See Wood, Clark B., assignor.)						
Jewett, David W., assignor of one-half to W. J. Allen, Oxford, Ky. Farm-gate	493,728	Mar. 21	1545	394	62	1691
Jewett, Franklin N., Fredonia, N. Y. Egg-holder	508,021	Nov. 7	61	18	65	769
Jewett, Henry M. (See Walker, William V., assignor.)						
Jewett, Luther K., Boston, Mass. Car-body bolster	510,429	Dec. 12	970	232	65	1608
Jobse, Peter H., Milwaukee, Wis. Bandage-roller	506,913	Oct. 17	1891	471	65	383
Jobson, Giles T., Augusta, Ga. Wheel for vehicles	496,226	Apr. 25	2699	677	63	548
Jobson, John B., Macon, Ga. Mainspring for watches	497,429	May 16	1692	427	63	955
Joerges, Adolph W., and J. A. O'Connell, Oshkosh, Wis. Nostril-protector for horses	501,463	July 11	1480	372	64	285
Johansen, Rudolph L., assignor of one-half to F. R. Pittman, Los Angeles, Cal. Ocean-power	508,320	Nov. 7	555	136	65	860
Johanson, Olof, New York, N. Y. Dental broach	498,554	May 30	3514	869	63	1309
John A. Riley & Sloan Company. (See MacDonald, Allan A., assignor.)						
John C. Jewett Manufacturing Company. (See Mast, William J. D., assignor.)						
John, Davis W., <i>et al.</i> (See Gledhill, Walter, assignor.)						
John F. Byers Machine Company. (See Byers, John F., assignor.)						
John Good Cordage and Machine Company. (See Good, John, assignor.)						
John J. Hayes Machine Company. (See Hayes, John J., assignor.)						
John James Company. (See Hagmann, George, assignor.)						
John Schroeder Lumber Company. (See Kelchner, Alvin J. and F. L., assignors.)						
John T. Noye Manufacturing Company. (See Hutchinson, Joseph A., assignor.)						
Johns, Hanson A. (See Shaw, Elisha D., assignor.)						
Johns, Henry W., New York, N. Y. Non-conducting covering	510,026	Dec. 5	316	71	65	1469
Johns, Jacob R., Millersburg, Pa., assignor, by mesne assignments, to Automatic and Electric Scale Company, of New Jersey. Rotating grain-weigher	507,544	Oct. 31	2982	{ 731 732 }	{ 65 65 }	611
Johns, James, <i>et al.</i> (See Dahl, Alfred, assignor.)						
Johns, John H., National Military Home, Leavenworth county, Kans. Rocking grate	495,092	Apr. 11	892	{ 225 226 227 }	{ 63 63 63 }	186
Johns, John H., National Military Home, Leavenworth county, Kans. Automatic stoker	497,073	May 9	1099	{ 282 283 }	{ 63 63 }	835
Johnson, A. S., <i>et al.</i> (See Bond, Nathan O., assignor.)						
Johnson, Albert, assignor to Indestructible Fuel Company, Haverhill, Mass. Fire-kindler	491,355	Feb. 7	496	127	62	842
Johnson, Albert, and F. Syvnd, Shelton, Wash. Revolving harrow	500,253	June 27	2518	615	63	1870
Johnson, Albert C. (See Hacker and Gilchrist, assignors.)						
Johnson, Albert E., and C. H. Porter, Brockton, Mass. Combined presser-foot and thread-holder for sewing-machines	493,869	Mar. 21	1767	451	62	1734
Johnson, Albert H., <i>et al.</i> (See Stewart and Johnson, assignors.)						
Johnson, Albert H., Tampa, Fla. Drawing-board	495,157	Apr. 11	1030	256	63	209
Johnson, Albert L., Cleveland, Ohio. Combined nut-lock and electrical connection for railway-rails	497,963	May 23	2540	635	63	1122
Johnson, Albert W., New Haven, assignor to Mitchell Manufacturing Company, Milford, Conn. Loom for weaving short wefts	495,112	Apr. 11	936	{ 236 237 238 }	{ 63 63 63 }	194
Johnson, Alexander A., assignor of one-half to F. S. Beaumont, Clarksville, Tenn. Nut-lock	510,510	Dec. 12	1103	276	65	1633
Johnson, Andrew C., assignor to Forest City Furniture Company, Rockford, Ill. Hinge	510,864	Dec. 12	1787	439	65	1756
Johnson, Andrew J., Anderson, Ind. Baby-jumper	508,423	Nov. 14	729	180	65	907
Johnson, Andrew M. (See Swanson, John L., assignor.)						
Johnson, Arthur H., Rahway, N. J. Front rod for double slips	509,128	Nov. 21	1891	462	65	1144

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Johnson, Arthur H., Rahway, N. J., assignor to Hall Signal Company, of New York and Maine. Power-applying device for electric motors	510,603	Dec. 12	1294	{ 315 316 }	65	1667
Johnson, Arthur H., and T. H. Patenall, Rahway, N. J. Block signal apparatus	509,127	Nov. 21	1889	462	65	1144
Johnson, Benjamin O., College Hill, Miss. Fence-building machine	500,004	June 20	2026	505	63	1783
Johnson, Bernt M., Racine, Wis. Street-sweeper	501,515	July 18	1564	{ 393 394 }	64	315
Johnson, Carl A. (See Johnson, Frank and C. A.)						
Johnson, Charles A., New York, N. Y. Pulley	504,588	Sept. 5	452	115	64	1354
Johnson, Charles. (See Mead and Johnson.)						
Johnson, Charles, assignor to J. A. Mead, Rutland, Vt. Jack-screw	493,332	Mar. 14	890	228	62	1547
Johnson, Charles B., et al. (See Sherman, Willis D., assignor.)						
Johnson, Charles F., Milford, N. H. Nut-lock	497,244	May 9	1361	346	63	882
Johnson, Charles N., Seattle, Wash. Stovepipe-shelf	497,125	May 9	1184	303	63	850
Johnson, Clarence B., Wilkes-Barré, Pa. Fire-escape	490,355	Jan. 24	2200	{ 573 574 }	62	491
Johnson, Clarence B., Wilkes-Barré, Pa. Controller for elevators	496,569	May 2	281	75	63	670
Johnson & Co., Isaac G. (See McKee, Thomas L., assignor.)						
Johnson Company. (See Brown, William M., assignor.)						
Johnson Company. (See Entwisle, Edward B., assignor.)						
Johnson Company. (See Evans, Elmer O., assignor.)						
Johnson Company. (See Evans, Henry C., assignor.)						
Johnson Company. (See Ford, Hamilton E., assignor.)						
Johnson Company. (See Gull, John M., assignor.)						
Johnson Company. (See O'Shea, Henry, assignor.)						
Johnson Company. (See Pfefferkorn, Wilhelm, assignor.)						
Johnson Company. (See Reilly, Francis P., assignor.)						
Johnson Company. (See Suppes, Max M., assignor.)						
Johnson, Curtis, River Falls, Wis. Friction-clutch pulley	493,775	Mar. 21	1619	412	62	1706
Johnson, Edward C., Kookuk, Iowa. Steam-pump	502,043	July 25	2408	606	64	482
Johnson, Edward H. (See Branth, Johan F. S., assignor.)						
Johnson, Edward H. (See Capek, John V., assignor.)						
Johnson, Edward H. (See Lundell, Robert, assignor.)						
Johnson, Edward H., New York, N. Y. Device for converting motion	504,086	Aug. 29	3028	756	64	1185
Johnson, Edward H., New York, N. Y. Conduit electric railway	509,622	Nov. 28	2755	664	65	1390
Johnson, Edward H., assignor to Edison Electric Light Company, New York, N. Y. Automatic thermal cut-out for incandescent electric lamps	509,036	Nov. 21	1720	425	65	1112
Johnson, Eldridge R., Camden, N. J., assignor to New Jersey Wire Stitching Machine Company, of New Jersey. Wire-stitching machine	496,314	Apr. 25	2844	{ 710 711 }	63	576
Johnson Electric Service Company. (See Johnson, Warren S., assignor.)						
Johnson Electric Service Company. (See Winkenwerder, Henry, assignor.)						
Johnson, Elton E., Collins, N. Y. Blotter	509,537	Nov. 28	2623	635	65	1294
Johnson, Emil, and J. Frykberg, Manistee, Mich. Compounding and making grinding-wheels	495,251	Apr. 11	1184	.....	63	237
Johnson, Erick J., Chicago, Ill. Damper for fireplaces	509,911	Dec. 5	111	25	65	1431
Johnson, Ernest V., Chicago, Ill. Construction of buildings	495,634	Apr. 18	1789	{ 449 450 }	63	366
Johnson, Ferdinand, New London, Pa. Clamping mechanism	509,129	Nov. 21	1892	462	65	1145
Johnson, Frank and C. A., Rockford, Ill. Gaining-machine	501,683	July 18	1833	{ 456 457 }	64	364
Johnson, Frank B., et al. (See Sherman, Willis D., assignor.)						
Johnson, Frank P., Danville, Pa. Sash-balance	491,114	Feb. 7	80	22	62	764
Johnson, Frederick A., assignor of one-half to J. H. Evans, Columbus, Ohio. Railway-crossing	501,721	July 19	1893	{ 470 471 }	64	375
Johnson, Frederick C., et al. (See Toucey, Ferris D., assignor.)						
Johnson, Frederick L., Wallingford, Conn. Hat-hanger	492,297	Feb. 21	1961	489	62	1174
Johnson, George C. (See Mann and Johnson.)						
Johnson, George H., Sisson, Cal. Railway snow-flanger	497,753	May 16	2200	550	63	1047
Johnson, Hamilton, Dennison, Ohio, assignor to J. Godfrey, Pittsburg, Pa. Device for binding corn-shocks	502,672	Aug. 1	725	174	64	699
Johnson, Hans G., Waukon, Iowa. Cloth-finishing machine	504,219	Aug. 29	3255	812	64	1227
Johnson, Harry T., New York, N. Y. Electric door-opener	508,518	Nov. 14	893	520	65	939
Johnson, Harry T., New York, N. Y. Galvanic battery	511,434	Dec. 26	2760	667	65	1961
Johnson, Harvey. (See Pettersson, August, assignor.)						
Johnson, Hastings H., assignor to S. F. Heath Cycle Company, Minneapolis, Minn. Inflating device for pneumatic tires	507,224	Oct. 24	2440	602	65	495
Johnson, Henry L., Warner, N. H. Fire-kindler	511,433	Dec. 26	2759	666	65	1961
Johnson, Hilary C., Media, Pa. Tackle-block	492,496	Feb. 28	2296	570	62	1253
Johnson, Isaac C., New York, N. Y. Fireproof partition for buildings	494,866	Apr. 4	549	139	63	107
Johnson, Isaac L., Washington, D. C. Subway for electric-railway conductors	502,821	Aug. 8	989	241	64	763
Johnson, Iver. (See Fyrberg, Andrew, assignor.)						
Johnson, Iver. (See Lobben, Peder, assignor.)						
Johnson, Iver, and A. Fyrberg, Worcester, Mass.; said Fyrberg assignor to said Johnson. Revolver	505,918	Oct. 3	182	46	65	36
Johnson, Iver, and O. Mossberg, Fitchburg, Mass.; said Mossberg assignor to said Johnson. Barrel-strap catch for revolvers	511,620	Dec. 26	3056	745	65	2016
Johnson, James. (See Henderson, John M., assignor.)						
Johnson, James C., Fulton county, Ky. Saw-filing machine	506,698	Oct. 17	1528	{ 382 383 }	65	316
Johnson, James F. (See Osteen, William A., assignor.)						
Johnson, James F., Kansas City, Mo. Corn-popper	510,027	Dec. 5	317	71	65	1469
Johnson, James S., Almont, Mich. Coupling for tubular frames	493,166	Mar. 7	617	155	62	1480
Johnson, James T. (See Wantling and Johnson.)						
Johnson, John, Chester, Pa. Picker-stick for looms	493,331	Mar. 14	889	228	62	1547
Johnson, John, Chester, Pa. Harness-hook for looms	498,474	May 30	3369	839	63	1285
Johnson, John, Chester, Pa. Picker-stick check for looms	502,970	Aug. 8	1249	306	64	809
Johnson, John, Omaha, Nebr. Coupling for plows	507,909	Oct. 31	3595	887	65	725
Johnson, John G., Gordon, Pa. Paper box	506,403	Oct. 10	1056	263	65	214
Johnson, John W., Harrodsburg, Ky. Horseshoe	511,020	Dec. 19	2050	507	65	1817
Johnson, John W. R., assignor to Tredegar Company, Richmond, Va. Machine for cutting, pointing, and shaping rods	489,586	Jan. 10	937	{ 243 244 }	62	210
Johnson, John W. R., assignor to Tredegar Company, Richmond, Va. Die for welding links	499,229	June 13	806	191	63	1544
Johnson, Joseph, assignor of one-half to M. W. Smades, Minneapolis, Minn. Vehicle-tongue support	507,136	Oct. 24	2283	560	65	467

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Johnson, Joseph, and C. D. Haskins, Lynn, Mass., assignors to General Electric Company, of New York. Field-magnet coil and manufacturing same	508,620	Nov. 14	1046	258	65	969
Johnson, Joseph H., Bradford, Pa. Automatic boiler-feeder	507,621	Oct. 31	3131	766	65	640
Johnson, Joseph S., San Francisco, Cal. Amalgamator	503,765	Aug. 22	2536	{ 630 631 }	64	1074
Johnson, Kirkbride. (See Brinkman, Oscar F., assignor.)						
Johnson, Lawrence T., Austin, Pa. Log-car	500,712	July 4	288	78	64	53
Johnson, Levi H., <i>et al.</i> (See Stewart and Johnson, assignors.)						
Johnson, Levi M., Hillsborough, Ohio. Hose-carriage	497,382	May 23	2418	603	63	1101
Johnson, Louis F., Poughkeepsie, N. Y. Electric battery	510,604	Dec. 12	1298	316	65	1668
Johnson, Louis K., Brooklyn, assignor to Alden Type Machine Company, New York, N. Y. Type-setting apparatus	494,572	Apr. 4	71	16, 17	63	14
Johnson, Louis K., assignor to A. A. Low, Brooklyn, N. Y. Type-setting apparatus	494,573	Apr. 4	74	17, 18	63	15
Johnson, Martin A., Stoughton, Wis. Wagon-box fastener	497,577	May 16	1927	484	63	996
Johnson, May A. S. (See Start and Johnson.)						
Johnson, Nils, and J. Stocker, St. Louis, Mo. Ammonia or other pump	494,956	Apr. 4	668	{ 172 173 }	63	129
Johnson, Nils J., assignor to Minneapolis Plow Works, Minneapolis, Minn. Gang-plow	510,871	Dec. 12	1798	{ 442 443 }	65	1758
Johnson, Nis, assignor to Meriden Bronze Company, Meriden, Conn. Filling-indicator	509,170	Nov. 21	1949	476	65	1156
Johnson, Oliver W. (See Hawk and Johnson.)						
Johnson, Oliver W., Cleveland, assignor to J. W. Penfield & Son, Willoughby, Ohio. Reciprocating cut-off mechanism for brick-machines	510,344	Dec. 5	824	{ 199 200 }	65	1566
Johnson, Osgood. (See Wand, Thomas, assignor.)						
Johnson, Richard P., Boston, Mass. Regulating device for sugar-washers	511,204	Dec. 19	2349	574	65	1874
Johnson, Robert W., New Brunswick, N. J. Sulphur candle or fumigator	499,324	June 13	955	230	63	1571
Johnson, Robert W., New Brunswick, N. J. Sulphur candle or fumigator	499,325	June 13	957	231	63	1571
Johnson, Robert W., assignor of one-half to G. P. McCoy, Sikeston, Mo. Fence-post	498,796	June 6	74	18	63	1402
Johnson, Rufus A. (See Gallagher and Johnson.)						
Johnson, Samuel C., Racine, Wis. Book-holder	494,574	Apr. 4	76	18	63	16
Johnson, Samuel H., Pittsburg, Pa., and H. C. Stowe, New York, N. Y. Structural hollow shaft	508,826	Nov. 14	1350	334	65	1027
Johnson, Samuel J., Itasca, Tex. Railway-switch	500,393	June 27	2743	{ 674 675 }	63	1910
Johnson, Samuel S., assignor of one-half to J. S. Wright, Owensborough, Ky. Valve for fermenting-tubs	489,868	Jan. 10	1340	350	62	903
Johnson, Sidney N., assignor to Marion Manufacturing Company, Chicago, Ill. Game apparatus	492,961	Mar. 7	300	76	62	1419
Johnson Steel Street Rail Company. (See Brown, William M., assignor.)						
Johnson Steel Street Rail Company. (See Street, Clement F., assignor.)						
Johnson, Thomas W., Boston, Mass. Funnel	489,585	Jan. 10	937	243	62	210
Johnson, Walter S., <i>et al.</i> (See Ely, William, assignor.)						
Johnson, Warren S., assignor to Johnson Electric Service Company, Milwaukee, Wis. Pipe-coupling	502,671	Aug. 1	723	173	64	699
Johnson, Will A., <i>et al.</i> (See Wanamaker, Edward A., assignor.)						
Johnson, William, Hull, Mass. Try-square	496,227	Apr. 25	2700	677	63	548
Johnson, William, O'Brien county, assignor of one-half to T. Beacom, Sheldon, Iowa. Fertilizer-distributor	497,182	May 9	1266	321	63	864
Johnson, William, Leeds, England, assignor of one-half to Somerset & Johnsonburg Manufacturing Company, of Pennsylvania. Reciprocating brick-machine	499,230	June 13	807	{ 191 192 }	63	1545
Johnson, William C., Creston, Ohio. Seeding-machine	508,321	Nov. 7	537	137	65	860
Johnson, William E. (See Stewart and Johnson.)						
Johnson, William H., Shreveport, La. Mosquito-canopy	492,298	Feb. 21	1962	489	62	1174
Johnson, William H., Shreveport, La. Combined window-shade and curtain-pole support	501,425	July 11	1428	358	64	274
Johnson, William H., assignor of one-half to G. E. Maxwell, Delhi, N. Y. Hame-fastening	493,214	Mar. 7	681	174	62	1492
Johnson, William L. (See Franken, Robert, assignor.)						
Johnson, William L., assignor of one-half to R. Franken, Pomona, Cal. Salt box or cellar	494,205	Mar. 28	2350	594	62	1858
Johnson, William T. S., assignor to J. Q. Stewart, Cincinnati, Ohio. Taper attachment for lathes	503,088	Aug. 8	1414	349	64	841
Johnson, Zachariah A., <i>et al.</i> (See Lee, William B., assignor.)						
Johnston, Albert W., New Brighton, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Preparing dental fillings	503,419	Aug. 15	1962	487	64	953
Johnston, Allen, Ottumwa, Iowa. Grinding disk-cutters and apparatus therefor	504,386	Sept. 5	115	29, 30	64	1292
Johnston, Allen, Ottumwa, Iowa. Apparatus for grinding cutlery	504,387	Sept. 5	117	{ 30 31 32 }	64	1292
Johnston, Allen, Ottumwa, Iowa. Construction of grinding emery-wheels	504,388	Sept. 5	122		64	1293
Johnston, Allen, Ottumwa, Iowa. Grinding-machine	504,389	Sept. 5	123	32, 33	64	1293
Johnston, Andrew L., Richmond, Va. Insulator	491,890	Feb. 14	1337	331	62	1031
Johnston, Edgar D., Connersville, Ind. Apparatus for moving coal	493,272	Mar. 14	785	203	62	1529
Johnston, Edgar D., Connersville, Ind. Planing-machine for blower-pistons	509,086	Nov. 21	1821	446	65	1131
Johnston Embossing Machine Company. (See Johnston, Joseph Y., assignor.)						
Johnston, Frederick M. (See Woodward and Johnston.)						
Johnston, George. (See Ward, Albert M., assignor.)						
Johnston, George, San Francisco, Cal. Ore-concentrator	489,744	Jan. 10	1170	305	62	257
Johnston, George, San Francisco, Cal. Ore-concentrator	490,849	Jan. 31	2989	{ 765 766 }	62	660
Johnston, George, San Francisco, Cal. Ore-concentrator	490,850	Jan. 31	2991	766	62	660
Johnston, George, Durban, Natal. Car-coupling	510,028	Dec. 5	320	71, 72	65	1469
Johnston, George W., Farmington, Ill. Air-warming furnace	501,604	July 18	1701	424	64	342
Johnston Harvester Company. (See Crowley, George G., assignor.)						
Johnston Harvester Company. (See Farrall, George A., assignor.)						
Johnston Harvester Company. (See Glass, Albert J., assignor.)						
Johnston Harvester Company. (See Pridmore, Edward, assignor.)						
Johnston, Henry, Ypsilanti, Mich. Garment-stay	494,064	Mar. 21	2101	535	62	1796
Johnston, Henry L., and J. E. Sandberg, Butte City, Mont. Saw-guide	492,299	Feb. 21	1963	489	62	1174
Johnston, James H., Montclair, Colo. Apparatus for breaking horses	508,172	Nov. 7	315	78	65	816
Johnston, John. (See Pratt and Johnston.)						
Johnston, John B., Malta, Ill. Bookbinder	511,082	Dec. 19	2152	530	65	1837
Johnston, John D., Newport, R. I. Combined dish-drainer, bread-board, and cutting-board	508,885	Nov. 14	1445	358	65	1044
Johnston, John H., assignor of one-half to G. Purves, Little Rock, Ark. Sash-holder	490,907	Jan. 31	3102	795	62	682
Johnston, John J., Pittsfield, Ill. Jewel-setter	506,697	Oct. 17	1526	382	65	316
Johnston, John K., Dundrum, Ireland. Flour-chute	502,194	July 25	2654	{ 670 671 }	64	498

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Johnston, John S., assignor to Adams & Westlake Company, Chicago, Ill. Car-seat.....	489,562	Jan. 10	905	236	62	204
Johnston, Joseph Y., Montclair, N. J., assignor, by mesne assignments, to Johnston Embossing Machine Company. Embossing and printing press.....	504,680	Sept. 5	599	152 153 154	64	1383
Johnston, Lysander, Chicago, Ill. Elevated railway.....	508,478	Nov. 14	816	203 204	65	924
Johnston, Robert E., Detroit, Mich. Folding umbrella.....	497,578	May 16	1928	485	63	996
Johnston Safe Automatic Electric Company. (See Cullen, William A., assignor.)						
Johnston, Septer E., Selma, Cal. Sewer-cleaning brush.....	498,659	May 30	3688	912	63	1340
Johnston, Thomas, Newburg, N. Y. Lawn-mower.....	509,600	Nov. 28	2726	658	65	1315
Johnston, William A., San Francisco, Cal. Stop-valve for gages.....	506,115	Oct. 3	488	126	65	96
Johnston, William A., and A. W. Browne, Prince's Bay, N. Y., assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine.....	501,075	July 11	851	220 221	64	171
Johnston, William A., and A. W. Browne, Prince's Bay, N. Y., assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Clutch for electric motors.....	503,420	Aug. 15	1964	488	64	953
Johnston, William A., and J. C. Davidson, Prince's Bay, N. Y., assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Pendent incandescent electric light.....	504,475	Sept. 5	267	69	64	1320
Johnston, William A., A. W. Browne, and J. C. Davidson, Prince's Bay, N. Y., assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Electric-motor apparatus.....	511,621	Dec. 26	3058	745 746 747 748	65	2016
Johnston, William C., assignor of one-half to S. H. Martin, Lincoln, Ill. Advertising device.....	509,473	Nov. 28	2525	609	65	1276
Johnston, William J., Port Huron, Mich. Fence.....	499,462	June 13	1213	289	63	1617
Johnston, William T., Newport, Ky. Steering apparatus.....	491,212	Feb. 7	245	62	62	794
Johnstone & Buckley. (See Johnstone, Robert K., assignor.)						
Johnstone, Francis W., Mexico, Mexico. Locomotive-engine.....	493,776	Mar. 21	1620	412 413	62	1706
Johnstone, Lewis, Edinburgh, Scotland. Automatic feeding device.....	507,910	Oct. 31	3596	887 888	65	726
Johnstone, Norman & Co. (See Windeatt, William H., assignor.)						
Johnstone, Robert K., Tenafly, N. J., assignor to Johnstone & Buckley, New York, N. Y. Making welting.....	495,891	Apr. 18	2198	553	63	439
Joiner, Thomas H. (See Goff and Joiner.)						
Jokl, Edmund. (See Raudnitz, Siegmund, assignor.)						
Jolly, Richard H., assignor of one-half to E. Clark, Bucyrus, Ohio. Lamp-lighter.....	492,685	Feb. 28	2591	641	62	1313
Jonas, Arthur H., and J. J. Braendly, New York, N. Y. Shoe.....	494,812	Apr. 4	465	116	63	89
Joncas, Louis, Auburn, Me. Machine for setting up Congress uppers.....	491,709	Feb. 14	1034	267	62	976
Jones, Albert. (See Schultz, Horatio N., assignor.)						
Jones, Albert F., Salem, Mass. Machine for coloring skins.....	498,120	May 23	2783	696	63	1165
Jones, Ansel B. (See Horton, William P., Jr., assignor.)						
Jones, Arthur E., assignor of one-half to C. J. White, New Britain, Conn. Suspender-buckle.....	499,836	June 20	1828	445	63	1737
Jones, Benjamin, Cleveland, Ohio. Mold, mold-facing, and core and making same.....	507,226	Oct. 24	2441		65	495
Jones, Benjamin, Cleveland, Ohio. Mold and making same.....	510,865	Dec. 12	1788		65	1756
Jones, Charles, and R. Tolson, Fazeley, England. Differential take-up for looms.....	497,579	May 16	1929	485	63	997
Jones, Charles A., Smethwick, England. Valve for hydraulic or steam machinery.....	501,791	July 18	2016	497 498	64	396
Jones, Charles E., Wheatland, Mo. Whiffletree hook.....	490,023	Jan. 17	1642	427	62	367
Jones, Charles E., Elgin, Ill. Electrical heater.....	502,494	Aug. 1	415	98	64	643
Jones, Charles S., deceased, Chicago, Ill.; S. H. Jones, executrix. Electric motor.....	500,135	June 27	2330	563	63	1837
Jones, Charlie D. (See Felt, Vanderlyn H., assignor.)						
Jones, Conrad S., assignor to M. E. Jones, Philadelphia, Pa. Heater.....	498,122	May 23	2786	697	63	1166
Jones, Corry, Long Island City, N. Y. Quill-winder.....	493,093	Mar. 7	498	124	62	1458
Jones, Daniel A., Oshkosh, Wis. Lock-snap.....	495,416	Apr. 11	1431	360	63	282
Jones, Daniel M., Wichita, Kans. Veterinary obstetrical forceps.....	497,720	May 16	2151	538	63	1038
Jones, David. (See Fearn, William R., assignor.)						
Jones, David F. L., and J. D. McPhail, Columbus, Ga. Seal device for sewers.....	498,121	May 23	2785	696	63	1166
Jones, Doctor R., Creighton, Mo. Car-coupling.....	491,562	Feb. 14	823	209	62	928
Jones, Edward A., Tonawanda, N. Y. Ball-bearing for vehicle-wheels.....	502,927	Aug. 8	1167	288	64	796
Jones, Edward P., Philadelphia, Pa. Wrench.....	510,263	Dec. 5	708	171	65	1544
Jones, Edward S., Providence, R. I. Device for securing zinc or other printing plates.....	495,466	Apr. 11	1523	381	63	301
Jones, Ellis T., New York, N. Y. Bottling-machine.....	491,753	Feb. 14	1118	283	62	988
Jones, Ernest. (See Fawcett and Jones.)						
Jones, Eugene, and D. W. Collins, Little Falls, N. Y. Cleansing-material injector for steam-boilers.....	506,045	Oct. 3	378	100	65	74
Jones, Floyd, Pompton Plains, N. J. Adjustable trestle.....	495,492	Apr. 18	1566	394	63	327
Jones, George W. (See Malke, Frederick E. R., assignor.)						
Jones, George W., Richardson, Tex. Clothes-pin.....	507,818	Oct. 31	3452	848	65	700
Jones, Gomer, Newark, N. J., assignor of one-half to Brown Developing Company, of New Jersey. Process of and apparatus for making and burning fuel-gas.....	507,500	Oct. 24	2899	713	65	583
Jones, Griffith, Baltimore, Md. Draft-equalizer.....	500,808	July 4	438	115	64	81
Jones, Harvey P., Denver, Colo. Rock-drill.....	502,565	Aug. 1	529	127	64	663
Jones, Henry C., Montgomery, Ala. Trolley-wire finder.....	503,421	Aug. 15	1965	488	64	953
Jones, Hiram, Detroit, Mich. Electric-light tower.....	510,479	Dec. 12	1053	252 253	65	1624
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Attachment for machines for rolling screw-threads.....	492,468	Feb. 28	2239	560	62	1242
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Mechanism for feeding headed blanks.....	495,201	Apr. 11	1096	272 273	63	221
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Die for rolling screw-threads.....	502,256	July 25	2768	699	64	551
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Apparatus for milling dies for rolling screw-threads.....	502,257	July 25	2770	700	64	552
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Die for rolling screw-threads.....	502,258	July 25	2774	701	64	552
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Mechanism for feeding screw-blanks.....	504,435	Sept. 5	202	52, 53	64	1308
Jones, Isaac, Lima, Ohio. Hog-trough.....	503,664	Aug. 22	2374	592	64	1042
Jones, J. M., et al. (See Welsh, Artemus and A., assignors.)						
Jones, James, Sharon, Iowa. Draft-equalizer.....	489,009	Jan. 3	49	14	62	13
Jones, James H., Floyd, Tex. Washing-machine.....	499,119	June 6	638	153	63	1502
Jones, James H., San Francisco, Cal. Rotary fan.....	500,005	June 20	2028	506	63	1783
Jones, James H., assignor to Emerson, Talcott & Co., Rockford, Ill. Push-bar for mowing-machines.....	504,419	Sept. 5	179	46	64	1304

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Jones, James K., <i>et al.</i> (See Graves, John W., assignor.)						
Jones, James W. (See Crossley and Jones.)						
Jones, James W., Lincoln, Ill. Catching and holding tool	511,148	Dec. 19	2263	554	65	1858
Jones, Jesse J., <i>et al.</i> (See Anderson and Winston, assignors.)						
Jones, John, and A. Gillies, Toronto, Canada. Cart	499,740	June 20	1660	399	63	1708
Jones, John, and A. Gillies, Toronto, Canada. Brush for street-sweepers	500,906	July 4	583	152	64	107
Jones, John K., Kansas City, Mo., assignor to American Silican Company, Omaha, Nebr. Wall-plaster	511,735	Dec. 26	3235		65	2049
Jones, John M., Palmyra, N. Y. Printing-press	498,851	June 6	178	44	63	1424
Jones, John M., assignor of one-half to W. Allen, Philadelphia, Pa. Toy	507,911	Oct. 31	3601	888	65	726
Jones, John M., assignor of one-half to C. L. Wright and G. B. Lasbury, Omaha, Nebr. Ore or feed pulverizer	500,582	July 4	68	19, 20	64	14
Jones, John R., Fresno, Cal. Fire-escape	503,322	Aug. 15	1819	450	64	9 6
Jones, Joseph, Dukinfield, England. Apparatus for grinding flats of carding-engines	491,356	Feb. 7	497	128	62	842
Jones, Joseph R., West Cornwall, assignor of two-thirds to A. Calhoun, Middlebury, and C. R. Witherell, Cornwall, Vt. Fruit-picker	510,917	Dec. 19	1876	460	65	1785
Jones, Joshua L., Chicago, Ill. Lock	504,785	Sept. 12	789	199	64	1431
Jones, Lorenzo D., Kenosha, Wis. Harness-rosette	493,094	Mar. 7	500	125	62	1458
Jones, Mary E. (See Jones, Conrad S., assignor.)						
Jones, Mary S. (See Naly and Jones.)						
Jones, Mathias B., Binghamton, N. Y. Antifriction journal-bearing	503,143	Aug. 15	1521	374	64	873
Jones, Milton B., assignor to C. J. Hyde, Meridian, Miss. Baling-press	495,589	Apr. 18	1716	432 433	63	354
Jones, Owen F., Baltimore, Md. Expansion or cut-off gear	489,904	Jan. 10	1410	365	62	305
Jones, Owen O., Poutney, Vt. Elevator-carrier	497,796	May 23	2273	571	63	1075
Jones, Richard J., Newark, N. J. Can-opener	495,041	Apr. 11	804	203	63	169
Jones, Robert C., Mars, Pa. Pipe-tongs	497,797	May 23	2274	571	63	1076
Jones, Robert M., Salt Lake City, Utah Ter. Electric rotary drilling-machine	495,738	Apr. 18	1960	494	63	395
Jones, Robert M., Salt Lake City, Utah Ter. Electric motor for rotary drilling-machines	502,098	July 25	2496	627	64	499
Jones, Samuel O., assignor of one-half to G. H. Atwood, Stillwater, Minn. Piston-valve	509,037	Nov. 21	1721	425 426	65	1112
Jones, Simon, S. B. Bishop, Hamilton, and T. C. Du Pont, Central City, Ky. Coal-weighing basket	499,120	June 6	640	154	63	1502
Jones, Susan H., executrix. (See Jones, Charles S.)						
Jones, Thomas D., assignor to A. W. Dreves, A. S. Osgood, and J. Early, Chicago, Ill. Nut-lock	502,195	July 25	2655	671	64	531
Jones, Vina, Abilene, Tex. Cutting-table	495,252	Apr. 11	1184	297	63	237
Jones, W. Martin. (See Wood, Rostio O., assignor.)						
Jones, Walter N., Jr., Petersburg, Va. Electric regulator and switch	508,322	Nov. 7	560	137	65	861
Jones, Wesley C., Warrensburg, Mo. Coffee-pot	494,206	Mar. 28	2351	594	62	1858
Jones, Wesley C., Warrensburg, Mo. Button-fastener	505,768	Sept. 26	2456	619	64	1771
Jones, Wesley C., assignor to T. A. Sollors and J. B. Greer, Warrensburg, Mo. Broom-rack	490,851	Jan. 31	2993	766	62	661
Jones, Wesley C., assignor to T. A. Sollors and J. B. Greer, Warrensburg, Mo. Broom-rack	497,667	May 16	2065	515 516	63	1021
Jones, Wesley C. P., Rusk, Tex., assignor to L. S. Hickman, Warrensburg, Mo. Broom-rack	491,891	Feb. 14	1338	331	62	1031
Jones, William, <i>et al.</i> (See Seaman, George Q., assignor.)						
Jones, William A., Sigourney, Iowa. Farm-gate	494,987	Apr. 4	716	182	63	137
Jones, William B., Lincoln, Ill. Snow plow or scraper	509,811	Nov. 28	3062	739	65	1379
Jones, William H., assignor to Whitney Glass Works, Glassborough, N. J. Apparatus for operating glass-molds	490,908	Jan. 31	3103	795 796	62	682
Jones, William H., assignor to Whitney Glass Works, Glassborough, N. J. Glass-mold	490,909	Jan. 31	3104	796	62	682
Jones, William H., and T. C. Greene, assignors of one-half to D. T. and A. W. Snyder, Liberty, Ind.; said Greene assignor, by mesne assignments, to D. T. Snyder. Wagon-jack	494,957	Apr. 4	674	174	63	129
Jones, William H. L., and G. C. Warr, Paterson, N. J. Softening vegetable fiber	507,225	Oct. 24	2441		65	495
Jones, William H. L., and G. C. Warr, Paterson, N. J. Softening vegetable fiber	507,501	Oct. 24	2901		65	583
Jones, William J., assignor of one-third to L. A. Daniels, Pinson, Tenn. Nut-lock	498,660	May 30	3690	912	63	1340
Jones, William M., New Richmond, assignor of one-half to T. G. Mann, Hinton, W. Va. Car-coupling	510,390	Dec. 5	909	218	65	1583
Jones, William P. (See Ulsh, John L., assignor.)						
Jones, William R. S., Ajmere, India. Buffer for cars	506,116	Oct. 3	489	126 127	65	96
Jong, Jacob de, Jersey City, N. J. Imitation mother-of-pearl and making same	494,255	Mar. 28	2427	612	62	1872
Jong, John T. W. de, St. Paul, Minn. Abdominal bandage	511,336	Dec. 26	2582	629	65	1930
Jönsson, Johan L., and T. Berg, assignors to Aktiebolaget Separator, Stockholm, Sweden. Milk-heater	492,300	Feb. 21	1964	490	62	1175
Jopson, George W., Meriden, Conn. Padlock	500,907	July 4	583	152	64	107
Joralemon, Joseph, Troy, Pa. Ice-cream freezer and packer	491,650	Feb. 14	963	242 243 748 749	62	957
Jorda, George I. and G., New York, N. Y. Rotary engine	511,622	Dec. 26	3063		65	2017
Jorda, Gottlieb. (See Jorda, George I. and G.)						
Jordan, Andrew P., Ellsworth, Me. Head-rest	491,651	Feb. 14	967	243	62	957
Jordan Bituminous Rock Company. (See Haskins, Alfonso, assignor.)						
Jordan, Charles M., Washington, D. C. Appliance for treating diseases of the ear	494,958	Apr. 4	675	174	63	129
Jordan, Edmund, Brooklyn, N. Y. Drawing or stamping press	503,422	Aug. 15	1967	488 489	64	953
Jordan, Edmund, Brooklyn, assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	505,708	Sept. 26	2359	596	64	1753
Jordan, Edmund, Brooklyn, assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	507,227	Oct. 24	2442	602	65	495
Jordan, James M. (See Harris, Frank E., assignor.)						
Jordan, John R. (See Mowrer and Jordan.)						
Jordan, Linwood F., Somerville, Mass., assignor of one-half to H. B. Bennett, Portland, Me. Battery-box and case	509,381	Nov. 28	2327	563	65	1238
Jordan, Oswald F., St. Thomas, Canada. Spring railway-frog	501,946	July 25	2253	564	64	455
Jordan, William H., Brooklyn, N. Y. Electric railway-signal	497,408	May 16	1657	418	63	949
Jørgensen, Erik. (See Krag and Jørgensen.)						
Jory, Joseph H., San Francisco, Cal. Amalgamating and reducing sluice	509,912	Dec. 5	112	25, 26	65	1431
Joseph, Julius C. (See Tate and Joseph.)						
Joseph, Leopold. (See Hillenbrand, Julius, assignor.)						
Josephson, Moses, Springfield, Ill. Vegetable-grater	510,141	Dec. 5	504	115	65	1505
Joslin, Omar T., Chicago, Ill. Making fertilizers from tank-water	489,010	Jan. 3	50		62	13

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Joslin, Omar T., Chicago, Ill. Making fertilizer from tank-water.....	495,042	Apr. 11	805	63	169
Joslin, Omar T., Chicago, Ill. Making fertilizer from tank-water.....	495,043	Apr. 11	806	.....	63	169
Joslyn, Daniel R., Gurdon, Ark. Car-coupling.....	501,076	July 11	853	221	64	171
Joss, Jacob, St. Joseph, Mo. Car-coupling.....	491,357	Feb. 7	498	128 129	62	843
Josselin, Louis C., assignor of one-half to J. Casarés, Mexico, Mexico. Tobacco cutting and sifting machine.....	506,117	Oct. 3	491	127 128	65	96
Josselyn, Charles H., Rockland, Mass. Last.....	496,785	May 2	626	167	63	731
Jost, Carl. (See Monte and Jost.)						
Jourdan, Armand G., assignor to himself and S. S. Lévy, Paris, France. Geographical clock.....	500,659	July 4	205	53, 54	64	40
Jourdan, Joseph A., Paris, France. Trousers-hanger.....	496,738	May 2	554	149	63	719
Joy, David, London, England. Valve-operating device for engines.....	490,599	Jan. 24	2568	661 662 663	62	563
Joy, David, London, England. Valve-gear for engines.....	506,509	Oct. 10	1246	310	65	250
Joy, Robert, assignor to T. Kingsford, Oswego, N. Y. Steam-boiler.....	495,977	Apr. 25	2323	587	63	477
Joy, Robert, assignor to T. Kingsford, Oswego, N. Y. Steam-boiler.....	507,735	Oct. 31	3304	808	65	672
Joy, Sam S., New Market, N. H. Wagon-jack.....	493,031	Mar. 7	409	102	62	1439
Joyce, Henry E., et al. (See Hogg, William T., assignor.)						
Joyce, James. (See Oxnam, Joyce, and Francis.)						
Joyce, Maurice, Washington, D. C. Matrix and method of using matrices.....	489,011	Jan. 3	52	15	62	13
Joyce, Owen C., assignor of one-half to A. W. Nobles, Edlil, Ark. Whiffletree-hook.....	504,925	Sept. 12	1017	262	64	1476
Joyner, Edgar D. (See Sands, Arthur J., assignor.)						
Judd, Edwin, assignor to Hall & Brown Wood Working Machine Co., St. Louis, Mo. Feed mechanism for woodworking-machines.....	511,205	Dec. 19	2351	575	65	1874
Judd, Joseph, Ansonia, Conn. Oiling-box for rolling-mills.....	499,431	June 13	1163	278	63	1607
Judson, Henry P., Cambridge, Mass. Artificial limb.....	497,026	May 9	1028	263	63	892
Judson, Roswell S., Matteawan, N. Y. Sash-weight.....	508,546	Nov. 14	934	230	65	947
Judson, Roswell S., and F. Edmond; said Edmond assignor to E. Edmond, Matteawan, N. Y. Spring chair-bottom.....	509,225	Nov. 21	2057	496	65	1176
Judson, Whitcomb L., Chicago, Ill. Shoe-fastening.....	504,037	Aug. 29	2957	740	64	1171
Judson, Whitcomb L., Chicago, Ill. Clasp locker or unlocker for shoes.....	504,038	Aug. 29	2959	740	64	1171
Judy, John F., Chicago, Ill. Clothes-wringer.....	506,821	Oct. 17	1745	439	65	356
Judy, William F., assignor of one-half to R. B. Roberts, Indianapolis, Ind. Check-punch.....	495,553	Apr. 18	1656	417	63	343
Juel, John, Larchwood, Iowa. Self-feeder for thrashing-machines.....	507,438	Oct. 24	2799	685	65	565
Juengst, Charles A., Croton Falls, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, Boston, Mass. Cash register and indicator.....	499,294	June 13	903	219 220	63	1562
Juergens, Henry F., Minneapolis, Minn. Egg-beater.....	499,741	June 20	1661	399	63	1708
Jukes, Hamilton A., Winnipeg, Canada. Dry closet or commode. (Reissue).....	11,373	Oct. 10	1452	365	65	291
Jukes, Hamilton A., Winnipeg, Canada. Water-closet.....	507,273	Oct. 24	2521	621	65	509
Julia, John P., New York, N. Y. Copying-book.....	489,959	Jan. 17	1520	397	62	343
June, Henry R., Elmira, N. Y. Mud-pan.....	510,794	Dec. 12	1617	402	65	1727
June, Marcus M., assignor of two-thirds to O. Coville and T. H. Whitcomb, Syracuse, N. Y. Candy-mold.....	493,729	Mar. 21	1546	394	62	1691
Junge, Charles. (See Junge, William and C.)						
Junge, William and C., London, England, assignors to J. S. Wallace, Belfast, Ireland. Saw.....	495,345	Apr. 11	1321	331	63	263
Jungmans, Arthur, Schramberg, Germany. Lantern-pinion.....	508,886	Nov. 14	1447	358	65	1045
Junginger, George S. (See Hornel and Junginger.)						
Jungmann, August, Chicago, Ill. Bridge-gate.....	501,947	July 25	2260	565	64	455
Jungmann, Felix, Berlin, Germany. Tube-cutter.....	504,736	Sept. 12	791	200	64	1431
Jungmarker, Axel. (See Hammarström, Ernst F., assignor.)						
Junk, John E. (See Constock and Junk.)						
Junkers, Hugo. (See Oechelhaeuser and Junkers.)						
Junkin, Thomas J. (See Fox, Charles E., assignor.)						
Junkins, Leander D. (See Crisp and Junkins.)						
Just, John A., Syracuse, assignor of one-half to A. E. Dewey, Watertown, N. Y. Making chlorine.....	495,462	Apr. 11	1518	378	63	300
Just, Paul C., Chicago, Ill. Trolley for conduit-railways.....	497,377	May 16	1609	407	63	941
Just, Paul C., Chicago, Ill. Conduit railway-trolley.....	510,142	Dec. 5	506	115	65	1505
Justice, Elmore E. (See Justice, William A., assignor.)						
Justice, William A., New Athens, assignor of one-third to E. E. Justice, Bridgeport, Ohio. Latch and lock combined.....	505,403	Sept. 19	1796	464	64	1634
Jüterbock, Carl O. (See Jüterbock, Gustav A., assignor.)						
Jüterbock, Gustav A., Berlin, Germany, assignor to C. O. Jüterbock, Penge, England. Artificial-tooth plate.....	494,065	Mar. 21	2102	535	62	1796
Juvinal, Charles D., D. L. Ingard, and M. H. Brinkerhoff, Upper Sandusky, Ohio. Barrel truck and stand.....	489,745	Jan. 10	1172	306	62	258
Kacer, Martin V. (See Yeoman and Kacer.)						
Kadletz, William, and R. B. Stocker, Lemhi Agency, Idaho. Stand.....	500,006	June 20	2089	506	63	1783
Kaefert, Fritz, Hanover, Germany. Steam heating apparatus.....	499,231	June 13	809	192	63	1545
Kaercher, John, Baraboo, Wis. Snow-shovel.....	502,724	Aug. 8	828	200	64	733
Kaestner, Max, Herzogenrath, assignor to W. Zimmermann, Cologne, Germany. Tile.....	502,725	Aug. 8	829	201	64	733
Kaffenberger, Gustav. (See Bird and Kaffenberger.)						
Kahl, Adolph, assignor of one-half to T. Scharf and A. Kahl, Sorrento, Ill. Wire-stretcher.....	490,566	Jan. 24	2519	648	62	553
Kahl, Albert, et al. (See Kahl, Adolph, assignor.)						
Kahner, Lazarus. (See Hyass, Charles, assignor.)						
Kahrs, Ertman, Brooklyn, N. Y. Glue-pot.....	498,717	May 30	3802	937	63	1359
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Journal-bearing.....	496,482	May 2	139	39	63	644
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Casing for clover-hullers.....	497,027	May 9	1030	263	63	822
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Screen-shoe for clover-hullers.....	500,136	June 27	2933	564	63	1838
Kaime, George S., Necedah, Wis. Loading or piling machine.....	504,589	Sept. 5	453	115 116	64	1354
Kain, Joseph D. (See Dunkerley, Benjamin, assignor.)						
Kaiser, Joseph M., assignor to Eiseman, Kaiser & Co., Chicago, Ill. Clasp.....	510,918	Dec. 19	1877	460	65	1786
Kaisling, William, Allegheny, Pa. Electric clock striking mechanism.....	493,777	Mar. 21	1622	413	62	1706
Kaldenberg, Frederick J., Tarrytown, N. Y. Tobacco-pipe.....	493,032	Mar. 7	410	102	62	1439
Kales, John W., Franklinville, N. Y. Water wheel or motor.....	499,121	June 6	642	154	63	1503
Kalies, Gustav, Horicon, Wis. Windmill.....	510,029	Dec. 5	321	72	65	1470
Kalkkuhl, Carl, assignor of one-half to S. Frank Philadelphia, Pa. Gas-lamp.....	502,123	July 25	2535	636	64	507
Kallenbach, Morris, Boody, Ill. Elevator.....	501,568	July 18	1644	411	64	332
Kaltenbeck, William H., Middlesborough, Ky. Wrench.....	492,401	Feb. 28	2127	532	62	1219
Kaltenbeck, William H., assignor of two-thirds to D. G. Colson and F. Waggoner, Middlesborough, Ky. Stamp-vending machine.....	507,368	Oct. 24	2685	660 661	65	542
Kam, Joseph, Buffalo, N. Y. Dry-kiln for malting.....	489,746	Jan. 10	1174	306	62	258

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Kamerer, George W., Norwich, Conn. Tool for dressing emery-wheels	511,083	Dec. 19	2153	530	65	1837
Kames, Joshua, Philadelphia, Pa., assignor to Atmospheric Propulsion Company, of New Jersey. Compressed-air motor for propelling wheeled vehicles	491,892	Feb. 14	1339	{ 331 332 }	62	1031
Kammer, John von der, Chicago, Ill. Incandescent lamp	492,809	Mar. 7	59	14	62	1370
Kammerer, Frank G., Chicago, Ill. Bottle or vessel holder	502,365	Aug. 1	192	45	64	601
Kammerer, Karl L., assignor of two-thirds to J. H. Bishop and G. W. Wessling, Bishop, Ill. Corn-planter attachment	510,069	Dec. 5	386	85	65	1482
Kämmerer, Michael. (See Bender and Kämmerer.)						
Kampf, August, assignor to Grusonwerk, Magdeburg, Germany. Hydraulic recoil-brake for guns	500,908	July 4	584	152	64	107
Kampf, August, assignor to Grusonwerk, Magdeburg, Germany. Hydraulic press, &c.	501,426	July 11	1429	358	64	274
Kampf, Joseph, New York, N. Y. Heater for soldering-irons	499,362	June 13	1034	{ 250 251 }	63	1585
Kampfe Brothers. (See Cruickshank, Arthur B., assignor.)						
Kamphaus, Peter, Wald, Germany. Pruning implement	508,022	Nov. 7	65	19	65	770
Kamsler, Julius, New York, N. Y. Electric burglar-alarm	492,330	Feb. 21	2011	500	62	1184
Kandeler, Charles F. T., Chicago, Ill. Roofed arch structure	495,222	Apr. 11	1124	250	63	226
Kane, Bart, Cincinnati, Ohio, assignor of one-half to C. W. Earnist. Excelsior-machine	499,168	June 6	716	170	63	1514
Kane, James P., Rochester, N. Y. Sash-fastener	511,702	Dec. 26	3180	778	65	2039
Kane, John. (See Graham and Kane.)						
Kane, John. (See Harvey and Kane.)						
Kane, Maurice, Chicago, Ill. Safety-wheel attachment for harvesters	489,012	Jan. 3	54	15	62	14
Kane, Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Springfield, Ohio, Grain-binder	495,044	Apr. 11	807	{ 203 204 }	63	169
Kane Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Chicago, Ill., and Springfield, Ohio. Harvester-elevator	499,169	June 6	718	170	63	1514
Kane, Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Chicago, Ill., and Springfield, Ohio. Harvester-platform adjustment	499,837	June 20	1829	445	63	1737
Kane, Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Chicago, Ill., and Springfield, Ohio. Grain-binder	499,838	June 20	1832	445	63	1738
Kane, Thomas, trustee. (See Brainard, Adelbert M., assignor.)						
Kanneberg, Alvin C., Canton, Ohio. Sheet-metal roofing	492,513	Feb. 28	2323	576	62	1258
Kansas City Elevator Manufacturing Company. (See Turner, Allen and F. E., assignors.)						
Kansas City Hay Press Company. (See Sooy, Ephraim C., assignor.)						
Kanback, Alexander R., Philadelphia, Pa. Car-coupling	511,623	Dec. 26	3065	749	65	2017
Kaplan, Leopold, Berlin, Germany. Permutation-lock	494,867	Apr. 4	551	139	63	107
Kardell, Carl M., Marshfield, Oreg. Saw-setting device	499,789	June 20	1745	422	63	1733
Karges, Theodore, Blair, Nebr. Horse-collar fastener	492,023	Feb. 21	1544	385	62	1086
Karlson, Axel, Duluth, Minn. Ice-velocipede	500,583	July 4	70	21	64	14
Karlson, Charles, Red Bank, N. J. Renovator	507,369	Oct. 24	2691	661	65	543
Karistén, Karl K., Stockholm, Sweden. Oven	489,651	Jan. 10	1023	{ 266 267 }	62	228
Karnes, Leonadus E., and K. F. Rice, assignors to B. F. Putnam and L. P. Badger, Eureka Springs, Ark. Tire-heater	489,436	Jan. 3	701	187	62	150
Karus, Augustine S. (See Bowman and Rice, assignors.)						
Karr, Burton A., and C. H. Bradrick, assignors to National Railway Signal Company, Omaha, Nebr. Automatic railway electric signal	508,946	Nov. 21	1591	389	65	1086
Karr, George S., Toronto, Canada. Saddle for velocipedes	506,510	Oct. 10	1347	{ 310 311 }	65	250
Kash, Bernard M., Joplin, Mo. Bridge construction	510,264	Dec. 5	709	171	65	1544
Kasmirsky, Ollie, et al. (See Loree, Manfred U., assignor.)						
Kasper, Christian, Cleveland, Ohio. Hitching device for horses	498,351	May 30	3182	792	63	1249
Kast & Ehinger. (See Dorn, Ludwig, assignor.)						
Kastengren, Carl F., Sjogeras, Klefva, Sweden. Cow-milker	500,713	July 4	290	78, 79	64	54
Kathreiners Malzkaffeeabriken Wilhelm & Brougier. (See Trillich, Heinrich, assignor.)						
Kato, George P., Jr., Jersey City, N. J. Lamp	503,266	Aug. 15	1717	424	64	909
Kato, George P., Jr., Jersey City, N. J., and R. W. Carman, Flushing, N. Y. Deodorizing and disinfecting apparatus	507,656	Oct. 31	3197	783	65	652
Katzer, Richard, Brooklyn, assignor to H. Scheuer, New York, N. Y. Holder for cuffs, &c.	503,858	Aug. 22	2659	666	64	1099
Kaucher, Frank, St. Joseph, Mo. Device for mixing grain	495,590	Apr. 18	1718	433	63	355
Kaufman, William H., Columbus, Ohio. Dumping-wagon	492,686	Feb. 28	2592	641	62	1313
Kaufmann, William H., Columbus, Ohio. Dumping-bed for wagons	511,528	Dec. 26	2900	706	65	1989
Kaufman, William J., Miamisburg, Ohio. Carriage-clip yoke	499,132	June 6	643	151	63	1503
Kaufmann, William J., Miamisburg, Ohio. Spring-clip	510,345	Dec. 5	829	200	65	1567
Kaufman, Ernst A., Canton, Ohio. Dumping-car	492,904	Mar. 7	211	52	62	1400
Kaufman, Jacob H., Marysville, Cal. Adjustable map or chart stand	491,358	Feb. 7	499	129	62	843
Kaufmann, Hermann, Langerwehe, Germany. Spring	490,389	Jan. 24	2249	585	62	501
Kaufmann, Isaac, New York, N. Y. Album-stand	508,224	Nov. 7	401	97	65	833
Kaul, Carl F., Madison, Nebr. Continuous brick-kiln	507,274	Oct. 24	2521	632	65	509
Kaul, Carl F., Madison, Nebr. Brick-mold	510,265	Dec. 5	712	172	65	1544
Kaul, John L. (See Krieg, Joseph, assignor.)						
Kausen, William F., Ferndale, Cal. Liquid-cooler	504,590	Sept. 5	458	116	64	1355
Kausser, Joseph E., Pensacola, Fla. Dredging apparatus	491,843	Feb. 14	1263	{ 313 314 }	62	1017
Kavanaugh, George H., Middletown, Conn. Punch	489,534	Jan. 10	865	220	62	196
Kay, Frederick G., et al. (See Saitz, John F., assignor.)						
Kay, Joshua A., assignor of one-half to R. A. V. Rae, Balwyn, Victoria. Machinery for setting type	492,164	Feb. 21	1761	{ 439 440 }	62	1132
Kaye, Edward, Phillipsburg, Pa. Marine railway	494,066	Mar. 21	2102	536	62	1796
Kaye, Edward, Phillipsburg, Pa. Apparatus for cooling glass-molds	501,077	July 11	854	221	64	171
Kaye, Samuel, Yazoo City, Miss. Fire-escape	489,483	Jan. 10	776	205	62	179
Kaye, Samuel, Yazoo City, Miss. Piston-rod protector	502,402	Aug. 1	255	60	64	613
Kaye, Timothy, assignor of one-fifth to J. G. Oeffner, Homestead, Pa. Apparatus for casting ingots	491,213	Feb. 7	250	62	62	795
Kayler, Raymond S. (See Cornelius, John, assignor.)						
Kaylor, John, Decatur, Ill. Hay-tedder	496,612	May 2	345	94	63	682
Kayser, Adolf, Buffalo, N. Y. Deodorizing hydrocarbon oils	508,479	Nov. 14	821	204	65	925
Kayser, William J., assignor of one-third to I. Leiser, Milwaukee, Wis. Combined funnel and strainer	495,635	Apr. 18	1791	450	63	366
Keach, Lloyd M., and J. C. Nelson, Table Grove, Ill. Stovepipe-thimble	507,657	Oct. 31	3199	783	65	652
Keahy, William A., Garnett, Ark. Plow	507,819	Oct. 31	3453	848	65	701
Keane, Frederick H., and D. Wilson, Cappoquin, Ireland. Ball throwing or bowling machine	502,299	Aug. 1	72	16	64	579
Kearney, James, assignor of one-half to A. A. Milnes, Pittsfield, Mass. Low-stock alarm for carding-engine feeders	506,046	Oct. 3	379	100	65	74

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Keating, Edward. (See Shay and Keating.)						
Keating, John D., Springfield, Mass. Pneumatic tire	494,575	Apr. 4	77	18	63	16
Keating, Robert M., Springfield, Mass. Automatic inflating device for rubber tires	491,563	Feb. 14	824	209	62	928
Keatinge, John R., Brooklyn, N. Y. Cushion for inking-pads	503,267	Aug. 15	1719	424	64	910
Keays, Arthur M. (See Tunnard and Keays.)						
Keck, Franklin J., assignor to Keck Transom Opener Company, Allentown, Pa. Transom-lifter	489,310	Jan. 3	502	138	62	109
Keck, Franklin J., assignor of one-fourth to F. G. W. Runk, Allentown, Pa. Window-chair	502,971	Aug. 8	1251	306	64	810
Keck, Rudolf. (See Jensen and Keck.)						
Keck Transom Opener Company. (See Keck, Franklin J., assignor.)						
Keckele, William H., Covington, Ky. Coupling for trolley-wires	492,301	Feb. 21	1966	490	62	1175
Keck, Milton, Gouverneur, N. Y. Sand-band for hubs	497,183	May 9	1267	321	63	864
Keef, Edson O., Lincoln, Me. Lantern	502,080	July 25	2470	620	64	494
Keefe, John C., Lowell, Mass. Purchase-block sheave	492,208	Feb. 21	1826	458	62	1145
Keefe, John C., Milwaukee, Wis. File-holder	507,228	Oct. 24	2444	602	65	496
Keeler, Berton A., Russell, Ark. Car-coupling	493,167	Mar. 7	618	155	62	1480
Keeler, Edwin O., et al. (See Weaver, William, assignor.)						
Keeler, Thomas C., Mount Holly, N. J. Measuring-caddy	502,124	July 25	2536	636	64	507
Keeley, John W., assignor to G. Draper & Sons, Hopedale, Mass. Loom-shuttle	505,903	Sept. 19	1475	384	64	1574
Keeling, Richard, Walhalla, N. D. Separator attachment for thrashing-machines	498,123	May 23	2787	697	63	1166
Keeler, Allen Z., et al. (See Burvill-Holmes, Ernest, assignor.)						
Keen & Hagerty. (See Wagandt, Charles L., assignor.)						
Keen, John, T. R. Marriott, and F. Cooper, London, England. Velocipede driving-gear	491,429	Feb. 7	600	{ 151 152 }	62	863
Keen Manufacturing Company. (See Whelpley, James A., assignor.)						
Keenan, George J., Buffalo, N. Y. Press-board for molding-machines	489,013	Jan. 3	55	15	62	14
Keenan, John A., Jr. (See Thompson, William D., assignor.)						
Keenan, Michael J., Galveston, Tex. Railway-rail	507,012	Oct. 17	2050	506	65	414
Keenan, Michael J., Galveston, Tex. Railway-crossing	511,624	Dec. 26	3065	749	65	2017
Keene, Milton W., assignor of one-third to L. R. Henkle, Dallas, Tex. Furnace	491,115	Feb. 7	83	23	62	764
Keene, William A., St. Louis, Mo., assignor to Mexican Machine Company, of Illinois. Fiber-cleaning machine	509,314	Nov. 21	2202	532	65	1204
Keeney, Charles H., Milwaukee, Wis. System and device for elevating water by pneumatic pressure	491,116	Feb. 7	83	23	62	765
Keeney, Charles H., Milwaukee, Wis. Device for preventing water from freezing in pipes	503,932	Aug. 22	2769	694	64	1120
Keeney, Charles H., assignor to International Self Closing Gas Burner Company, Milwaukee, Wis. Self-closing cut-off for gas-burners	491,943	Feb. 14	1418	354	62	1047
Keeney, Mayro, Somerville, Conn. Registering device for textile-fabric machines, &c.	491,564	Feb. 14	826	209	62	929
Keep, James M., New York, N. Y. Apparatus for holding and issuing paper for toilet or other purposes	495,892	Apr. 18	2199	554	63	439
Keep, James M., assignor to A. A. Weeks, New York, N. Y. Paper-clip	499,924	June 20	1968	478	63	1762
Keephart, William L., and J. C. Hackett, Wilkes-Barre, Pa. Bed-bottom	503,323	Aug. 15	1820	451	64	927
Keers, John, and W. B. McLaughlin, Philadelphia, Pa. Awning-frame	507,736	Oct. 31	3305	809	65	672
Kees, Anna, et al. (See Kees, William, assignor.)						
Kees, Frederick D. (See Lillie, William F., assignor.)						
Kees, Jacob, et al. (See Kees, William, assignor.)						
Kees, William, assignor of two-thirds to A. Kees, Northville, S. D., and J. Kees, Milwaukee, Wis. Door-hanger	504,591	Sept. 5	458	117	64	1355
Keester, Logan S., Union Mills, N. C. Saw filing and setting machine	508,111	Nov. 7	217	56, 57	65	799
Kegler, Daniel. (See Sommer, Peter K., assignor.)						
Kegler, William, Bellevue, Iowa. Pump-curb	505,047	Sept. 12	1216	313	64	1513
Kegler, William, Bellevue, Iowa. Machine for forming metal tubes	510,796	Dec. 12	1619	403	65	1728
Kehl, Anthony, assignor to Roots & Heinemann, Connersville, Ind. Clock-movement	494,145	Mar. 28	2250	573	62	1839
Kehlberger, Emile, and L. Pouque, Paris, France. Engine	510,480	Dec. 12	1055	253	65	1624
Kehlenbeck, Henry. (See Hotchkiss, Joseph V., assignor.)						
Kehm, William F., Portland, Iowa. Draft-elevator	508,023	Nov. 7	65	19	65	770
Kehr, Cyrus, Lakeside, Ill. Machine for and method of weaving coiled-wire fabric	511,435	Dec. 26	2761	{ 667 668 }	65	1962
Kehr, Cyrus, Lakeside, Ill., assignor to North Western Wire Mattress Company, Kenosha, Wis. Folding chair	491,214	Feb. 7	251	62, 63	62	795
Kehr, Cyrus, Lakeside, Ill., assignor to North Western Wire Mattress Company, Kenosha, Wis. Folding chair	491,215	Feb. 7	253	63	62	796
Kehr, Cyrus, Lakeside, Ill., assignor to North Western Wire Mattress Company, Kenosha, Wis. Folding chair	491,216	Feb. 7	254	63	62	796
Keil, Adam. (See Legg and Keil.)						
Keil, Adam, McKeesport, Pa. Electric lantern	489,150	Jan. 3	256	71	62	60
Keil, Adam, McKeesport, and A. R. Westerdahl, assignors to S. S. Brown, Pittsburg, Pa. Mining-machine	501,209	July 11	1076	274	64	212
Keil & Son, Francis. (See Reichwein, Herman, assignor.)						
Keiser, Francis, Mahanoy City, Pa. Heat-radiator	501,479	July 11	1503	379	64	289
Keiser, Henry B. A., Braddock, Pa. Straightening-machine	489,816	Jan. 10	1272	333	62	279
Keiser, Henry B. A., Braddock, Pa. Casting-plant	497,984	May 23	2577	645	63	1129
Keiser, Henry B. A., and C. M. Schwab, Braddock, Pa. Furnace	508,024	Nov. 7	66	19	65	770
Keist, George A., assignor of one-half to W. K. Oakes, Auburn, Me. Machine for rolling bandages	510,846	Dec. 5	829	200	65	1567
Keith, Eli, Hagerstown, Ind. Wash-tub	504,495	Sept. 5	307	78	64	1327
Keith, George E. (See Stinchfield, Lewis D., assignor.)						
Keith, Jesse M., Murray, Iowa. Farm-gate	498,124	May 23	2788	697	63	1166
Keith, Jesse M., Murray, Iowa. Gate for stock-yards	510,511	Dec. 12	1104	266	65	1634
Keith, Joseph, Duncan's, Va. Evaporator	490,967	Jan. 31	3195	816	62	690
Keith, Maddison Q., Centerville, assignor of one-half to H. H. Bowen, Uno, Ga. Car-coupling	495,493	Apr. 18	1567	394	63	324
Keizer, Gottlieb, Brewster, Nebr. Spader or digger	510,266	Dec. 5	712	172	65	1544
Kelchner, Alvin J. and F. L., assignors to John Schroeder Lumber Company, Milwaukee, Wis. Boring-machine	498,555	May 30	3515	870	63	1310
Kelchner, Frank L. (See Kelchner, Alvin J. and F. L.)						
Kellam, Julius W., assignor to M. E. Kellam, Brooklyn, N. Y. Flange-wrench	499,742	June 20	1662	400	63	1708
Kellam, Julius W., assignor to M. E. Kellam, Brooklyn, N. Y. Adjustable flange-wrench. (Reissue.)	11,394	Dec. 5	916	219	65	1585
Kellam, Minnie E. (See Kellam, Julius W., assignor.)						
Kellam, Minnie E. (See Kellam, Julius W., assignor.) (Reissue.)						
Kelleher, John. (See Hathaway and Kelleher.)						
Kellenberger, John, West Hoboken, N. J. Fabric-holder for embroidering-machines	502,463	Aug. 1	356	86	64	632
Keller, Arthur H., Durango, Colo. Roasting-furnace	506,511	Oct. 10	1248	311	65	251

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Keller, August, Cleveland, Ohio. Spring-hinge	496,160	Apr. 25	2598	654	63	530
Keller, Augustus R., Philadelphia, Pa. Machine for making binding-strips.	499,551	June 13	1358	322	63	1643
Keller, Frank. (See Murphy, Edward, assignor.)						
Keller, Frank W., Utica, N. Y. Chimney-rack	504,729	Sept. 12	680	173	64	1411
Keller, Gottlieb, West Hoboken, N. J., assignor of two-fifths to A. de Riesthal, Brooklyn, and S. Blog, New York, N. Y. Motor	504,272	Aug. 29	3343	835	64	1244
Keller, James D., Detroit, Mich., assignor of one-half to J. F. Shiel, Seymour, Ind. Toe-weight	503,089	Aug. 8	1417	349	64	841
Keller, Jeremiah, Canton, Ohio. Electric motor for dental work	493,431	Mar. 14	1034	267	62	1577
Keller, Jeremiah, Canton, Ohio. Regulator for dynamo-electric machines	506,881	Oct. 17	1840	460	65	373
Keller, Joseph S. (See Seymour, William S., assignor.)						
Keller, Peter, Chicago, Ill. Carburetor	499,635	June 13	1490	357	63	1665
Kelley, Calhoun L., assignor of two-thirds to C. O. Hoffman and J. P. Tribble, Kennett, Mo. Thill-coupling bolt	502,972	Aug. 8	1252	306	64	810
Kelley, Calhoun L., assignor of two-thirds to C. O. Hoffman and J. P. Tribble, Kennett, Mo. Commode	507,820	Oct. 31	3454	848	65	701
Kelley, Charles H. (See Robbins, Frank G., assignor.)						
Kelley, Charles H., Revere, Mass. Heel and shank finishing machine	490,808	Jan. 31	2931	752	62	648
Kelley, Fred H. (See Blair and Kelley.)						
Kelley, George B., Rockford, Ill. Burnishing-machine	493,033	Mar. 7	411	103	62	1440
Kelley, Manly S., Providence, R. I., assignor to Fenton Metallic Manufacturing Company, Jamestown, N. Y. Truck	504,476	Sept. 5	268	70	64	1320
Kelliher, Alfred T., Bethel, Me. Freight-carrier	507,137	Oct. 24	2284	561	65	468
Kellner, Carl, Vienna, Austria-Hungary. Machine for reducing paper-stock	489,079	Jan. 3	146	41	62	36
Kellogg, Alonzo C., Portage, Wis. Surgical instrument	509,226	Nov. 21	2057	496	65	1176
Kellogg, Charles G., Wyoming, N. J. Vessel for shallow-water navigation	497,325	May 16	1530	385	63	926
Kellogg, Edwin M., Delavan, Wis. Mechanical movement	500,584	July 4	71	21	64	14
Kellogg, Henry, Jr. (See Chase, Jonathan, assignor.)						
Kellogg, Henry J., New Haven, Conn. Awning-frame	495,113	Apr. 11	944	238	63	195
Kellogg, Martha E., Battle Creek, Mich. Dress-stay	502,436	Aug. 1	312	75	64	623
Kellogg, Milo G., Chicago, Ill. Electric cable	503,604	Aug. 22	2283	569	64	1028
Kellogg, Milo G., Chicago, Ill. Multiple switchboard. (Reissue)	11,386	Nov. 14	1509	369	65	1052
Kellogg, Milo G., Chicago, Ill. Multiple switchboard. (Reissue)	11,387	Nov. 14	1512	369	65	1053
Kellogg, Milo G., Chicago, Ill. Multiple switchboard. (Reissue)	11,388	Nov. 14	1515	370	65	1054
Kellogg, Warren T., assignor to Empire Portable Forge Company, Lansingburg, N. Y. Dauber-brush	497,721	May 16	2152	538	63	1038
Kellogg, Warren T., assignor to Empire Portable Forge Company, Lansingburg, N. Y. Dauber-brush	497,722	May 16	2154	538	63	1038
Kellogg, William L., Indianapolis, Ind. Stave-making machine	492,905	Mar. 7	213	52, 53	62	1400
Kellogg, William S. (See Heck and Kellogg.)						
Kells, Charles E., Jr., New Orleans, La. Electric-pole changer	502,300	Aug. 1	75	17	64	580
Kellum, Elmo F. and L. B., Cripple Creek, Colo. Toy	511,084	Dec. 19	2154	530, 531	65	1837
Kellum, Levi B. (See Kellum, Elmo F. and L. B.)						
Kellum, W. H., trustee, et al. (See Welch, Rosia W., assignor.)						
Kellum, William H., et al. (See Welch, Rosia W., assignor.)						
Kelly, Albert H., Salt Lake City, Utah Ter. Binding for books	506,512	Oct. 10	1249	311	65	251
Kelly, Charles C. (See Alger, William P., assignor.)						
Kelly & Co., R. A. (See Vanderploeg, William L., assignor.)						
Kelly, Cortland D. (See Eiseman, Walter S., assignor.)						
Kelly, Edward, et al. (See Livengood, Chadbourne, and Gibbons, assignors.)						
Kelly, Fergus, assignor to W. F. Osborne, Ansonia, Conn. Buckle	495,115	Apr. 11	948	239	63	196
Kelly, George A., Minneapolis, Minn. Log-kicker	497,098	May 9	1138	291	63	841
Kelly, George A., Longview, Tex. Plow	506,236	Oct. 10	766	189	65	157
Kelly, George W., Marquette, Mich. Brake-rod fork	510,267	Dec. 5	713	172	65	1545
Kelly, Henry C., Jr., Chicago, Ill. Pneumatic conveyer	494,274	Mar. 28	2456	618	62	1876
Kelly, Isaac V., Haverhill, assignor of one-third to J. D. Foster, Ironton, Ohio. Cultivator	497,883	May 23	2421	604	63	1102
Kelly, James J., Albany, N. Y. Dumb-waiter	495,114	Apr. 11	946	233	63	195
Kelly, James R., Waterloo, N. Y. Machine for tying cross-wires in wire fences	490,442	Jan. 24	2321	602, 603	62	513
Kelly, James R. and P. P., Waterloo, N. Y. Machine for tying cross-wires in wire fences	506,638	Oct. 10	1424	357	65	226
Kelly, Jarvis P. (See Hendrick and Kelly.)						
Kelly, Jarvis P., assignor to Warwick Cycle Manufacturing Company, Chicopee, Mass. Sprocket-wheel for velocipedes	497,279	May 9	1426	362	63	891
Kelly, Jarvis P., Chicopee, assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Pneumatic vehicle-wheel	504,273	Aug. 29	3344	836	64	1244
Kelly, John, Chicago, Ill. Valve device	505,272	Sept. 19	1579	412	64	1594
Kelly, John B., Pleasant Home, Oreg. Steam-power crosscut-saw	503,665	Aug. 22	2375	592, 593	64	1042
Kelly, John F. (See Stanley and Kelly.)						
Kelly, John F. (See Stanley, Kelly, and Chesney.)						
Kelly, John F., assignor to Stanley Laboratory Company, Pittsfield, Mass. Electrical condenser	508,887	Nov. 14	1448	358	65	1045
Kelly, John F. and C. C. Chesney, assignors to Stanley Laboratory Company, Pittsfield, Mass. Electric motor	507,658	Oct. 31	3200	783	65	652
Kelly, John F. and C. C. Chesney, assignors to Stanley Laboratory Company, Pittsfield, Mass. Alternating-current motor	508,721	Nov. 14	1198	297	65	999
Kelly, John M., Rochester, N. Y. Safety device for street-cars	507,138	Oct. 24	2285	561	65	468
Kelly, John M., Lexington, Ky. Cooking-stove	510,797	Dec. 12	1622	403, 404	65	1728
Kelly, John P., Saco, Me. Spindle	499,123	June 6	644	154	63	1503
Kelly, John T., North Fitzroy, Victoria. Raising sunken vessels	495,494	Apr. 18	1568	394	63	328
Kelly, John T., North Fitzroy, and A. McIntyre, Fitzroy, Victoria. Means for raising sunken vessels	491,725	Feb. 14	1078	272	62	980
Kelly, John W. (See Lane and Kelly.)						
Kelly, John W., et al. (See Lane, Fernando G., assignor.)						
Kelly, Joseph N., Arlington Heights, Ill. Sewing-machine feed	507,737	Oct. 31	3306	809	65	673
Kelly, Luke J., Albany, N. Y. Lifting-jack	497,409	May 16	1659	419	63	950
Kelly, Michael, New York, N. Y. Poison-feeding device	503,268	Aug. 15	1720	424	64	910
Kelly, O. W., et al. (See Neer, Harry M., assignor.)						
Kelly, Oliver S. (See Green, George F., assignor.)						
Kelly, Peter P. (See Kelly, James R. and P. P.)						
Kelly, Thomas, assignor of one-half to M. Meyer, St. Louis, Mo. Swinging step ladder or scaffold support	494,868	Apr. 4	552	139	63	107

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Kelly, Walter J. (See Rauch and Kelly.)						
Kelly, William E., Cleveland, Ohio. Game apparatus	509,601	Nov. 28	2727	659	65	1316
Kelsey, Benjamin F., Somerville, assignor to American Soda Fountain Company, Boston, Mass. Making dies for producing designs on soft metal	491,179	Feb. 7	196	50	62	785
Kelsey, Frank N., New Haven, Conn. Railway-signal	491,754	Feb. 14	1120	283	62	989
Kelsey, John B., J. Wallace, and J. B. Thompson, Lebanon, Oreg. Rotary wheeled harrow	510,143	Dec. 5	507	116	65	1505
Kelso, Oliver M., Rock Rapids, Iowa. Animal-bolder	490,968	Jan. 31	3196	817	62	699
Kelso, William, assignor to W. McConway, Pittsburg, Pa. Car-coupling	492,357	Feb. 21	2058	313	62	1192
Kem, Stephen A., and E. Frederick, Purcell, Ind. Ter. Photographic washing apparatus	503,144	Aug. 15	1522	374	64	873
Kemp, Amos J., assignor of one-half to C. Bratton, Mansfield, Tex. Seed-planter and fertilizer-distributor	496,362	Apr. 25	2936	733 734	63	594
Kemp, Charles E. (See Kemp, Clarence M. and C. E.)						
Kemp, Clarence M. and C. E., Baltimore, Md. Gas-mixer	507,013	Oct. 17	2051	507	65	414
Kemp, George W., assignor of one-half to A. G. Forbes, Montgomery, Ala. Overseaming attachment for sewing-machines	497,668	May 16	2067	516	63	1022
Kemp, John H. O., Front Royal, Va. Car-coupling	509,098	Nov. 21	1724	426	65	1113
Kemp, John M. (See Wynkoop and Kemp.)						
Kemp-Welch, James. (See Dudley-Cooper, Henry, assignor.)						
Kemp, William, Jr., Washington, D. C. Type-matrix	507,275	Oct. 24	2525	622	65	510
Kempel, Casper L. (See Brigger, Gottfried, assignor.)						
Kempel, Charles W., Bellaire, Ohio. Lamp	511,337	Dec. 26	2583	629	65	1930
Kempkens, Heinrich, Greffarth, near Crefeld, Germany. Press for pressing cheese, &c.	489,151	Jan. 3	258	71	62	60
Kempner, Moses W., St. Louis, Mo. Opera-chair	506,914	Oct. 17	1892	472	65	383
Kempshall, Eleazer. (See De Long and Kempshall.)						
Kempshall, Eleazer, assignor to W. R. Walkley, Brooklyn, N. Y. Hook	504,039	Aug. 29	2961	740	64	1172
Kempshall Specialty Manufacturing Company. (See De Long and Kempshall, assignors.)						
Kendall, Charles B. (See Schaaake, Henry, assignor.)						
Kendall, Charles B., Newton, Mass., and H. Schaaake, Baltimore, Md.; said Schaaake assignor to said Kendall, San Francisco, Cal. Can-seaming machine	489,484	Jan. 10	777	205 206 207	62	179
Kendall, David W. (See Brenner, David H., assignor.)						
Kendall, Edward D., Brooklyn, N. Y. Composition of matter for the extraction of precious metals from ore	500,137	June 27	2334		63	1838
Kendall, Edward D., Jamaica, N. Y. Refrigerating apparatus	502,437	Aug. 1	313	75	64	623
Kendall, Edward D., Jamaica, N. Y. Apparatus for producing cold and ice	502,438	Aug. 1	317	75	64	623
Kendall, Isaac N., and G. Cassady, Vancouver, Canada. Curved saw-tooth	499,866	June 20	1917	465	63	1753
Kendall, John A., Maysville, Mo. Steam-cooker	510,798	Dec. 12	1624	404	65	1728
Kendrick, George R., Portland, Ind. Steam-pump	494,207	Mar. 28	2352	595	62	1859
Kendrick, Hiland H., Fulton, N. Y. Wrench	508,519	Nov. 14	896	220	65	939
Kendrick, John, St. Louis, Mo. Dress-stay	501,078	July 11	855	232	64	229
Kenehan, Gilbert P., Cleveland, Ohio. Belt-fastener	507,622	Oct. 31	3132	766	65	640
Kenevel, Jeannot W., Chicago, Ill. Apparatus for manufacturing gas	493,891	Mar. 21	1797	458	62	1739
Kenevel, Jeannot W., Chicago, Ill. Electric trolley	495,940	Apr. 18	2265	570	63	451
Kenevel, Jeannot W., Chicago, Ill. Driving mechanism	498,936	June 6	329	77	63	1450
Kenison, John B. (See Burk, Michael F., assignor.)						
Kenison, John B., and M. F. Burk, Lynn, Mass. Staging-bracket	511,625	Dec. 26	3066	750	65	2018
Kenison, John B., and M. F. Burk, Lynn, Mass. Folding bracket	511,626	Dec. 26	3067	750	65	2018
Kennard, Charles W., et al. (See Shaffer, Richard M., assignor.)						
Kennard, William K., Camden, Me. Twine-cutter	508,424	Nov. 14	730	180	65	908
Kennedy, Charles W. (See Ashley, Ralph, assignor.)						
Kennedy, Charles W., Philadelphia, Pa. Storage-battery	507,139	Oct. 24	2286	561 562	65	468
Kennedy, Daniel, New York, N. Y. Valve	495,739	Apr. 18	1962	495	63	395
Kennedy, Ed., et al. (See Kitton, John C., assignor.)						
Kennedy, Edward S. T. (See Hoyt, Benjamin W., assignor.)						
Kennedy, Edward S. T., New York, N. Y. Boiler-deflector. (Reissue)	11,374	Oct. 10	1453	365	65	291
Kennedy, Franklin K., assignor to Brighton Sign Company, Limited, New Brighton, Pa. Sign-letter	489,905	Jan. 10	1412	365	62	306
Kennedy, George A., Olena, Ohio. Hay-stacker	494,336	Mar. 28	2556	644	62	1896
Kennedy, George A., Olena, Ohio. Saw-filing device	508,732	Nov. 14	1199	297	65	999
Kennedy, Grafton C. (See Brandenburg, Albert F., assignor.)						
Kennedy, John C., Lebanon, Ky. Mail-bag fastener	506,699	Oct. 17	1530	383	65	316
Kennedy, John J. (See Gaffney, Thomas F., assignor.)						
Kennedy, Joseph, administrator. (See Groom, Patrick W.)						
Kennedy, Julian, Latrobe, Pa. Pump-valve	491,226	Feb. 7	362	90	62	817
Kennedy, Leonard W., Oakland, Cal. Railway-rail joint	510,268	Dec. 5	714	173	65	1545
Kennedy, Logan P., assignor to Lithgow Manufacturing Company, Louisville, Ky. Kicker-latch for stove or other doors	501,883	July 18	2155	535	64	420
Kennedy, Richard J. (See Stout, John P., assignor.)						
Kennedy, Robert J., assignor of two-thirds to G. H. Crafts, Redlands, and G. Boalich, Colton, Cal. Hydraulic amalgamator	498,979	June 6	408	95	63	1463
Kennedy, Rufus L. (See Hadley, Joshua A., assignor.)						
Kennedy, Thomas, New York, N. Y. Scaffold truss or support for building, decorating, or other purposes	496,739	May 2	556	149 150	63	719
Kennedy, Walter, Milan, Ill. Farm-gate	503,049	Aug. 8	1355	335	64	831
Kennelly, Arthur E. (See Ott and Kennelly.)						
Kennelly, Arthur E., assignor to T. A. Edison, Orange, N. J. Static voltmeter	500,236	June 27	2493	609 610	63	1866
Kennelly, John J., assignor, by mesne assignments, to Sterling Car Heating and Lighting Company, New York, N. Y. Sanding-box for cars	501,722	July 18	1895	471	64	375
Kenner, Charles A., Utica, assignor of one-half to W. M. Widener, York, Nebr. Syringe	493,591	Mar. 14	1313	335	62	1630
Kenner, William H., Dundee, Tex. Baling-press	491,967	Feb. 14	1451	361 362	62	1054
Kenney, Alphonso E., and W. H. Taber, Boston, Mass. Mattress-frame	510,541	Dec. 12	1188	286	65	1648
Kenney, Lester B., Dansville, N. Y. Car-coupling	506,118	Oct. 3	492	128	65	97
Kenney, George P., Watertown, N. Y. Cash-carrier	494,783	Apr. 4	415	103	63	81
Kenish, William, Wilmington, N. C. Pile	509,474	Nov. 28	2527	610	65	1276
Kenosha Crib Company. (See Hannahs, Fred C., assignor.)						
Kent, Charles C., Taunton, assignor of one-half to G. Draper & Sons, Hopedale, Mass. Ring-spinning frame	501,427	July 11	1430	359	64	275
Kent, John, Brockton, Mass. Elastic-gore marker	500,007	June 20	2090	506	63	1783
Kent, John, and C. R. Glass, Chambers county, Ala. Motor	506,119	Oct. 3	493	128	65	97
Kent, Robert S., Gloucester City, N. J. Air-heating furnace	493,333	Mar. 14	891	228	62	1548

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Kent, Thomas A. (See Glafcke, Paul E., assignor.)						
Kent, Walter G., and H. S. Price, London, England. Fluid-meter.....	491,245	Feb. 7	296	74, 75	62	805
Kenton Can Company. (See France, Albert L., assignor.)						
Kenyon, William H., New York, N. Y., assignor to Hall Signal Company, of Maine. Electric signaling apparatus.....	492,497	Feb. 28	2298	571	62	1253
Keough, Patrick J. (See Nelsen, Peder, assignor.)						
Kepler, Beroth M., assignor of four-fifths to G. W. Good, C. A. Spangler, E. T. Swain, and J. O'Hagen, Reno, Pa. Ratchet-drill.....	510,542	Dec. 12	1190	286	65	1648
Kepler, William C., Flowerfield, and F. A. Wegner, Three Rivers, Mich. Pneumatic tire.....	506,594	Oct. 10	1365	342	65	274
Kepler, Eugene T., Helena, Mont., assignor of one-fourth to R. H. Shaeffer. Material for forming boxes, &c.....	508,723	Nov. 14	1200	298	65	999
Ker, George, Portland, Oreg. Car-coupling.....	504,697	Sept. 5	631	160	64	1389
Kerman, Herbert C., St. Catharines, assignor of one-third to W. S. Kerman, Toronto, Canada. Device for making cigarettes.....	504,040	Aug. 29	2962	741	64	1172
Kerman, William S. (See Kerman, Herbert C., assignor.)						
Kerneen, George S., assignor of two-thirds to J. A. Smith and F. V. Puffer, Boston, Mass. Disk harrow.....	506,047	Oct. 3	381	101	65	75
Kern, Frank, Mattoon, Ill. Garment-supporter.....	495,893	Apr. 18	2202	554	63	439
Kern, George N., and J. W. Fielder, Mason City, Ill. Band-cutting and feeding attachment for thrashing-machines.....	504,220	Aug. 29	3257	812	64	1227
Kern, Jacob C., Wilkes-Barré, Pa. Combined trunk and wardrobe.....	502,081	July 25	2471	621	64	495
Kern, Louis, Chicago, Ill. Coin-controlled lung-testing machine.....	502,439	Aug. 1	322	76	64	625
Kern, Samuel E., Bellevue, Ohio. Wrench.....	504,041	Aug. 29	2963	741	64	1172
Kern, Thomas S., et al. (See Anderson, John A. E., assignor.)						
Kern, William C., et al. (See Anderson, John A. E., assignor.)						
Kern, William H., assignor of one-half to W. H. Ebert, Philadelphia, Pa. Elevator.....	495,554	Apr. 18	1658	{ 417 418 }	63	344
Kernaghan, George F. (See Shultz, Jacob F., assignor.)						
Kernan Furnace Company. (See Owens, William J., assignor.)						
Kernodle, George S., et al. (See Kernodle, James A., assignor.)						
Kernodle, James A., assignor of two-thirds to G. W. Ellington and G. S. Kernodle, Reidsville, N. C. Churn.....	491,737	Feb. 14	1096	277	62	984
Kerr, James W., San Francisco, Cal. Rope sheave or wheel.....	492,331	Feb. 21	2012	{ 500 501 }	62	1184
Kerr, John F. (See Chipman, Robert J., assignor.)						
Kerr, Robert C., and P. Hardman, assignors to Kerr Thread Company, Fall River, Mass. Hot-box detector.....	496,659	May 2	430	115	63	697
Kerr Thread Company. (See Cook, Richard H., assignor.)						
Kerr Thread Company. (See Kerr and Hardman, assignors.)						
Kerr, William, Cleveland, Ohio. Sink or basin trap.....	489,639	Jan. 10	1007	262	62	225
Kersey, Robert H., Lebanon, Ind. Apparatus for heating and circulating hot water.....	511,436	Dec. 26	2767	669	65	1962
Kershaw, Earnest J., Cleveland, Ohio. Machine for manufacturing wooden trays.....	501,079	July 11	856	{ 222 223 }	64	171
Kershaw, William, Fall River, Mass. Picker-check for looms.....	498,515	May 30	3439	853	63	1297
Kersteter, Charles W., Chicago, Ill. Automatic fire-sprinkler.....	498,661	May 30	3691	912	63	1340
Kertell, Charles, San Francisco, Cal. Holder and protector for pens or pencils.....	499,552	June 13	1359	323	63	1643
Kessler, Charles E., Humboldt, Kans. Corn-planter.....	500,909	July 4	585	153	64	107
Kessler, James H., Humboldt, Kans. Washing-machine.....	495,811	Apr. 18	2071	523	63	415
Kester, George F. (See Jaques and Kester.)						
Kester, Jesse F., La Grange, Ill., assignor to F. P. Little Electrical Construction and Supply Company, Buffalo, N. Y. Electric-arc lamp.....	510,605	Dec. 12	1300	316	65	1668
Kester, John H., Winston, N. C. Tobacco-box-clamping machine.....	494,004	Mar. 21	2005	{ 510 511 }	62	1779
Kester, John H., Winston, N. C. Machine for clamping and holding boxes containing plug-tobacco.....	505,881	Oct. 3	128	33	65	26
Ketcham, Lincoln H., Comley, Ohio. Fence-post driver.....	500,138	June 27	2335	564	63	1838
Ketchum, David W., Evanston, assignor to Star Rosin Company, Chicago, Ill. Turpentine-box.....	499,388	June 13	1076	261	63	1593
Ketchum, Frank S., New York, N. Y. Metallic railway-tie.....	504,066	Aug. 29	2996	{ 748 749 }	64	1178
Ketchum, Frank S., New York, N. Y. Angle-bar for railway-rail joints.....	504,067	Aug. 29	2998	749	64	1179
Ketchum, Oliver W., Toronto, Canada. Gas-producer.....	490,771	Jan. 31	2873	738	62	636
Ketchum, Oliver W., Toronto, Canada. Steam-boiler gas-producing furnace.....	491,359	Feb. 7	501	129	62	844
Ketchum, Oliver W., Toronto, Canada. Water heating and purifying device.....	491,360	Feb. 7	504	130	62	844
Ketter, John F., Ironton, Ohio. Two-wheeled vehicle.....	492,984	Mar. 7	336	81	62	1426
Ketteringham, John P., assignor to F. O'Brien and S. J. Perrault, Natchez, Miss. Transom-lifter.....	489,311	Jan. 3	503	139	62	109
Ketterlinus, John L. (See Brown, Samuel, assignor.)						
Kettron, Charles, Macomb, Ill. Rotary steam-engine.....	507,738	Oct. 31	3308	{ 809 810 }	65	673
Keuffel, Willie L. E., Hoboken, N. J. Folding steel measure.....	496,123	Apr. 25	2546	642	63	520
Keuser, Emanuel, assignor to M. Keuser, Philadelphia, Pa. Dyeing-frame.....	499,170	June 6	720	171	63	1515
Keuser, Mary. (See Keuser, Emanuel, assignor.)						
Key, Isaac, assignor of one-half to O. Capron and J. Hahn, Winamac, Ind. Churn.....	491,055	Jan. 31	3345	853	62	730
Key, Thomas J., and J. M. Marshall, Mansfield, Ark. Gate-latch.....	495,093	Apr. 11	894	226	63	187
Keyes, Frank A., Palatine, Ill. Shield for rockers.....	510,799	Dec. 12	1625	404	65	1729
Keyes, Frank E., assignor to United Indurated Fibre Company of New Jersey, Lockport, N. Y. Machine for forming hollow pulp articles.....	503,284	Aug. 15	1750	432	64	915
Keyes, James A. (See Benton and Keyes.)						
Keyless Lock Company. (See Craig, James D., assignor.)						
Keys, Lee & Huewe Company. (See Huewe, George A., assignor.)						
Keystone Manufacturing Company. (See Packer, George W., assignor.)						
Keystone Watch Case Company. (See Bradley, William W., assignor.)						
Keystone Watch Case Company. (See Hunter, Rudolph M., assignor.)						
Keystone Watch Case Company. (See Mink, Fritz, assignor.)						
Keystone Watch Case Company. (See Platnauer, Louis, assignor.)						
Keywood, William, Tacoma, Wash. Automatic air-brake.....	500,910	July 4	538	154	64	108
Kibbe, Edison A., Seneca, Kans. Washing-machine.....	499,232	June 13	810	192	63	1545
Kibby, Alexander S., Chicago, Ill. Machine for affixing postage-stamps to letters.....	503,933	Aug. 22	2771	694	64	1120
Kidd, Gideon P., assignor of one-half to J. H. Arnold and J. H. Barnhart, Roann, Ind. Wire-stretcher.....	493,432	Mar. 14	1036	267	62	1578
Kidd, John S., Des Moines, Iowa. Wagon dump and elevator. (Reissue).....	11,340	May 23	2943	{ 732 733 }	63	1192
Kidd, John S., Des Moines, Iowa. Scothing device for dumping-platforms.....	511,021	Dec. 19	2051	507	65	1817

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Kidder, Amasa N., assignor of one-half to A. Howard, Chelmsford, Mass. Paper-making machine	492,209	Feb. 21	1827	458	62	1146
Kidder, Joshua R., Port Clinton, Ohio. Lounge-cot	497,580	May 16	1931	485	63	997
Kidder, Wellington P., Boston, Mass. Safety device for elevators	495,094	Apr. 11	894	226 227	63	187
Kidney, George H., Cleveland, Ohio. Potato-digger	510,070	Dec. 5	387	85, 86	65	1482
Kidwell, John W., Washington, D. C. Manufacture of glazed iron	503,423	Aug. 15	1969		64	954
Kidwell, John W., Washington, D. C. Manufacture of pigment or paint	503,424	Aug. 15	1970		64	954
Kidwell, John W., Washington, D. C. Non-corrodible plastic composition	503,425	Aug. 15	1971		64	954
Kieckhefer Brothers Company. (See Walter, Sebastian, assignor.)						
Kiefer, Peter, Belle Fountain, Wis. Device for use in binding grain-shocks	504,592	Sept. 5	459	117	64	1355
Kiehl, Joseph S. (See Meyer, Kiehl, and Grant.)						
Kiehl, Joseph S., Chicago, Ill. Automatic sprinkler and fire-indicator	506,700	Oct. 17	1531	383	65	316
Kiel, Cornelius Hoboken, N. J. File case and drawer	498,012	May 23	2620	654	63	1136
Kiel, William, Butler, N. J., assignor to Butler Hard Rubber Company, of New York. Tray	506,120	Oct. 3	494	128	65	97
Kielef, Timothy J., New York, N. Y. Drain-trap	511,437	Dec. 26	2768	669	65	1963
Kieselhorst, John A., St. Louis, Mo. Piano-mute	498,352	May 30	3184	792	63	1250
Kieserling, Robert, Hamburg, Germany. Apparatus for making hollow articles from plastic material	505,362	Sept. 19	1731	447 448	64	1621
Kieserling, Robert, and M. Möller, Altona, Germany. Making hollow objects from plastic material	502,196	July 25	2656	671 672	64	531
Kieswetter, Joseph F., Toledo, Ohio. Warp-clamp for looms	493,405	Mar. 14	992	256	62	1570
Kilbourne, Frederick H., et al. (See Wheat, John J., assignor.)						
Kiley, Daniel, Brooklyn, N. Y. Balanced slide-valve	496,740	May 2	557	150	63	720
Kiley, George A., Hazleton, Pa. Furnace-boiler for heating houses, &c.	496,613	May 2	347	95	63	682
Kille, Chalkly J., Moorestown, N. J. Air-supplying device for stoves or furnaces	495,740	Apr. 18	1963	495	63	396
Killefer, John, Redlands, Cal. Cultivator	503,145	Aug. 15	1523	374	64	874
Killinger, Montgomery F., Wytheville, Va. Ratchet-wrench	493,273	Mar. 14	786	203	62	1530
Kilmer, Charles H., Elmira, N. Y. Bill-file	493,433	Mar. 14	1037	267	62	1578
Kilmer, Irving A., Newburg, N. Y. Rod-reel	501,251	July 11	1147	291	64	223
Kilmer, Irving A., Newburg, N. Y. Piston-packing	503,859	Aug. 22	2660	666	64	1099
Kilmer, Irving A., Newburg, N. Y. Piston-packing	503,860	Aug. 22	2661	667	64	1099
Kilmer, William A., Newburg, N. Y. Bale-tie	504,436	Sept. 5	204	53	64	1308
Kilner, William C., East Shelby, N. Y. Fence-post	510,030	Dec. 5	324	72	65	1470
Kilpatrick, Alexander, et al. (See Sperry, Charles F., assignor.)						
Kimball, Abbie G. (See Kimball, Frederic N., assignor.)						
Kimball, Charles M., Auburndale, Ohio. Bristle-fastener for brushes	503,795	Aug. 22	2577	641	64	1082
Kimball, Daniel E., Topeka, Kans. Electric railway	489,563	Jan. 10	906	236	62	204
Kimball, Eben A., Brockton, Mass. Machine for turning irregular forms	498,170	May 23	2850	713	63	1178
Kimball, Frank A., et al. (See Turner, Alonzo G., assignor.)						
Kimball, Frank C., Salem, Mass. Machine for shaving leather	490,443	Jan. 24	2322	603	62	514
Kimball, Freddie C., assignor to H. E. Kimball and A. I. Whitney, Cleveland, Ohio. Har-ness	492,210	Feb. 21	1828	458	62	1146
Kimball, Frederic N., Rochester, assignor to A. G. Kimball, New York, N. Y. Sash-balance	494,959	Apr. 4	676	174	63	130
Kimball, George H., et al. (See Kitton, John C., assignor.)						
Kimball, Helen E., et al. (See Kimball, Freddie C., assignor.)						
Kimball, James F., Tilden, Me., assignor to Western Wheeled Scraper Company, Aurora, Ill. Road-scraper	491,565	Feb. 14	827	210 211	62	929
Kimball, John J. (See Queen and Kimball.)						
Kimball, Orrin A., and J. Gramer, Boston, Mass. Piano	503,861	Aug. 22	2662	667	64	1099
Kimber, Abraham, assignor of three-eighths to E. W. Bradford, Indianapolis, Ind. Mail-pouch deliverer	496,518	May 2	200	53	63	655
Kimble, James P., Rose Hill, Iowa. Track-clamp	499,233	June 13	811	192	63	1545
Kimble, Loren W., assignor to Libbey Glass Company, Toledo, Ohio. Feeding-up machine for polishing-tools	504,593	Sept. 5	460	117	64	1355
Kime, Enoch, Milton, Ohio. Land-roller	489,587	Jan. 10	940	244	62	210
Kime, Enoch, Milton, Ohio. Land roller and pulverizer	502,301	Aug. 1	76	17	64	580
Kimplen, Cornelius, Chicago, Ill. Crushing or grinding machine	507,140	Oct. 24	2289	562 563	65	468
Kimplen, Cornelius, assignor to M. Kimplen, Chicago, Ill. Rock-breaking machine	510,800	Dec. 12	1626	404 405	65	1729
Kimplen, Mary. (See Kimplen, Cornelius, assignor.)						
Kimsey, William T., Michigan City, Ind. Car-coupling	497,184	May 9	1268	322	63	865
Kincaid, Frank G. (See Mansfield, Eben B., assignor.)						
Kinch, John Z., et al. (See Reagan, Saupp, and Hibbs, assignors.)						
Kind, Charles, Friendship, Wis. Separator-sieve	500,714	July 4	293	79	64	54
Kind, Hermann. (See Steinen, Otto, assignor.)						
Kind, Joseph J. de, Philadelphia, and A. S. Vogt, Altoona, Pa. Drying-machine	506,915	Oct. 17	1894	472	65	384
Kinder, Joseph J. de, Philadelphia, and A. S. Vogt, Altoona, Pa. Drying-machine	506,916	Oct. 17	1896	472	65	384
Kinder, Joseph J. de, Philadelphia, and A. S. Vogt, Altoona, Pa. Drying-machine	506,917	Oct. 17	1897	472	65	384
Kindler, Louis A., Cleveland, Ohio. Stringing pianos	491,652	Feb. 14	968	243	62	958
King, Alfred S. (See Hayward, King, and Loveland.)						
King, Alexander, Painesville, and F. F. King, Cleveland, Ohio. Shears and scissors sharp-ener	492,810	Mar. 7	61	14	62	1370
King Bridge Company. (See Rasch, Peter, assignor.)						
King, Charles H., Jesup, Iowa. Portable crane	501,147	July 11	986	251	64	194
King, Charles W., Kalamazoo, Mich. Portable boat	507,439	Oct. 24	2301	685 686	65	565
King, Charles W., Newton, Mass. Hand tacking-machine	508,547	Nov. 14	934	230 231	65	947
King, Clarence E., Washington, D. C. Saw-gage	489,817	Jan. 10	1274	334	62	280
King, Daniel, Finksburg, Md. Car-truck	500,008	June 20	2092	507	63	1784
King, Downing H., Farmersville, Ill. Churn	501,839	July 18	2075	512	64	407
King, Edward G., and C. H. Becker, Beloit, Wis. Machine for forming screw-threads	502,302	Aug. 1	77	17, 18	64	580
King, Edward P., et al. (See Edison, Thomas A., assignor.)						
King, Francis J., Baltimore, Md. Shoe	502,973	Aug. 8	1253	306	64	810
King, Frank, London, England. Secondary battery	501,723	July 18	1896	471	64	376
King, Frank, and E. Clark, London, England. Secondary battery	500,394	June 27	2744	675	63	1910
King, Frank F. (See King, Alexander and F. F.)						
King, Frank H. and G. W., Marion, Ohio. Device for locking and operating dredging-spuds	492,687	Feb. 28	2593	641 642	62	1313

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King, Fred G. (See Darragh and King.)						
King, Frederick J., London, England. Manufacture of metal chests	498,718	May 30	3805	{ 937 938 }	63	1359
King, George W. (See King, Frank H. and G. W.)						
King, George W., Marion, Ohio. Dredger or traveling crane	494,637	Apr. 4	173	42	63	35
King, George W., Marion, Ohio. Dredger or traveling crane	494,638	Apr. 4	174	42, 43	63	36
King, George W., Marion, Ohio. Dredger or traveling crane	494,639	Apr. 4	176	43, 44	63	36
King, George W., Marion, Ohio. Loading or unloading machine	494,813	Apr. 4	466	{ 116 117 }	63	89
King, Hawkins A., and A. J. Wright, Quincy, Mich. Machine for attaching cross-wires in wire fences	490,600	Jan. 24	2572	663	62	563
King, Jacob C., York, Pa. Automatic grain-weigher	505,769	Sept. 26	2456	619	64	1771
King, Jacob H., Piqua, Ohio. Grinding-machine	509,538	Nov. 28	2624	635	65	1294
King, James M., North Danville, Va. Tobacco-tagging machine	494,296	Mar. 28	2490	628	62	1883
King, James M., North Danville, Va. Tobacco-flavoring machine	494,960	Apr. 4	677	174	63	130
King, James M., Hebron, Nebr. Planter	495,495	Apr. 18	1569	395	63	328
King, James O., Harvey, assignor of three-fourths to A. W. L. Hager, Triangle, and R. B. Boone, Durham, N. C. Grain cleaning and separating machine	506,513	Oct. 10	1250	312	65	251
King, John, Chicago, Ill. Electric annunciating push-button	494,337	Mar. 28	2557	644	62	1896
King, John M. (See Velie, Charles E., assignor.)						
King, John P., Philadelphia, Pa. Automatic crying doll	489,014	Jan. 3	55	16	62	14
King, John P., Philadelphia, Pa. Automatic musical toy	507,014	Oct. 17	2053	507	65	414
King, Lewis J., assignor of one-half to T. R. Knox, Shoal Creek, Ga. Handle-clamp, &c.	504,221	Aug. 29	3259	813	64	1228
King, Luzerne, South Sioux City, Nebr. Cutting mechanism for mowers or reapers	490,024	Jan. 17	1643	427	62	367
King, Richard W., Wichita, Kans. Railway construction	499,925	June 20	1970	479	63	1762
King, Robert, Mansfield, La., assignor to Kingsland & Douglas Manufacturing Company, St. Louis, Mo. Cotton-ginning apparatus	510,269	Dec. 5	716	{ 173 174 }	65	1545
King, Robert F., Bozeman, Mont. Whiffletree	490,749	Jan. 31	2843	729	62	630
King, Robert W., Montreal, Canada. Transferring mechanism for knitted work	506,852	Oct. 17	1789	{ 449 450 }	65	364
King, Roswell D., New York, N. Y. Dental engine	500,139	June 27	2338	{ 564 565 }	63	1838
King, Samuel R., Boston, Mass. Fire escape or ladder	511,438	Dec. 26	2769	669	65	1963
King, Sidney D., Pittston, Pa. Car-truck	491,263	Feb. 7	320	{ 670 81, 82 }	62	810
King, Theodore E., Westport, Conn. Miter-saw	506,433	Oct. 10	1112	{ 275 276 277 }	65	224
King, Theodore J., Washington, D. C. Fare-receiver	511,703	Dec. 26	3181	{ 778 779 }	65	2039
King, Thomas S., Cincinnati, Ohio. Chair	505,832	Oct. 3	46	13	65	12
King, Will H. T., Dallas, Tex. Wrench	496,941	May 9	903	237	63	801
King, William, Ottawa, Canada. Diaphragm for boilers	510,347	Dec. 5	831	201	65	1568
King, William H., New Haven, Conn. Sash-holder	497,245	May 9	1362	346	63	882
King, William L., Winston, N. C. Button	504,437	Sept. 5	205	53	64	1309
King, William M. (See Sterick, Sylvester T. F., assignor.)						
King, William S. (See Buttricks, Frederick D., assignor.)						
King, William S. (See Goodhue, Henry M., assignor.)						
King, William S. (See O'Bolger, Thomas, assignor.)						
King, William S., assignor of one-half to F. L. Wardroper and E. B. Wallace, Richmond, Ky. Stair-curve	499,636	June 13	1491	358	63	1665
Kingman, Alpheus H. (See Mosely and Kingman.)						
Kingman, William H., Reading, Mass. Appliance for teaching penmanship	503,796	Aug. 22	2578	641	64	1082
Kingsford, Thomson. (See Joy, Robert, assignor.)						
Kingsland, Allan B. (See Fitch and Kingsland.)						
Kingsland & Douglas Manufacturing Company. (See King, Robert, assignor.)						
Kingsland & Douglas Manufacturing Company. (See Reeder, William S., assignor.)						
Kingsland, Hugh A., Belleville, and W. P. Sanger, East Orange, N. J. Motor	497,246	May 9	1364	346	63	883
Kingsley, Albert F. (See Milton, John, assignor.)						
Kingsley, Albert F., Washington, D. C. Locomotive or other boiler furnace	506,595	Oct. 10	1366	342	65	274
Kingsley, Horace L., Racine, Wis. Vehicle-pole	503,605	Aug. 22	2284	570	64	1026
Kingston, George, Worcester, Mass. Wire hook	493,626	Mar. 14	1375	349	62	1642
Kingzett, Charles T. (See Woodcock and Kingzett.)						
Kinkead, James H., Virginia City, Nev. Grinding-pan	492,962	Mar. 7	302	76	62	1419
Kinkel, William. (See Schmid and Kinkel.)						
Kinkert, Samuel. (See Bryant and Kinkert.)						
Kinman, James J., Petersburg, Ind. Clothes-line holding and operating device	492,628	Feb. 28	2507	621	62	1297
Kinnard, Will M., Dayton, Ohio. Autographic register	509,382	Nov. 23	2328	564	65	1238
Kinnear, William R., Columbus, Ohio. Railway-tie	495,045	Apr. 11	809	204	63	170
Kinnear, William R., Columbus, Ohio. Metallic roofing	499,024	June 6	498	{ 116 117 }	63	1478
Kinnear, William R., Columbus, Ohio. Roof	507,545	Oct. 31	2984	{ 732 733 }	65	612
Kinner, John M. (See Rex and McNiece, assignors.)						
Kinney, Jesse, Detroit, Mich. Puzzle	496,263	Apr. 25	2759	690	63	559
Kinny, John B. (See Cool, Charles H., assignor.)						
Kinross, John W., Springfield, Ill. Band-cutter and feeder	511,242	Dec. 19	2411	587	65	1285
Kinsell, James L., and F. A. Leavens, Belle Plaine, Iowa. Car-axle box	507,141	Oct. 24	2292	563	65	469
Kinsella, Edward, Rochester, N. Y. Shank-piece for shoes	492,125	May 23	2789	{ 697 698 }	63	1167
Kinsella, Edward, Rochester, N. Y., assignor of one-half to M. J. Moloney. Shoe	505,428	Sept. 19	1842	473	64	1643
Kinser, George W., Plattsmouth, Nebr. Drill-chuck	498,797	June 6	75	18	63	1402
Kinsey, Joseph W. (See Wright and Kinsey.)						
Kinsman, Frank E., Plainfield, N. J. Electric train-controlling apparatus	492,402	Feb. 28	2128	533	62	1219
Kinsman, Frank E., Plainfield, N. J. Means for operating throttle-valves of steam-engines	492,403	Feb. 28	2133	{ 533 534 }	62	1220
Kinsman, Frank E., Plainfield, N. J. Electric circuit for controlling trains	504,042	Aug. 29	2963	741	64	1172
Kinsman, Frank E., Plainfield, N. J. Contact for signaling to cars	505,833	Oct. 3	47	13	65	12
Kinsman, Frank E., Plainfield, N. J. Electric car-lighting system	506,237	Oct. 10	768	{ 189 190 }	65	157
Kinsman, John H., Bridgeport, Conn. Telephone-call	491,893	Feb. 14	1342	332	62	1032
Kintner, Alcuin E., Painesville, Ohio. Magnetic lock	494,146	Mar. 28	2252	574	62	1839

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Kintner, Charles J., New York, N. Y. Combined toilet article	497,451	May 16	1728	436	63	961
Kintner, Charles J., New York, N. Y. Electric-railway switching mechanism	511,627	Dec. 26	3068	750	65	2018
Kintner, Charles J., New York, N. Y., assignor of one-third to G. Stahl, Philadelphia, Pa. Apparatus for electrically-propelled cars	492,627	Feb. 23	2505	621	62	1296
Kintner, Charles J., New York, N. Y., assignor of one-third to G. Stahl, Philadelphia, Pa. Closed conduit for electric railways	498,852	June 6	180	45	63	1424
Kintzing, Ralston C., Brooklyn, N. Y., assignor to Crocker-Wheeler Electric Company, of New Jersey. Dynamo or motor. (Reissue)	11,354	July 25	2785	703	64	554
Kinyon, David R., Raritan, N. J. Chain-guiding box for cloth stretching and drying machines	499,839	June 20	1834	446	63	1738
Kipper, Emil. (See Perry, Enoch W., Jr., assignor.)						
Kirby, Adolphus D. (See Brightman, Francis M., assignor.)						
Kirby, Charles E. (See Gibbs, Henry W., assignor.)						
Kirby, Fitz A., Wyandotte, Mich. Supporting-crane	509,227	Nov. 21	2058	496	65	1177
Kirby, John, Jr., assignor to Dayton Manufacturing Company, Dayton, Ohio. Brake-handle	508,025	Nov. 7	67	19	65	770
Kirby, John L., Cambridge, assignor to Dover Stamping Company, Boston, Mass. Metal barrel	494,275	Mar. 28	2457	619	62	1877
Kirby, Stephen R., New York, N. Y. Sash-holder	497,185	May 9	1258	322	63	865
Kirby, Stephen R., New York, N. Y. Sash-fastener	497,186	May 9	1269	322	63	865
Kirby, Stephen R., New York, N. Y. Sash-fastener	497,187	May 9	1270	322	63	865
Kirby, Stephen R., New York, N. Y. Sash-holder	497,581	May 16	1932	485	63	997
Kirby, Stephen R., New York, N. Y. Window packing and antirattling device	505,315	Sept. 19	1656	428	64	1608
Kirby, William A., Auburn, assignor of one-half to W. D. Baldwin, Yonkers, N. Y. Hose-reel	492,024	Feb. 21	1545	385	62	1087
Kirchenbauer, Louis, Chicago, Ill. Bolt-threader	509,039	Nov. 21	1725	426 427	65	1113
Kirchner, Frank H. (See Cabot, John A., assignor.)						
Kirchner, Henry W., Denver, Colo., and G. N. Chase. U. S. Army. Means for preventing derailment of cars	508,480	Nov. 14	823	204	65	925
Kirchner, Peter A., Fort Wayne, Ind. Water-alarm for steam-boilers	511,529	Dec. 26	2902	706	65	1990
Kirk, Arthur S. (See Jennings, Stephen A., assignor.)						
Kirk, Edgar W., and J. F. Hazel, Kansas City, Mo. Hydraulic motor	510,270	Dec. 5	719	174	65	1546
Kirk, Henry C., Jr. (See Zell, Robert R., assignor.)						
Kirk, John, and B. Lee, Leeds, England. Cloth-pressing machine	501,349	July 11	1311	327 328	64	252
Kirk, John, and B. Lee, Leeds, England. Cloth-pressing machine	507,229	Oct. 24	2445	603	65	496
Kirk, John A., and J. E. Hosford, Washington, D. C. Pneumatic tire	508,621	Nov. 14	1047	258	65	969
Kirk, John P., Austin, Tex. Plow	489,015	Jan. 3	56	16	62	15
Kirk, John R. (See Moore, Rue, Smith, Roebuck, Mills, and Kirk.)						
Kirk, Rebecca, Stratford, Canada. Arm and wrist rest	492,889	Mar. 7	185	45	62	1395
Kirk, Wallace R., Kansas City, Mo. Telegraph or telephone system	510,430	Dec. 12	971	232 233	65	1608
Kirk, Wallace R., Kansas City, assignor of one-half to J. P. Jackson, Independence, Mo. Car wheel and axle	498,171	May 23	2853	713	63	1178
Kirkegaard, Georg, Brooklyn, N. Y. Electric-arc lamp	501,080	July 11	860	223	64	172
Kirkegaard, Georg, Brooklyn, N. Y. Electric-arc lamp	501,081	July 11	861	224	64	172
Kirker, Albert H., Avalon, Pa. Car-brake	499,553	June 13	1361	323	63	1643
Kirker, James M., Louisville, Ky. Fire-escape	506,238	Oct. 10	771	190	65	158
Kirkham, John J., Terre Haute, Ind. Apparatus for manufacturing gas	502,125	July 25	2537	626 637	64	507
Kirkman, James W., Baltimore, Md. Fly-fan	491,287	Feb. 7	363	91	62	818
Kirkpatrick, Benjamin R., Hodgenville, Ky. Hedge fence	509,812	Nov. 28	3063	739	65	1379
Kirkpatrick, David M., Kansas City, Mo. Copy-holder	511,530	Dec. 26	2903	707	65	1990
Kirkpatrick, John R., Kendallville, Ind. Saw-swage	499,295	June 13	910	220	63	1563
Kirkpatrick, John W. (See Sheldon, Harry E., assignor.)						
Kirkpatrick, Robert S., Des Moines, Iowa. Apparatus for wringing mops	503,541	Aug. 15	2151	539	64	987
Kirkpatrick, Roger, Philadelphia, Pa. Needle for knitting-machines	491,117	Feb. 7	85	24	62	765
Kirkpatrick, Roger, Philadelphia, Pa. Cam-cylinder for knitting-machines	491,118	Feb. 7	86	24	62	765
Kirkpatrick, Rufus, G. S. Tiller, and W. O. Kirkpatrick, Sweet Springs, Mo. Lock-nut	506,596	Oct. 10	1368	343	65	274
Kirkpatrick, T. A. (See Lord, Charles A., assignor.)						
Kirkpatrick, William O. (See Kirkpatrick, Tiller, and Kirkpatrick.)						
Kirkpatrick, William P., Arrowsmith, Ill. Swift warping machine	505,770	Sept. 26	2458	619 620	64	1771
Kirkscey, Cicero L., and F. P. Bowden, Dover, Ark. Horse-detaching device	498,395	May 30	3243	807	63	1262
Kirnan, William H., Bayonne, N. J., assignor to Gamewell Fire-Alarm Telegraph Company, New York, N. Y. Police signaling apparatus	500,285	June 27	2562	626	63	1878
Kirnan, William H., Bayonne, N. J., assignor to Gamewell Fire-Alarm Telegraph Company, New York, N. Y. Electric-signal receiver	509,171	Nov. 21	1950	476	65	1157
Kirsch-King, Albert W., Chicago, Ill. Machine-joint	490,876	Jan. 31	3030	779	62	669
Kirsch, Peter G., Decatur, Ind. Washing-machine	507,546	Oct. 31	2985	733	65	612
Kirschner, Karl, Jr., Radlic, near Prague, Austria-Hungary. Tool for securing corks in bottles	500,395	June 27	2745	675	63	1910
Kirstein, Henry E. (See De Celles, Joseph H. E., assignor.)						
Kisinger, John T., Sr., Belton, assignor to J. T. T. Kisinger, Jr., and L. G. Rowell, Kansas City, Mo. Animal-trap	489,869	Jan. 10	1341	350	62	294
Kisinger, John T. T., Jr., et al. (See Kisinger, John T., Sr., assignor.)						
Kisinger, John T. T., Jr., Belton, Mo. Fender attachment	503,242	Aug. 15	1678	412	64	902
Kisinger, William S., Bellevue, Ky. Wire-connector	492,811	Mar. 7	62	14	62	1370
Kisinger, William S., Bellevue, assignor to Winchester Cotton and Tobacco Press Company, Winchester, Ky. Hand-press	500,660	July 4	207	51	64	40
Kissinger, Elias, Girardville, Pa. Rubber boot	501,082	July 11	863	224	64	172
Kissner, Leonard, assignor to Hocking Valley Manufacturing Company, Lancaster, Ohio. Hay-tedder	508,425	Nov. 14	731	180	65	908
Kissock, John A. C., et al. (See Mable, William, assignor.)						
Kistner, P. Henry. (See Dark, Francis P., assignor.)						
Kitchen, John G. A., St. Helen's, England. Pneumatic tire	508,724	Nov. 14	1200	298	65	999
Kitchener, S. A., et al. (See Thibault, Henry, assignor.)						
Kitching, Henry C., Licking, Mo. Box-fastener	489,535	Jan. 10	865	226	62	196
Kitching, Henry C., Licking, Mo. Device for holding and stretching card-clothing while being attached to carding-cylinders	492,404	Feb. 28	2137	534	62	1321
Kitching, John T., Gatesville, Tex. Harness-rack	506,514	Oct. 10	1252	312	65	251
Kitsée, Isidor, Philadelphia, Pa. Secondary battery	505,467	Sept. 26	1901	490	64	1668

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Kitselman, Alva L., <i>et al.</i> (See Pope, John C., assignor.)						
Kitselman, Alva L., Ridgeville, Ind. Wire-fabric machine.....	504,984	Sept. 12	1118	{ 286 287 288 }	64	1494
Kitselman, Davis M., <i>et al.</i> (See Pope, John C., assignor.)						
Kitson, Arthur, Philadelphia, Pa. Smoke-consuming apparatus.....	490,826	Jan. 31	2958	760	62	653
Kitson, Arthur, and T. Walker, Philadelphia, Pa. Apparatus for and method of producing gas.....	507,073	Oct. 17	2146	532	65	430
Kitson, John E. (See Bufford and Kitson.)						
Kitson Machine Company. (See Davis, Henry A., assignor.)						
Kitson Machine Company. (See Morton, Albert H., assignor.)						
Kitterman, George W., Peru, Ill. Horse breaker or hobble.....	497,326	May 16	1531	386	63	926
Kitton, John C., assignor of eighty-two-and-one-half one-hundredths to W. T. Harris, W. E. D. Morrison, C. W. Bryson, J. K. Witherspoon, G. H. Kimball, E. Gilman, S. Norris, and C. W. Smith, Los Angeles, G. D. Thompson, Sierra Madre, E. Kennedy, Pasadena, and S. S. Havermale, Viejas, Cal. Lubricant, journal-box, and making.....	507,072	Oct. 17	2144	532	65	429
Kittredge, Anson O. (See White and Kittredge.)						
Kitts, Willard A., Oswego, N. Y. High or low water alarm.....	503,606	Aug. 22	2285	570	64	1026
Kittson, Alfred B., Boston, Mass. Amalgamator for gold and silver ores.....	497,669	May 16	2069	{ 516 517 }	63	1022
Klafl, Moritz W., Chicago, Ill. Handle for umbrellas, &c.....	495,978	Apr. 25	2324	588	63	478
Klaflky, Gottfried F., New York, N. Y. Life-boat.....	506,048	Oct. 3	383	101	65	75
Klages, William, Akron, Ohio. Bicycle-support.....	497,798	May 23	2275	572	63	1076
Klahn, Emil, West Hoboken, N. J., assignor to D. C. Hood, New York, N. Y. Self-winding electric clock.....	491,945	Feb. 14	1421	355	62	1048
Klahn, Emil, Jersey City, N. J., assignor, by mesne assignments, to Star Automatic Feed Bag Company, of New Jersey. Feed-bag.....	506,239	Oct. 10	773	191	65	158
Klahn, Emil, West Hoboken, N. J., assignor to D. C. Hood, New York, N. Y. Escape-ment for torsional clocks.....	509,315	Nov. 21	2205	532	65	1204
Klahr, George A., J. A. Petty, and M. H. Foy, Sycamore, Ohio. Combined car and air-brake coupling.....	504,222	Aug. 29	3260	813	64	1228
Klar, Karel, Prague, assignor to the House of Al. Hugo Lhota, Králové Hradec, Austria-Hungary. Pedal bass organ.....	491,566	Feb. 14	831	211	62	930
Klatzl, John C. (See Stubbe, Frederick H., assignor.)						
Klauber, Moses L. (See Grossman, Joseph H., assignor.)						
Klauder-Weldon Dyeing Machine Company. (See Weldon, Leonard, assignor.)						
Klay, Andrew, Bluffton, Ohio. Photographic camera.....	492,025	Feb. 21	1547	386	62	1087
Klebes, Joseph S., North Attleborough, Mass. Reversible-head button.....	496,417	May 2	41	12	63	626
Kleckler, Frank G. (See Dudley and Kleckler.)						
Kleeman, William M., Columbus, Ohio. Memorandum-tablet for telephones.....	491,777	Feb. 14	1164	291	62	996
Klees, James A., Reading, Pa. Dumping-wagon.....	490,661	Jan. 31	2703	695	62	603
Klees, William H., assignor to himself and H. E. Outwater, Susquehanna, Pa. Electric-arc lamp.....	501,884	July 18	2156	535	64	421
Kleish, Anthony V. (See Wensing, John, assignor.)						
Klein, Charles, Syracuse, N. Y. Brush-cleaning attachment for bottles.....	498,475	May 30	3370	839	63	1285
Klein, Charles C., Abington, Pa. Twisting and cop-winding machine.....	492,211	Feb. 21	1829	459	62	1146
Klein, Charles J., New York, N. Y. Electric switch.....	509,539	Nov. 28	2626	635	65	1295
Klein, Frederick. (See Linder, George, assignor.)						
Klein, Isidor. (See Benedikt and Klein.)						
Klein, Jacob B. (See Callahan, Frank, assignor.)						
Klein, Johann, Frankenthal, Germany. Compound engine.....	494,425	Mar. 28	2696	676	62	1922
Klein, Leon A., <i>et al.</i> (See Winter, Louis F., assignor.)						
Klein, Theodore, <i>et al.</i> (See Pieper, Herman H., assignor.)						
Kleinert, Isaac B., New York, N. Y. Ear-muff.....	503,703	Aug. 22	2435	606	64	1054
Kleinhans, Jacob, <i>et al.</i> (See Weidig, Henry P., assignor.)						
Kleinstiver, Abel, assignor of one-half to B. S. Van Tuyl, Petrolea, Canada. Regulating mechanism.....	508,947	Nov. 21	1593	390	65	1086
Klemann, Peter, New York, N. Y. Device for cutting or lighting cigars.....	489,818	Jan. 10	1275	334	62	280
Klemm, John, Philadelphia, Pa. Device for attaching handles to implements.....	510,271	Dec. 5	724	175	65	1546
Klonk, Gottlieb, Defiance, Ohio. Carpet-fastener.....	489,016	Jan. 3	58	17	62	15
Kloppe, Herman, and A. Neuhaus, New York, N. Y. Valve-closing device.....	509,172	Nov. 21	1953	477	65	1157
Klotzker, Albert J., and J. G. Goesel, St. Louis, Mo. Matrix-making machine.....	503,324	Aug. 15	1821	451	64	927
Klotzker, Albert J., and J. Ranz, St. Louis, Mo.; said Ranz assignor to said Klotzker. Cigar-venting machine.....	508,725	Nov. 14	1202	298	65	999
Klower, Charles H. (See Adair and Klower.)						
Klieber, Josef, Neusattl, assignor to C. Götz, Carlsbad, Austria-Hungary. Liquid material for the manufacture of fine earthenware.....	500,585	July 4	73		64	15
Klien, Richard, and R. Lindner, Chemnitz, Germany. Locomotive-engine.....	511,531	Dec. 26	2905	{ 707 708 }	65	1990
Klima, Lawrence, Chicago, Ill. Washing-machine.....	498,798	June 6	76	18, 19	63	1402
Klinder, Frank C., Sheboygan, Wis. Sidewalk or building block.....	496,201	Apr. 25	2657	667	63	540
Kline, Bruce F., assignor of one-half to Smith & Boullemet, New Orleans, La. Riveting-tool.....	489,608	Jan. 10	971	252	62	217
Kline, Charles H. (See Long and Kline.)						
Kling, Edgar, assignor to I. Kling, Louisville, Ky. Car-coupling.....	501,428	July 11	1431	359	64	275
Kline, Frank W., North Germantown, N. Y. Railway block-signal.....	506,005	Oct. 3	318	84	65	62
Kline, Frank W., North Germantown, N. Y. Music or book-leaf turner.....	510,801	Dec. 12	1627	405	65	1729
Kline, George C., New York, N. Y. Horseshoe.....	507,276	Oct. 24	2526	623	65	510
Kline, Harry A. (See Reiff, William H., assignor.)						
Kline, Herman. (See Singer, Samuel S., assignor.)						
Kline, John E., Casey, Ill. Fence.....	491,180	Feb. 7	198	51	62	785
Kling, Isaac. (See Kling, Edgar, assignor.)						
Kling, Peter M., St. Louis Mo. Car-truck.....	492,727	Feb. 28	2654	657	62	1326
Klinger, Alexander, Telluride, Colo. Lace-fastener.....	500,396	June 27	2746	675	63	1910
Klingler, Charles. (See Klingler, Joseph W., assignor.)						
Klingler, Joseph W., Beaver Springs, assignor of one-half to C. Klingler, Salem, Pa. Car-coupling.....	507,015	Oct. 17	2054	507	65	414
Klinker, Wesley, Union Mills, Iowa. Rake.....	506,597	Oct. 10	1369	343	65	274
Klipper, Benjamin. (See Stahl and Klipper.)						
Klipstein, Friedrich C., Sauk City, Wis. Wire-reel carrier.....	508,426	Nov. 14	732	181	65	908
Klitsche, Amandus. (See Kuhn and Klitsche.)						
Klock, J. C. (See Bennett, George W., assignor.)						
Klock, Orin C., and C. R. Stevens, Marietta, Ohio. Means for operating organ-bellows....	500,009	June 20	2094	507	63	1784
Klock, Orin C., and C. R. Stevens, Marietta, Ohio. Pedal-action for organs or pianos.....	500,010	June 20	2095	507	63	1784

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Kloes, Elizabeth. (See Rist, Henry W., assignor.)						
Klos, Daniel. (See Edwards, Thomas H., assignor.)						
Klots, Henry D. (See Pendleton, Gordon, Jr., assignor.)						
Klots, Henry D., New York, N. Y. Spinning-spindle support	493,034	Mar. 7	414	103	62	1440
Klots, Henry D., New York, N. Y. Mount for spinning-spindles	498,980	June 6	410	96	63	1464
Klots, Henry D., New York, N. Y. Spinning-spindle and support therefor	501,792	July 18	2019	498	64	396
Klots, Henry D., New York, N. Y. Gathering or doubling machine	506,434	Oct. 10	1115	277	65	225
Klugel, Oscar G., Indianapolis, Ind. Coin-controlled dice-shaking machine	502,495	Aug. 1	417	98, 99	64	643
Klump, Charles A., et al. (See Winner, William P., assignor.)						
Klump, Gustav, Esslingen, Germany. Metal-embossing machine	502,566	Aug. 1	531	137	64	664
Knacker, Adam, Edgar, Nebr. Kiln	511,704	Dec. 26	3183	779	65	2039
Knaff, Rudolph, et al. (See Scates, George R., assignor.)						
Knap, Edgar D., Schenectady, and S. D. Sprong, East Greenbush, N. Y. Magnetic permeameter	508,827	Nov. 14	1352	334	65	1027
Knapp, Charles, St. Louis, Mo. Sash-fastener	493,035	Mar. 7	416	104	62	1441
Knapp, Charles, St. Louis, Mo. Apparatus for ventilating cars	502,928	Aug. 8	1169	288	64	796
Knapp, Charles, St. Louis, Mo. Sash-fastener	504,165	Aug. 29	3161	789	64	1209
Knapp, Charles F. (See Beam, Oren H., assignor.)						
Knapp, Charles H., et al. (See Van Wormer, Chauncey E., assignor.)						
Knapp, Edgar. (See Helenbolt, George S., assignor.)						
Knapp, George W., Baltimore, Md. Socket for dipper-handles	509,173	Nov. 21	1955	477	65	1157
Knapp, Henry W., et al. (See Wyman, Charles F., assignor.)						
Knapp, Jacob E., Brownsville, Oreg. Gate	510,802	Dec. 12	1629	405	65	1729
Knapp, James H. (See Graham and Knapp.)						
Knapp, John E., Olyphant, Pa. Shade-hanger bracket	507,440	Oct. 24	2802	686	65	565
Knapp, Shepard, et al. (See Whitacre, William C., assignor.)						
Knapper, Joseph, and S. B. Marton, Connelville, Pa. Engine	490,662	Jan. 31	2704	695	62	604
Knaub, William R. (See Brown and Knaub.)						
Knauss, Frank V., assignor to Portsmouth Stove and Range Company, Portsmouth, Ohio. Fire-box	501,885	July 18	2159	536	64	421
Knauss, Thomas E., et al. (See Whitzel, Russel B., assignor.)						
Kneass, Strickland L., assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Injector	501,464	July 11	1481	372	64	285
Knecht, Clinton H. (See Seiberling and Knecht.)						
Kneidler, Oscar. (See Kneidler, Solomon A. and O.)						
Kneidler, Solomon A. and O., assignors of one-fourth to S. A. Boyd, Philadelphia, Pa., executrix of H. M. Boyd, deceased. Cable-grip	493,551	Mar. 14	1237	317	62	1615
Knee, Henry, Kent, Pa. Portable fence	500,397	June 27	2746	676	63	1911
Kneelad, H. F., et al. (See White, Edward F., assignor.)						
Kneeland, Charles L., Lansing, Mich. Milk cooler	499,840	June 20	1835	446	63	1738
Kneeland, Frank G., et al. (See Leonard, David, assignor.)						
Kneeland, Frank G., et al. (See Miller, George E., assignor.)						
Kneen, William, London, England. Furnace	505,661	Sept. 26	2275	577	64	1738
Kneiff, Max J. F., Berlin, Germany. Artificial tooth	501,429	July 11	1433	359	64	275
Kneip, William F., assignor to Hay & Todd Manufacturing Company, Ypsilanti, Mich. Combination undergarment. (Reissue)	11,325	Apr. 18	2285	575	63	455
Knickerbacker, John. (See Bootman, William H., assignor.)						
Knickerbacker, John, Troy, N. Y. Hydrant	504,594	Sept. 5	462	117	64	1356
Knietseh, Rudolph, Ludwigshafen, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Process of and apparatus for making liquid chlorine	506,639	Oct. 10	1426	358	65	286
Knietseh, Rudolph, assignor to Badische Anilin and Soda Fabrik, Ludwigshafen, Germany. Package of liquid chlorine	506,640	Oct. 10	1428	373	65	286
Knight, Albert W., Armstrong, Ill. Rod-coupling device	494,208	Mar. 28	2354	595	62	1850
Knight, Arthur P., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Series multiple electric controller	507,547	Oct. 31	2986	733, 734	65	612
Knight, Augusta B., Boston, Mass. Chateleine	504,839	Sept. 12	882	227	64	1450
Knight, Charles A., Glasgow, and C. P. Higgins, Kilbowie, Scotland. Hydraulic stamping-press	495,591	Apr. 18	1721	434	63	355
Knight, Charles A., Glasgow, and C. P. Higgins, Kilbowie, Scotland. Die for shaping saddles for steam-boilers	495,592	Apr. 18	1723	434	63	355
Knight, Charles H. (See Lundy, Sinclair G., assignor.)						
Knight & Co., W. B. (See Pickles, Charles K., assignor.)						
Knight, Edward M., Brooklyn, N. Y. Filter	494,426	Mar. 28	2697	677	62	1922
Knight, Edward M., New York, N. Y. Filter	498,276	May 30	3045	757	63	1236
Knight, Epps G., et al. (See Monday, Robert, assignor.)						
Knight, Frank. (See Sanford, Hopkins A., assignor.)						
Knight, George W., assignor to G. Draper & Sons, Hopedale, Mass. Spindle and bearing therefor	508,323	Nov. 7	561	138	65	861
Knight, Harrison T., deceased, Milan, Mo.; N. Knight, executrix. Staple-extractor	499,637	June 13	1492	358	63	1666
Knight, Howard, Trenton, N. J. Game apparatus	509,813	Nov. 28	3064	739	65	1379
Knight, James, Philadelphia, Pa. Lawn-rake and grass-receiver	501,430	July 11	1434	359	64	275
Knight, James E., et al. (See Livengood, Chadbourne, and Gibbons, assignors.)						
Knight, James T. C., assignor to Société Knight de Kerpezdron et Gibault, Paris, France. Apparatus for purifying boiler-feed water	510,272	Dec. 5	725	175	65	1547
Knight, John A., Saltillville, assignor of one-half to D. H. Lambdin, Young's Creek, Ind. Machine for stropping and honing razors	498,662	May 30	3692	912, 913	63	1341
Knight, John R., et al. (See Leonard, David, assignor.)						
Knight, John R., et al. (See Miller, George E., assignor.)						
Knight, Lucian, assignor to himself and J. Bivans, Rossville, Ill. Combined hame clip and section	510,687	Dec. 12	1441	356	65	1694
Knight, Margaret E., South Framingham, and H. B. Steele, Medford, assignors to said Knight, R. D. Evans, J. S. Lockwood, Boston, and D. C. Marr, Hyde Park, Mass. Slicing machine	494,784	Apr. 4	416	104	63	81
Knight, Nannie, executrix. (See Knight, Harrison T.)						
Knight, Octavius, sub-administrator. (See Daelen, Bernard V.)						
Knight, Richard D., Providence, R. I. Pocket-case and making the same	489,125	Jan. 3	222	60	62	51
Knight, Richard D., Providence, R. I. Advertising device	489,126	Jan. 3	223	60	62	51
Knight, Richard D., Providence, R. I. Card-holder	501,279	July 11	1185	300	64	231
Knight, Walter H., New York, N. Y. Electric-railway trolley	508,622	Nov. 14	1048	259	65	969
Knight, Walter H., Lynn, assignor to General Electric Company, Boston, Mass. Compounding dynamo-electric machines	509,475	Nov. 28	2528	610	65	1277
Knight, William C., Richmond, Va. Rotary steam-engine	500,398	June 27	2747	676, 677	63	1911

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Knight, William S., <i>et al.</i> (See Ahrens, John T., assignor.)						
Kniphals, Hinary, Davenport, Iowa. Extension-ladder	502,403	Aug. 1	256	61	64	613
Knisley, John A., Hitt, Mo. Drip-trough	504,420	Sept. 5	180	47	64	1304
Knoblauch, Anton, Minneapolis, Minn. Life-preserving guard for cars	508,888	Nov. 14	1449	359	65	1045
Knobloch, Frank, <i>et al.</i> (See Taylor, Alfred, assignor.)						
Knoche, August, Elberfeld, Germany. Electrical motor	495,046	Apr. 11	810	204	63	170
Knoche, Gottfried, New York, N. Y. Pneumatic malting	507,659	Oct. 31	3201	784	65	652
Knoche, John, Cincinnati, Ohio. Air-compressor	508,225	Nov. 7	402	97, 98	65	833
Knocker, Andrew, and J. L. Rinker, Aurora, Mo. Adjustable automatic can-swing	498,931	June 6	411	96	63	1464
Knott, Leo. (See Schwalen, John N., assignor.)						
Knower, George, Greenwood, Wis. Batten and padding for closing joints in buildings	503,426	Aug. 15	1972	489	64	954
Knowles, Charles V., Somerville, N. J., assignor to E. Holmes, New York, N. Y. Electrical indicator for rudders	495,047	Apr. 11	811	205	63	170
Knowles, Edward R., Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Rheostat	498,799	June 6	77	19	63	1402
Knowles, Edward R., Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Stand for testing electric arc lamps	508,623	Nov. 14	1050	259	65	970
Knowles, Edward R., Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Brush-holder for dynamo-electric machines	508,624	Nov. 14	1051	260	65	970
Knowles, Edward R., Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Stand for controlling electric circuits	508,626	Nov. 14	1056	261 } 262 } 45 } 46 }	65	971
Knowles, Edward R., Brooklyn, assignor to L. Werner, New York, N. Y. Machine for removing water-hairs from pelts	502,366	Aug. 1	193	46 } 47 }	64	601
Knowles, Edward R., Middletown, Conn., and E. H. Park, Millbury, Mass., assignors to Schuyler Electric Company, of Connecticut. Switch-box for controlling electric circuits	508,625	Nov. 14	1052	260 } 261 }	65	971
Knowles, Elmer E. (See Smith and Knowles.)						
Knowles, George, Jr. (See Young, George W., assignor.)						
Knowles Loom Works. (See Gaunt and Wild, assignors.)						
Knowles Loom Works. (See Hutchins, George F., assignor.)						
Knowles Loom Works. (See Nutt, George H., assignor.)						
Knowles Loom Works. (See Wattie, William, assignor.)						
Knowlton, Charles H., and B. F. Meyer, assignors to M. A. Furbush & Son Machine Company, Camden, N. J. Shuttle-box-operating mechanism for looms	503,542	Aug. 15	2154	539 } 540 }	64	987
Knowlton, Charles H., and B. F. Meyer, assignors to M. A. Furbush & Son Machine Company, Camden, N. J. Shuttle-box-operating mechanism for looms	503,543	Aug. 15	2158	540	64	988
Knowlton, Charles H., and B. F. Meyer, assignors to M. A. Furbush & Son Machine Company, Camden, N. J. Ball-bearing eccentric and strap therefor	507,016	Oct. 17	2055	508	65	414
Knowlton, H., <i>et al.</i> (See Hanson, Freeman, assignor.)						
Knowlton, Mark D. (See Smith and Knowlton.)						
Knowlton, W. J., <i>et al.</i> (See Hanson, Freeman, assignor.)						
Knox, Davis R., Portland, Mo. Box-fastener	490,567	Jan. 24	2521	649	62	553
Knox, George F., Chicago, Ill. Ice-machine	501,045	July 4	804	209	64	146
Knox, Harvey, Rixford, Pa. Sucker-rod elevator	502,974	Aug. 8	1254	307	64	810
Knox, Henry K., Vevay, Ind. Car-coupling	493,095	Mar. 7	501	125	62	1458
Knox, Henry K., Vevay, Ind. Car-coupling	507,821	Oct. 31	3456	849	65	701
Knox, James, Kilbirnie, Scotland. Machine for making nets	504,595	Sept. 5	464	118 } 119 }	64	1356
Knox, T. R. (See King, Lewis J., assignor.)						
Knudsen, Andrew, Tucson, Ariz. Ter. Combination-tool	502,259	July 25	2776	701	64	552
Knudsen, Augustus, San Francisco, Cal. Steam-engine	496,689	May 2	473	127	63	706
Knudsen, Augustus, San Francisco, Cal. Steam-engine	501,793	July 18	2020	498 } 499 }	64	397
Knudson, Edward, Milton, Mass. Stall-cleaner	501,948	July 25	2261	565	64	456
Knudson, Harold E., <i>et al.</i> (See Higgins, Charles W., assignor.)						
Knudson, Jacob B., <i>et al.</i> (See Higgins, Charles W., assignor.)						
Knuth, William C., Chicago, Ill. Machine for cutting and polishing gems	509,814	Nov. 28	3065	739 } 740 }	65	1378
Knutson, Knut, Minneapolis, Minn. Toy	506,435	Oct. 10	1116	277	65	225
Koch, August W., Cincinnati, Ohio. Adjustable and detachable frame or skirting for hearths	509,577	Nov. 28	2686	650	65	1307
Koch, Edonard A., Waterloo, La. Plow	493,168	Mar. 7	618	155	62	1480
Koch, Emil, Hoboken, N. J. Beer-plate	508,140	Nov. 7	271	67	65	808
Koch, Friedrich. (See Moschel and Koch.)						
Koch, Henry R., St. Joseph, Mo. Variable lifting device for elevators	501,840	July 18	2077	512	64	407
Koch, J. T., <i>et al.</i> (See Koch, Johann T., assignor.)						
Koch, John C. (See Watzlawik, Fritz, assignor.)						
Koch, Johann T., Offenbach-on-the-Main, assignor to F. Hesse and J. T. Koch, Frankfurt-on-the-Main, Germany. Car-coupling	506,598	Oct. 10	1370	343	65	275
Koch, John L., Lawrenceburg, Ind. Harness-saddle	506,783	Oct. 17	1679	423	65	344
Koch, Karl, Elsey, near Hohenlimburg, Germany. Commutator-brush	495,136	Apr. 11	990	248	63	202
Koch Sons & Co. (See Geyer, Charles F., assignor.)						
Koch, Walter E., Pittsburg, Pa. Furnace for heating steel ingots	489,017	Jan. 3	59	17	62	15
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash-register	505,553	Sept. 26	2067	527 } 528 } 529 }	64	1698
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash-register	505,554	Sept. 26	2082	530	64	1701
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash register and recorder	505,555	Sept. 26	2088	531	64	1702
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash register, indicator, and check-printer	506,121	Oct. 3	495	129 } 130 }	65	97
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Registering mechanism	506,122	Oct. 3	500	130	65	98
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Cash-register	506,123	Oct. 3	503	130 } 131 }	65	98
Koch, William, New York, N. Y., assignor, by mesne assignments, to National Cash Register Company, Dayton, Ohio. Pawl-locking device for cash registers and indicators	509,666	Nov. 28	2829	683 } 684 }	65	1335
Kochs, Albert. (See Kochs, Benjamin and A.)						
Kochs, Benjamin and A., St. Louis, Mo. Electric-railway trolley	491,361	Feb. 7	505	130	62	844
Kock, James P. (See Haubman, Leon F., assignor.)						
Koerberlein, Anton, assignor to Morse, Williams & Co., Philadelphia, Pa. Elevator	497,922	May 23	2480	619 } 620 }	63	1111
Koedding, William, St. Louis, Mo. Car-track	495,894	Apr. 18	2202	554 } 555 }	63	439

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Koedding, William, assignor of one-half to E. Verstraete, St. Louis, Mo. Electric motor or generator	495,941	Apr. 18	2267	571	63	452
Koefoed, Charles J. (See McIntire and Koefoed.)						
Koehler, Charles S., Brooklyn, assignor to Benziger Brothers, New York, N. Y. Candle-labrum	505,316	Sept. 19	1657	428	64	1608
Koehler, Hermann, Long Island City, assignor to Standard Oil Company, New York, N. Y. Refining petroleum	507,441	Oct. 24	2803	686	65	565
Koehler, Wilhelm. (See Berkan, Rudolf, assignor.)						
Koeller, Hermann H., assignor of one-half to L. Stroehrer, St. Louis, Mo. Hitching device	497,188	May 9	1271	323	63	865
Koenig, Christian, Sacramento, Cal. Side-hill vehicle	507,370	Oct. 24	2692	662	65	543
Koenig, Emil, Hicksville, assignor to E. Schweinburg, New York, N. Y. Drilling-machine for buttons of mother-of-pearl	500,540	June 27	2967	728	63	1950
Koenig, Emil, Hicksville, assignor to E. Schweinburg, New York, N. Y. Drilling-machine for buttons of mother-of-pearl	506,177	Oct. 3	613	157	65	119
Koenig, Emil, Hicksville, assignor to E. Schweinburg, New York, N. Y. Machine for shaping buttons of mother-of-pearl	506,178	Oct. 3	614	158	65	119
Koenig, Rosa, Milwaukee, Wis. Mangle	506,436	Oct. 10	1117	278	65	225
Koeniges, Martin, Dolgeville, N. Y. Piano-hammer-covering machine	493,274	Mar. 14	788	204	62	1530
Koenigsberg, Joseph. (See Jenks, Llewellyn H., assignor.)						
Koepoel, Adolf, assignor to Siemens & Halske, Berlin, Germany. Electrical measuring-instrument	494,961	Apr. 4	678	175	63	130
Koepp, Henry, assignor of one-half to F. Z. Nodden, Milwaukee, Wis. Window	491,653	Feb. 14	969	243	62	958
Koerner, Charles, Detroit, Mich. Car-coupling	494,376	Mar. 28	2624	659	62	1909
Koerner, Herman T., Buffalo, N. Y. Printer's drying-rack	504,985	Sept. 12	1124	288	64	1496
Koester, Ernst J., Harkorten, Germany. File for pointing lead-pencils, &c	511,338	Dec. 26	2583	629	65	1930
Koetter, John F. W., St. Louis, Mo. Repeating toy pistol	490,568	Jan. 24	2532	649	62	553
Kohl, Arnold, Centralia, Ill. Binding-post for electrical connections	503,427	Aug. 15	1973	490	64	954
Kohl, Edward, Cleveland, Ohio. Roll for clothes-wringers	494,814	Apr. 4	469	118	63	90
Kohl, Georg, Vienna, Austria-Hungary. Button-fastener and key for detaching	489,127	Jan. 3	223	60	62	51
Kohler, August, Chicago, Ill. Bridge-gate	502,975	Aug. 8	1255	307	64	810
Kohler, Edward, assignor to M. Grant, London, England. Rotary shuttle-actuating mechanism for sewing-machines	489,162	Jan. 3	271	75	62	63
Kohler, Edward, assignor to M. Grant, London, England. Sewing-machine	489,163	Jan. 3	272	76	62	63
Kohler, John F., New York, N. Y. Saddle attachment	495,346	Apr. 11	1322	332	63	263
Kohlhepp, Rudolf, assignor of one-half to M. L. Cate, Boston, Mass. Pressure-gage	494,678	Apr. 4	235	59	63	48
Kohlmeier, August E., St. Louis, Mo. Water-filter	510,348	Dec. 5	833	201	65	1568
Kohlrausch, Matthew H., Billerica, Mass. Machine for scouring cloth	493,627	Mar. 21	1381	351	62	1659
Kohr, Emanuel H., Tyrone, Pa. Leaf-holder	505,771	Sept. 26	2460	620	64	1771
Koken, Ernest E., St. Louis, Mo. Chair-base	492,554	Feb. 28	2390	593	62	1274
Kokernot, Alexander B., New Orleans, La. Refrigerator for beer-barrels	500,011	June 20	2096	508	63	1784
Kokernot, Alexander B., New Orleans, La. Refrigerator attachment for beer-barrels	500,012	June 20	2097	508	63	1785
Kolb, August R. (See Boulter, William A., assignor.)						
Kolbe, Emil A. (See Betts, Benjamin B., assignor.)						
Kolbe, Henry F., Detroit, Mich. Electric alarm	496,690	May 2	475	127	63	706
Kolben, Emil, Schenectady, assignor to Edison General Electric Company, New York, N. Y. Conductor for armatures	491,567	Feb. 14	832	211	62	930
Kolben, Emil, Schenectady, assignor to Edison General Electric Company, New York, N. Y. Armature and means for supporting the same	491,568	Feb. 14	833	212	62	930
Kollenberg, Fred G., Owensborough, Ky. Letter-box	492,026	Feb. 21	1549	386	62	1087
Koller, Hugo, Vienna, Austria-Hungary. Dry battery	496,228	Apr. 25	2702	677	63	548
Kollrepp, Alexander. (See Wohl and Kollrepp.)						
Kolseus, Max, Chicago, Ill. Fire-escape	508,226	Nov. 7	404	98	65	833
Koneman, William A., assignor to Chicago Heat Storage Company, Chicago, Ill. Gas-manufacturing apparatus	500,333	June 27	2652	649	63	1894
König, Carl B., Altona, Germany. Mask-respirator	504,880	Sept. 12	939	242	64	1461
König, Joseph. (See Levin, Amesach, assignor.)						
König, Wilhelm, Berlin, Germany. Mosaic toy	510,178	Dec. 5	568	132	65	1517
Konigsberg, Joseph. (See Gaedke, Hermann, assignor.)						
Konrad, William. (See Georgeson and Konrad.)						
Konz, Sebastian, Louisville, Ky. Machine for making wire springs	504,390	Sept. 5	127	33	64	1293
Koob, Joseph. (See Engel and Koob.)						
Koons, Isaac B., Foglesville, Pa. Kettle-lifter	503,862	Aug. 22	2663	668	64	1099
Koontz, Augustus O., South Bend, Ind. Windmill	489,080	Jan. 3	147	41	62	36
Kooy, Jacob P. (See Holt and Kooy.)						
Köpcke, Claus, Dresden, Germany. Railway-track	494,718	Apr. 4	300	76	63	60
Kopp, Nicholas, Fostoria, Ohio. Manufacture of glassware	495,048	Apr. 11	813	205	63	170
Kopp, Theodore. (See Lutz and Kopp.)						
Koppes, William M., Orrville, Ohio. Thrashing-machine	491,485	Feb. 7	694	175	62	881
Kops, Daniel, assignor to L. Schiele & Co., New York, N. Y. Corset	496,124	Apr. 25	2547	642	63	520
Korb, Henry, and S. Krug, Cincinnati, Ohio. Match-box	498,064	May 23	2698	675	63	1149
Koretke, Charles A. C., Belvidere, Ill. Heating-stove	490,478	Jan. 24	2385	617	62	526
Korman, John, Minneapolis, Minn. Hoop for barrels	511,439	Dec. 26	2771	671	65	1963
Korn, George W. (See Remscheid, August, assignor.)						
Korting, Ernst, Hanover, Germany, assignor to L. Schutte, Philadelphia, Pa. Injector	496,977	May 9	949	249	63	808
Kortright, George W., and C. M. Craven, Wayne, Nebr. Bicycle	498,172	May 23	2857	714	63	1178
Kosa, Frank B., Hillsborough, Wis. Paper-roll holder and changeable type-printer	498,516	May 30	3440	853	63	1297
Koscialowski, Philip L., San Francisco, Cal. Machine for perforating characters	505,404	Sept. 19	1798	464	64	1635
Kosinski, Walter T., New York, N. Y. Armature for dynamo-electric machines or motors	505,247	Sept. 19	1538	401	64	1586
Kostar, John H. (See Clarke, Ira P., assignor.)						
Kostmayer, John G., et al. (See Buckley, John P., assignor.)						
Kothe, Richard, F. Reingruber, and H. Hassencamp, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue coloring-matter	506,918	Oct. 17	1898		65	385
Kothe, Richard, M. Ulrich, and O. Dressel, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue dye	511,532	Dec. 26	2907		65	1991
Kottgen, Walther. (See Anders, George L., assignor.)						
Kouns, Wesley, Salina, Kans. Windmill	500,911	July 4	589	154	64	108
Kountz, John S., Natchez, Miss. Bag-holder	504,787	Sept. 12	792	200	64	1431
Koyl, Charles H., Brooklyn, N. Y., assignor to National Drying Company, Phillipsburg, N. J. Apparatus for drying brewers' grains	497,280	May 9	1427	363	63	892
Krabach, Frank X., Defiance, Ohio. Harrow or cultivator tooth	489,960	Jan. 17	1520	397	62	343
Krabach, Frank X., Defiance, Ohio. Harrow-frame	501,724	July 18	1897	472	64	376
Kraetz, John G., Buffalo, N. Y. Fire-alarm box	503,376	Aug. 15	1906	472	64	942

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Kraetzer, Edwin J., Cambridge, Mass. Buckle.....	496,161	Apr. 25	2599	654	63	530
Kraetzer, Edwin J., Gloversville, N. Y., assignor to Consolidated Fastener Company, Portland, Me. Glove-fastener.....	490,444	Jan. 24	2324	603	62	514
Kraetzer, Edwin J., Gloversville, N. Y., assignor to Consolidated Fastener Company, Portland, Me. Glove-fastener.....	507,623	Oct. 31	3133	767	65	640
Kraetzer, Edwin J., Cambridge, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove-fastening.....	494,104	Mar. 21	2171	554	62	1810
Kraetzer, Edwin J., Cambridge, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove or garment fastener.....	502,404	Aug. 1	258	61	64	613
Kraft, Charles H. F., Battle Creek, Mich. Wrench.....	491,056	Jan. 31	3746	853	62	731
Kraft, Georg W., assignor to Lingner & Kraft, Dresden, Germany. Flexible ruler.....	490,390	Jan. 24	2250	585	62	501
Krag, Ole H. J., and E. Jörgensen, Kongsberg, Norway. Magazine-gun.....	492,212	Feb. 21	1834	{ 459 460	{ 62	1147
Krag, Ole H. J., and E. Jörgensen, Kongsberg, Norway. Straight-pull breech-bolt for fire-arms.....	502,727	Aug. 8	831	201	64	733
Krag, Ole H. J., and E. Jörgensen, Kongsberg, Norway. Cartridge-holder.....	505,363	Sept. 19	1733	{ 448 449	{ 64	1622
Kragle, John L., Clearfield, Pa. Pen-extractor.....	502,726	Aug. 8	830	201	64	733
Krais, Paul. (See Krekeler and Krais.)						
Krais, Andrew, New Milford, Ohio. Antirattler for thill-couplings.....	506,822	Oct. 17	1746	439	65	357
Kraker, Joseph, San Francisco, Cal. Filter.....	489,747	Jan. 10	1175	306	62	258
Kraker, Michael, assignor to Acme Filter Company, San Francisco, Cal. Filter.....	509,740	Nov. 28	2940	711	65	1354
Kraker, Michael, assignor to Acme Filter Company, San Francisco, Cal. Filter.....	509,741	Nov. 28	2942	712	65	1355
Kramer, George W., assignor to Hart Weigher Company, Peoria, Ill. Steering-gear for traction-engines.....	502,230	July 25	2712	{ 684 685	{ 64	541
Kramer, George W., assignor to Hart Weigher Company, Peoria, Ill. Steering-gear for traction-engines.....	503,146	Aug. 15	1525	375	64	874
Kramer, George W., assignor to Hart Weigher Company, Peoria, Ill. Steering-gear for traction-engines.....	503,147	Aug. 15	1526	375	64	874
Krammer, Hermann, Vienna, Austria-Hungary. Manufacture of trunks, hat-boxes, &c.....	500,912	July 4	591	154	64	109
Krampf, John M., New Albany, Ind., assignor to W. C. De Pauw Company, of Indiana. Apparatus for recovering sand used in glass grinding and polishing.....	494,209	Mar. 28	2355	596	62	1859
Krank, Albert, Taipale, Russia. Production of motive power and apparatus therefor.....	501,083	July 11	864	{ 224 225	{ 64	173
Kranz, August, Cleveland, Ohio. Dynamite.....	506,784	Oct. 17	1680		65	344
Kraph, Bernhardt, Philadelphia, Pa. Street-sweeper.....	506,701	Oct. 17	1535	384	65	317
Krasky, Henry G., San Francisco, Cal., assignor to United States Indicator Company, of California. Station-indicator.....	502,625	Aug. 1	630	151	64	682
Krastin, August, Cleveland, Ohio. Fire-alarm.....	505,834	Oct. 3	50	13	65	12
Krastin, August, assignor to A. P. Elten, Cleveland, Ohio. Mail-box.....	507,660	Oct. 31	3203	784	65	653
Kratz, John, Baltimore, Md. Mallet.....	492,608	Feb. 28	2473	614	62	1291
Kratz, John, Baltimore, Md. Cable-grip.....	498,517	May 30	3443	854	63	1297
Kraus, Otto A., et al. (See Haberturth and Mandel, assignors.)						
Kraus, Rudolf, assignor of three-twentieths to F. Bergmann, Long Island City, N. Y. Automatic match-lighter.....	491,314	Feb. 7	420	{ 109 110	{ 62	827
Krause, Hugo C. H., and H. B. Schneider, Chicago, Ill. Photographic-negative ribbon for camera-boxes.....	497,884	May 23	2421	604	63	1102
Krause, Roswell F., Chicago, Ill. Carriage-top.....	497,099	May 9	1139	{ 291 292	{ 63	842
Krause, William J. (See Frey, John A., assignor.)						
Krauser, Evan L., Norristown, Pa. Nut-lock.....	505,468	Sept. 26	1902	490	64	1668
Kraushaar, George J., Cleveland, Ohio. Album-stand.....	498,173	May 23	2858	714	63	1179
Krauss, Jacob. (See Smith, Frank A., assignor.)						
Krauss, Jacob, Lexington, Ky. Vehicle.....	502,303	Aug. 1	78	18	64	580
Krebs, Charles H., Milwaukee, Wis. Boot or shoe smoothing device.....	506,049	Oct. 3	385	101	65	75
Krebs, Henry, Wadena, Iowa. Potato-digger.....	492,332	Feb. 21	2014	{ 501 502	{ 62	1184
Krebs, Paul. (See Menz, Louis, assignor.)						
Kregel, Louis G., St. Louis, Mo. Coffin-fastener.....	493,096	Mar. 7	502	125	62	1458
Krehbiel, John, Cleveland, Ohio. Convertible seat and berth for cars.....	498,013	May 23	2621	655	63	1136
Kreider, Jacob B., Annville, Pa. Joint for artificial limbs.....	506,006	Oct. 3	321	84	65	63
Kreider, William, assignor of one-third to C. Carroll, New Orleans, La. Hose-coupling.....	496,363	Apr. 25	2939	734	63	594
Kreischer, George F., New York, N. Y. Enameling-furnace.....	492,405	Feb. 28	2139	534	62	1221
Krekeler, Carl. (See Lauch and Krekeler.)						
Krekeler, Carl, and P. Krais, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Red dye.....	498,932	June 6	412		63	1464
Kremer, Franklin W., Cleveland, Ohio. Mechanism for converting motion.....	496,832	May 2	703	186	63	745
Krenkel, Ernst P., Leipsic, Germany. Material for the manufacture of trunks.....	491,018	Jan. 31	3275	836	62	715
Krenkel, Paul, Leipsic, Germany. Life-preserving trunk.....	492,6-8	Feb. 28	2595	642	62	1314
Krenz, Julius D., and W. D. Frederick, Peoria, Ill. Guiding attachment for sewing-machines.....	464,679	Apr. 4	236	60	63	48
Kreusler, Arnold, Staten Island, N. Y. Steam-generating apparatus.....	502,418	Aug. 1	282	67	64	618
Kreusler, Arnold, Staten Island, N. Y. Combined steam generator and heater.....	502,728	Aug. 8	833	201	64	733
Kreusler, Arnold, Staten Island, N. Y. Steam-generator.....	502,729	Aug. 8	834	202	64	734
Kreusler, Arnold, Kreischerville, assignor to himself, and A. Zinsser, New York, N. Y. Treating beer and analogous liquids.....	489,018	Jan. 3	60	18	62	16
Krewson, Joseph A., Rogersville, Mo. Stirrup for saddles.....	494,005	Mar. 21	2007	511	62	1779
Krick, Adam C., Newark, N. J. Traveling-bag.....	504,840	Sept. 12	282	227	64	1451
Krieg, Joseph, St. Mary's, Pa., assignor of one-half to J. L. Kaul, Hollins, Ala. Wagon-brake.....	505,048	Sept. 12	1217	313	64	1513
Krieger, Andrew, Indianapolis, Ind. Saw.....	492,890	Mar. 7	186	45	62	1396
Krieger, Andrew, assignor to E. C. Atkins & Company, Indianapolis, Ind. Holder for inscribable saw-teeth.....	493,334	Mar. 14	893	228	62	1548
Krieger, Andrew, assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw.....	493,628	Mar. 21	13-3	351	62	1659
Krieger, Andrew, assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw.....	494,210	Mar. 28	2356	596	62	1859
Krieghoff, Anton, assignor to himself, R. C. Hickok, and G. P. Armstrong, Buffalo, N. Y. Folding umbrella.....	496,833	May 2	705	187	63	745
Kriegsman, E. E. (See Geisenhüner, Henry, assignor.)						
Kringel, Frank W., Los Angeles, Cal. Repeating action for upright pianofortes.....	495,979	Apr. 25	2326	588	63	478
Krnka, Karel, Prague, Austria-Hungary. Extractor and ejector for bolt-guns.....	495,137	Apr. 11	991	248	63	202
Krnka, Karel, Prague, Austria-Hungary. Breech-bolt for firearms.....	495,741	Apr. 18	1964	495	63	396
Kroder, John, New York, N. Y. Easel-bracket.....	494,758	Apr. 4	366	92	63	72
Kroemer, Florence, New York, N. Y. Coating clock-cases.....	506,050	Oct. 3	386	102	65	75
Kroenke, Henry, and E. Bindewald, New York, N. Y. Refrigerator.....	508,520	Nov. 14	897	221	65	940
Kroger, John, Toledo, Ohio. Bookbinding.....	505,049	Sept. 12	1218	314	64	1513

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Krogh, Emil C. C., assignor of one-half to T. B. and S. D. McGovern, Monmouth, Ill. Check-row planter.....	497,799	May 23	2276	{ 572 573 }	{ 63	1076
Krogh, Emil C. C., assignor of one-half to S. D. and T. B. McGovern, Monmouth, Ill. Thermostat.....	497,800	May 23	2278	573	63	1077
Kroll, August, Leopolis, Wis. Pump.....	497,670	May 16	2071	517	63	1023
Kroll, Mikkel C., Northampton, Mass. Eel-spear.....	504,166	Aug. 29	3163	789	64	1210
Kromer, Camillo, Albany, N. Y. Velocipede or bicycle.....	498,800	June 6	78	19, 20	63	1402
Kropff, Hermann, Dusseldorf, Germany. Pasteurization of liquids.....	497,327	May 16	1532	386	63	926
Kropp, Charles C., Newark, N. J. Violin.....	494,276	Mar. 28	2457	619	62	1877
Kropp, Charles C., Newark, N. J. Keyboard for musical instruments.....	502,099	July 25	2497	627	64	499
Kröttsch, Hugo A., Leipsic, Germany. Apparatus for collecting and arranging postage-stamps, &c.....	508,948	Nov. 21	1595	390	65	1087
Krouse, Andrew, <i>et al.</i> (See Ferrall, Thomas R., assignor.)						
Krouse, Charles C., Williamsport, Pa. Record-book.....	495,253	Apr. 11	1145	297	63	238
Krouse, George, <i>et al.</i> (See Ferrall, Thomas R., assignor.)						
Krouse, Louis M., Cincinnati, Ohio. Flushing-tank.....	492,027	Feb. 21	1550	386	62	1088
Krückeberg, Frederick, Minneapolis, Minn. Hose-bridge.....	504,530	Sept. 5	366	92	64	1338
Kruegar, Martin, Chicago, Ill. Electric-arc lamp.....	496,882	May 9	805	212	63	732
Krueger, Reinhold, New York, N. Y. Jeweler's ring-tray.....	504,167	Aug. 29	3164	789	64	1210
Krueger, William, Neenah, Wis. Stove or furnace.....	507,017	Oct. 17	2056	508	65	415
Krug, Philip F. (See Unger and Krug.)						
Krug, Philip F., Brooklyn, N. Y. Lubricator.....	490,910	Jan. 31	3106	796	62	683
Krug, Philip F., New York, N. Y. Lubricator.....	502,100	July 25	2498	627	64	109
Krug, Simon. (See Korb and Krug.)						
Krug, Wilhelm, Kries Siegen, Germany. Ore-separator.....	490,911	Jan. 31	3107	{ 796 797 }	{ 62	683
Krüger, Gustav, Stettin, Germany. Plant-supporter.....	500,140	June 27	2339	565	63	1839
Kruisbrink, Johannes A., Amsterdam, and J. J. van Leeuwen, Arnhem, Netherlands. Ice breaking and clearing apparatus.....	499,296	June 13	911	221	63	1563
Krumscheid, Philip, Boston, Mass. Thermo-mechanical alarm.....	496,519	May 2	201	54	63	655
Krumschied, Peter. (See Duggan, Philip J., assignor.)						
Krupp, Firm of Fried. (See Corleis and Renisch, assignors.)						
Krupp, Firm of Fried. (See Salomon, Fritz, assignor.)						
Krupp, Firm of Fried. (See Schmitz, Albert, assignor.)						
Kruppenbacher, William, Yonkers, N. Y. Adjustable window-seat.....	507,371	Oct. 24	2694	662	65	544
Kruschke, Rudolph C., Duluth, Minn. Electric show-case alarm.....	490,479	Jan. 24	2385	{ 617 618 }	{ 62	526
Kruse, Gustav, Hamburg, Germany, assignor to G. T. Mamerow, Chicago, Ill. Beer-tempering device.....	505,424	Sept. 19	1838	473	64	1642
Krusi, Herman. (See McMullen, Krusi, and Wood.)						
Krutsch, Charles A., Logansport, Ind. Hair-crimper.....	502,567	Aug. 1	533	127	64	664
Krutzsch, William, assignor to Buckeye Iron and Brass Works, Dayton, Ohio. Automatic locking device for press-operating mechanism.....	503,090	Aug. 8	1418	350	64	841
Krutzsch, William, assignor to Buckeye Iron and Brass Works, Dayton, Ohio. Hydraulic accumulator.....	503,091	Aug. 8	1419	350	64	841
Kubala, Ludwig, Königliche Weinberge, near Prague, Austria-Hungary. Baking-oven.....	495,347	Apr. 11	1323	332	63	263
Kuchler, Karl, Aussig, Austria-Hungary, assignor to B. Heller, New York, N. Y. Belting.....	502,976	Aug. 8	1256	307	64	811
Kuckartz, Leonard, Portland, Oreg. Warehouse gang-plank.....	502,568	Aug. 1	534	127	64	664
Kuebler, Willibald, Easton, Pa. Reversing mechanism.....	510,031	Dec. 5	325	73	65	1470
Kuehne, Albert, <i>et al.</i> (See Beehler, Charles W., assignor.)						
Kuersten, Hugo, assignor of one-half to H. Michel, Chicago, Ill. Window-frame.....	506,240	Oct. 10	774	191	65	158
Kub, Solomon, Sioux Falls, S. D. Advertising apparatus.....	489,961	Jan. 17	1522	398	62	344
Kuh, Solomon, Sioux Falls, S. D. Advertising apparatus.....	504,421	Sept. 5	180	47	64	1304
Kuhlman, William A., Toledo, Ohio. Car-fender.....	506,785	Oct. 17	1681	423	65	345
Kuhlmann, Werner, Brunswick, Germany. Elastic supporting device for cars.....	507,739	Oct. 31	3309	810	65	673
Kühn, Albin, Heidelberg, Germany. Contrivance for fastening scaffolds.....	508,949	Nov. 21	1596	391	65	1087
Kuhn, Edmond, Brooklyn, N. Y. Clock-attaching device for cycles.....	490,750	Jan. 31	2844	730	62	630
Kuhn, Edmond, New Albany, Ind. Pattern for molding dovetails.....	492,728	Feb. 28	2655	658	62	1327
Kühn, Gustav E., Schmöln, Germany. Cyclometer.....	503,485	Aug. 15	2069	516	64	971
Kuhn, Rudolph C., and A. Klitsche, La Crosse, Wis. Railway-switch.....	506,437	Oct. 10	1118	{ 278 279 }	{ 65	226
Kubner, Herman E., Davenport, Iowa. Wheel.....	500,913	July 4	592	155	64	109
Kuhnle, Gotfred. (See Odgaard and Kuhnle.)						
Kuhns, Amos M., Union Deposit, Pa. Wire fence.....	502,977	Aug. 8	1257	308	64	811
Kulbrock, August, Berlin, Germany. Fire-bar for furnaces.....	508,950	Nov. 21	1597	391	65	1087
Kulich, Anton, Brooklyn, N. Y. Bed-lounge.....	508,548	Nov. 14	938	231	65	947
Kulp, Henry M., Philadelphia, Pa., and C. H. Laird, Camden, N. J. Watchmaker's pliers.....	505,835	Oct. 3	51	14	65	12
Kumpf, William, Memphis, Tenn. Stringed musical instrument.....	505,662	Sept. 26	2276	577	64	1738
Kundtz, Theodor, Cleveland, Ohio. Cabinet sewing-machine table.....	490,116	Jan. 17	1784	465	62	397
Kundtz, Theodor, Cleveland, Ohio. Sewing-machine table.....	491,654	Feb. 14	970	244	62	958
Kundtz, Theodor, Cleveland, Ohio. Sewing-machine table.....	491,655	Feb. 14	971	244	62	958
Kundtz, Theodor, Cleveland, Ohio. Sewing-machine table.....	491,656	Feb. 14	973	245	62	959
Kuney, Elmer E. (See Head, Frank E., assignor.)						
Kuntz, Charles F., St. Louis, Mo. Roach-trap.....	501,350	July 11	1313	328	64	252
Kunz, William, Buffalo, N. Y. Car-step.....	493,932	Mar. 21	1871	477	62	1753
Künzell, Oskar, Dusseldorf, Germany. Cigar-box.....	499,124	June 6	644	155	63	1503
Kupfer, Arthur A. and H. C., Providence, R. I. Wheel-tire.....	508,173	Nov. 7	316	79	65	817
Kupfer, Herman C. (See Kupfer, Arthur A. and H. C.)						
Küpferling, Carl. (See Thiele, Küpferling, and Sichteremann.)						
Kursh, George F., Philadelphia, Pa. Link for sleeve or cuff buttons.....	501,725	July 18	1900	472	64	376
Kurtz, John, Philadelphia, Pa. Ice-machine.....	504,986	Sept. 12	1124	288	64	1496
Kurtz, John G., Washington, D. C. Clothes-drier.....	505,108	Sept. 19	1324	342	64	1547
Kurtz, John S., Richfield, Pa., assignor to C. La Dow, Albany, N. Y. Spring-tooth harrow.....	489,417	Jan. 3	659	{ 178 179 }	{ 62	141
Kurtz, Louis, New York, N. Y. Tricycle.....	493,505	Mar. 14	1159	296	62	1599
Kurtz, William, New York, N. Y. Photomechanical printing.....	498,396	May 30	3244	807	63	1262
Kurtzmann, Charles F. <i>et al.</i> (See Rexicker, George W., assignor.)						
Kuschewsky, Solomon L. (See Wool, Moses, assignor.)						
Küster, August C., Brooklyn, N. Y. Stair-carpet fastener.....	507,517	Oct. 24	2934	720	65	589
Küstermann, Max, and H. Gottschalk, Berlin, assignors to Vereinigte Zündwaarenfabriken) Actien-Gesellschaft Zanow-Hannover, Hanover, and S. Bud, Berlin, Germany. Machine for printing on matches.....	495,095	Apr. 11	897	{ 227 228 }	{ 63	187
Kutscher, Louis, New Britain, Conn. Shutter-worker.....	494,006	Mar. 21	2008	512	62	1780

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Kuykendall, Josiah and W. F., Cookeville, Tenn. Vehicle-shaft.	499,340	June 13	983	238	63	1575
Kuykendall, William F. (See Kuykendall, Josiah and W. F.)						
Kwiatkowski, Adalbert, Posen-Wilda, Germany. Coffin-signal.	500,013	June 20	2100	508	63	1785
Kwiatkowski, Louis F. (See Rieckert and Kwiatkowski.)						
Kyes, Henry P., Riverside, Cal. Checkrein detaching or attaching device.	498,353	May 30	3185	793	63	1250
Kyle, Augustus G. and E. J., Newville, Pa. Meat-clamp.	506,702	Oct. 17	1537	384	65	318
Kyle, Edward J. (See Kyle, Augustus G. and E. J.)						
Kyte, John P., Salem, Ind. Churn.	506,404	Oct. 10	1057	263	65	214
L. Wolff Manufacturing Company. (See Clifford, John, assignor.)						
L'Enfant, Charles, New York, N. Y. Cover for books.	492,925	Mar. 7	246	62	62	1407
La Baw, George W., Bayonne, N. J. Lifting-jack.	501,280	July 11	1186	300	64	231
La Boiteaux, Frank M., assignor of one-half to H. Varwig, Cincinnati, Ohio. Device for demagnetizing watches.	507,912	Oct. 31	3601	888	65	726
La Burt Automatic Electric Block Signal System and Car Coupler Company. (See La Burt, John, assignor.)						
La Burt, John, New York, assignor to Agricola La Burt Manufacturing Company, Brooklyn, N. Y. Electric block-signal system.	490,663	Jan. 31	2705	696	62	604
La Burt, John, assignor of one-third to A. M. Lowry, New York, N. Y. Convertible step-ladder and window-platform.	490,664	Jan. 31	2709	697	62	605
La Burt, John, assignor to La Burt Automatic Electric Block Signal System and Car Coupler Company, New York, N. Y. Block-signal system.	494,007	Mar. 21	2010	513	62	1780
La Burt, John, assignor to La Burt Automatic Electric Block Signal System and Car Coupler Company, New York, N. Y. Car-Coupling.	501,605	July 18	1705	434	64	343
La Chance, Walter W., assignor of one-half to T. M. Fouts, Cleveland, Ohio. Cell-door-operating device.	508,026	Nov. 7	68	20	65	771
La Cour, Paul, Askovus, Denmark. Regulator.	498,461	May 30	3350	834	63	1281
La Dow, Charles. (See Kurtz, John S., assignor.)						
La Dow, Charles. (See Perrin, Charles, assignor.)						
La Dow, Charles, Albany, N. Y. Harrow.	494,538	Mar. 28	2825	723	62	1955
La Dow, Charles, Albany, N. Y. Harrow.	501,841	July 18	2078	513	64	407
La Dow, Charles, Albany, N. Y. Harrow.	501,886	July 18	2161	536	64	421
La Dow, Charles, Albany, N. Y. Harrow.	501,887	July 18	2163	536	64	422
La Dover, George A., Selkirk, N. Y. Frame for mail-bags or like receptacles.	506,515	Oct. 10	1253	313	65	252
La Follett, Woodson F., Ballard, Mo. Flue-cap.	494,815	Apr. 4	470	118	63	91
La France, Elzear, Worcester, Mass. Fire or burglar alarm.	489,312	Jan. 3	505	139	62	110
La Pierre, Frank H. (See Coe, Isaac, assignor.)						
La Roche, Frederick A., Philadelphia, Pa. Storage-battery.	496,126	Apr. 25	2550	642	63	520
La Rochelle, Ephrem, assignor of two-thirds to E. Poirier, Salem, Mass. Nut-lock.	494,338	Mar. 28	2558	644	62	1897
La Sha, Jeromé. (See Torrey and La Sha.)						
La Sha, Salina, et al. (See Torrey and La Sha, assignors.)						
La Strong, Frank. (See Hudson, La Strong, and Bunch.)						
La Subérine. (See Vasson, Raphaël G. de, assignor.)						
La Touche, Reno M., Moscow, Pa. Device for catching oil from crank-pin journals of connecting-rods.	504,391	Sept. 5	128	33	64	1294
La Tour, Louis, Bridgeport, Conn. Bed-lounge.	490,420	Jan. 24	2287	618	62	527
Labady, Louis C., Tacoma, Wash. Hub for vehicle-wheels.	493,097	Mar. 7	503	126	62	1459
Labatt, Charles B., San Francisco, Cal. Elevator safety attachment.	503,486	Aug. 15	2070	516	64	972
Labudde, Rudolph, and F. Hansen, Freeport, Ill. Spring-hinge.	503,243	Aug. 15	1679	413	64	902
Lacer, William K., Niles, Mich. Automatic grain-weigher.	506,007	Oct. 3	321	84, 85	65	63
Lachman, Morris, London, England, assignor to Standard Caster and Wheel Company, of West Virginia. Caster-wheel.	492,924	Mar. 7	245	62	62	1407
Lackey, Albert W., Gold Hill, Nev. Cable-protector.	500,399	June 27	2751	677	63	1911
Lacombe, Joseph M., Paris, France, assignor of one-half to L. G. Dreyfus, Santa Barbara, Cal. Carbon electrode for arc lamps.	506,650	Oct. 10	1445	362	65	2-9
Lacroix, Elizear P., assignor to C. Rogers & Bros., Meriden, Conn. Coffin-handle.	505,663	Sept. 26	2277	578	64	1739
Lacroix, Napoleon, and L. Dubois, Montreal, Canada. Sewer-cleaner.	494,427	Mar. 28	2700	678	62	1922
Lacy, Elzada. (See Lacy, George W., assignor.)						
Lacy, George W., assignor, by mesne assignments, to E. Lacy, Kingston, N. Y. Truck for motor-cars.	503,092	Aug. 8	1421	351	64	842
Lacy, Robert T., Jr., Camden, N. J. Mineral-locator.	507,018	Oct. 17	2059	508	65	415
Ladd, John H., London, England. Treating malleable iron.	504,841	Sept. 12	884		64	1451
Ladd, Sherman W., Somerville, Mass. Lasting-machine.	500,141	June 27	2340	505	63	1839
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Starting and stopping mechanism for lasting-machines.	510,972	Dec. 19	1976	485	65	1804
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Lasting-machine.	510,973	Dec. 19	1978	487	65	1805
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Lasting-machine.	510,974	Dec. 19	1983	488	65	1805
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Lasting-machine.	510,975	Dec. 19	1984	489	65	1805
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Tacking-machine.	510,976	Dec. 19	1987	490	65	1806
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Lasting-machine.	510,977	Dec. 19	1988	491	65	1806
Ladd, Sherman W., Somerville, Mass., assignor to Consolidated Hand Method Lasting Machine Company, Nashua, N. H. Tack separating and feeding mechanism.	510,978	Dec. 19	1992	492	65	1806
Ladd, Story B. (See Condit and Ladd.)						
Lademann, Otto, Berlin, Germany. Carving-machine.	508,951	Nov. 21	1597	391	65	1087
Laffont, Marc, Paris, France. Artificial stone.	501,794	July 18	2021		64	397
Laffont, Marc, Paris, France. Artificial stone.	501,888	July 18	2164		64	422
Laffont, Marc, Paris, France. Artificial stone.	501,889	July 18	2165		64	422
Lafon, Toussaint, Bordeaux, France. Bolt.	507,277	Oct. 24	2527	623	65	510
Lafore, John, Argenta, Ark. Car-door.	505,836	Oct. 3	52	14	65	13
Lagerquist, Andrew J., Braceville, Ill. Bridge-gate.	501,516	July 18	1566	394	64	316
Lagerquist, Gust, and A. G. Nelson, Minneapolis, Minn. Elevator-gate.	500,586	July 4	74	21	64	15
Lahue, Moses M. (See Sawyer and Lahue.)						
Lahusen, Johann C., Bremen, Germany. Production of neutral wool-grease.	511,051	Dec. 19	2091	518	65	1825
Laichinger, John, St. Louis, Mo. Condenser.	495,417	Apr. 11	1432	360	63	282
Laidlaw, William, Hawick, Scotland. Apparatus for dyeing yarn.	501,517	July 18	1568	394	64	316
Laighton, William S., and A. P. Hitchcock, Norwich, Conn. Camera.	490,117	Jan. 17	1785	465	62	397
Laiminger, Korbinian, St. Louis, Mo. Harrow.	490,713	Jan. 31	2782	715	62	620

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Laininger, Korbinian, and J. Ackfeld, St. Louis, Mo. Hitching device	497,582	May 16	1933	486	63	997
Laird, Archibald F., assignor of one-half to J. M. Hill, Thornton, Tex. Cotton-bag carrier	492,028	Feb. 21	1551	386	62	1088
Laird, Archibald F., and J. M. Hill, Thornton, Tex. Cotton-sack carrier	509,540	Nov. 28	2627	635	65	1295
Laird, Charles H. (See Kulp and Laird.)						
Laird, Robert H., Toronto, Canada, assignor to W. H. Laird, New York. Apparatus for vaporizing oil	498,518	May 30	3443	{ 854 855 }	{ 63 }	1297
Laird, Robert H., Toronto, Canada, assignor to W. H. Laird, New York, N. Y. Process of and apparatus for deodorizing and refining crude oil	507,230	Oct. 24	2446	603	65	496
Laird, William H. (See Laird, Robert H., assignor.)						
Laird, William H. (See Watson, George A., assignor.)						
Laird, William H., assignor of one-half to W. H. Reinhart, Mendon, Mich. Hay-rack	505,317	Sept. 19	1659	428	64	1608
Laire, Georges de, assignor to Société de Laire & Co., Paris, France. Making vanilloy-carbonic acid and vanillin	497,546	May 16	1879	...	63	988
Lake, Amariah, Pleasantville, N. J. Illusion apparatus	508,237	Nov. 7	405	98	65	834
Lake, Amariah, Pleasantville, N. J. Illusion apparatus	510,803	Dec. 12	1630	405	65	1730
Lake, David. (See Whiffen and Lake.)						
Lake, Gaither A., Stockwell, Ind. Combination step-ladder	502,367	Aug. 1	197	47	64	602
Lake, Leon, Hornellsville, N. Y., assignor to Whiffen-Lake Lasting Machine Company, Hammononton, N. J. Lasting-machine	491,894	Feb. 14	1344	333	62	1032
Lake, Levin, Baltimore, Md. Umbrella-cover	506,405	Oct. 10	1058	263	65	214
Lake, Thomas H., and R. W. Dickson, Mobile, Ala.; said Dickson assignor to said Lake. Fertilizer-distributor	489,313	Jan. 3	507	139	62	110
Lake, Vincent F. (See Whiffen and Lake.)						
Lake, Vincent F., Pleasantville, N. J., and I. Risley, New York, N. Y., assignors to Composing Machine Company, Pleasantville, N. J. Machine for justifying matrix-pages	510,032	Dec. 5	327	73	65	1471
Lake, Wilnot, Charlton Heights, Md. Pavement	507,683	Oct. 31	3231	791	65	658
Lakin, James A., Westfield, Mass. Burial-casket	501,809	July 4	439	115	64	81
Lallemant, Frederick A., Montreal, Canada. Washing-machine	502,730	Aug. 8	835	202	64	731
Lally, Bartholomew W. (See Miller and Lally.)						
Lamarche, Henry J., et al. (See De Barril, Robert J., assignor.)						
Lamarche, John V., et al. (See De Barril, Robert J., assignor.)						
Lamarche, Matthew J., et al. (See De Barril, Robert J., assignor.)						
Lamb, Addison E., Philadelphia, Pa. Stand for sharpening-stones	496,741	May 2	560	150	63	720
Lamb, Charles M., Adrian, Mich. Gate-hinge	504,450	Sept. 5	223	60	64	1312
Lamb, Charles M., Adrian, Mich. Gate-hinge	504,451	Sept. 5	223	60	64	1312
Lamb, Charles R., New York, N. Y. Tile	499,743	June 20	1063	400	63	1708
Lamb, Christopher K., San Francisco, Cal. Water-filter	511,149	Dec. 19	2264	555	65	1859
Lamb, George B., Waterbury, Conn. Wire-drawing machine	489,588	Jan. 10	941	{ 244 245 }	{ 62 }	211
Lamb, George B., assignor to Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Hydraulic-pressure valve	490,290	Jan. 24	2090	545	62	468
Lamb, George M. and H. R., Hillsdale, Mich. Fence	496,067	Apr. 25	2494	629	63	509
Lamb, Hiram R. (See Lamb, George M. and H. R.)						
Lamb, Horace K., Denver, Colo. Eyelid-lifter	497,052	May 9	1060	272	63	828
Lamb, Isaac W. (See Clark, Charles W., assignor.)						
Lamb, James, Detroit, Mich. Stove	495,555	Apr. 18	1661	419	63	345
Lamb, James, Aurora, Ind., assignor to L. K. Lamb, Tolono, Ill. Prescription-case	489,652	Jan. 10	1025	267	62	228
Lamb, Knitting Machine Manufacturing Company et al. (See Perkins, Albert, assignor.)						
Lamb, Lamartine K. (See Lamb, James, assignor.)						
Lamb, Nathan H., Verdon, S. D. Type-writing machine	492,812	Mar. 7	63	15	62	1370
Lamb, Restore B. (See Gibbs, Eugene U., assignor.)						
Lamb, Salem T., New Albany, Ind. Corn-planter	490,665	Jan. 31	2711	697	62	605
Lamb, Walter, Memphis, Tenn. Adjustable handle for bicycles	505,273	Sept. 19	1580	412	64	1594
Lamb, William, Aberdeen, S. D. Brick-mold-sanding machine	493,098	Mar. 7	504	{ 126 127 }	{ 62 }	1459
Lambach, Philip H., Boulder, Colo. Washing-machine	493,335	Mar. 14	894	229	62	1548
Lambdin, David H. (See Knight, John A., assignor.)						
Lamberson, Frank J., et al. (See Crosby, Frank P., assignor.)						
Lamberson, Oscar S., Sioux City, Iowa. Latch	496,570	May 2	262	75	63	670
Lambert, Alonzo, Brooklyn, assignor to H. E. Oppenheimer & Co., New York, N. Y. Tool for bending ring-shanks	496,125	Apr. 25	2549	642	63	520
Lambert, Charles N. (See Cox, Israel W., assignor.)						
Lambert, Frank, Brooklyn, N. Y., assignor to Thomson Meter Company, of New Jersey. Mechanism for controlling the action of oscillating disks	490,025	Jan. 17	1644	427	62	367
Lambert, Frank, Brooklyn, N. Y., assignor to Thomson Meter Company, of New Jersey. Mechanism for controlling the action of oscillating disks	490,026	Jan. 17	1646	428	62	368
Lambert, Frank, Brooklyn, N. Y., assignor to Thomson Meter Company, of New Jersey. Mechanism for controlling the action of oscillating disks	511,705	Dec. 26	3185	780	65	2040
Lambert, George A., Belfast, Me. Plow-colter clamp	491,895	Feb. 14	1346	334	62	1033
Lambert, George A., Darke county, Ohio. Vehicle-shaft	497,378	May 16	1610	407	63	941
Lambert, George A., assignor to I. H. and E. A. Sherman, Belfast, Me. Plow-colter	509,383	Nov. 28	2331	564	65	1239
Lambert, Julius, Hoboken, N. J. Card or letter case	501,431	July 11	1435	360	64	276
Lambing, Isaac P., Golden, assignor of one-half to E. J. Rothwell and R. Sherman, Denver, Colo. Duplex rotary force-pump	508,574	Nov. 14	983	241	65	957
Lamkin, John B., Garfield, Ark. Mail-bag catch-hook	495,116	Apr. 11	950	239	63	196
Lamont, Frank L., et al. (See Grim, Charles B., assignor.)						
Lamont, Robert P., Chicago, Ill. Counterbalance for bridges	503,377	Aug. 15	1909	473	64	943
Lamout, Robert P., Chicago, Ill. Driving mechanism for bridges	503,378	Aug. 15	1910	473	64	943
Lamp, William P., Brownsville, Ill. Car-coupling	492,029	Feb. 21	1552	387	62	1088
Lamparter, Henry, St. Charles, assignor to H. Tibbe & Son Manufacturing Company, Washington, Mo. Machine for filling the interstices of corn-cob pipes	496,883	May 9	808	212	63	783
Lamplugh, Henry A. (See Lamplugh, James A. and H. A.)						
Lamplugh, James A., and H. A., Birmingham, England; said H. A. Lamplugh assignor to said James A. Lamplugh. Combined pressure-gage and safety-valve for pneumatic tires	511,706	Dec. 26	3187	780	65	2040
Lampman, A. N., et al. (See Godfrey, Wyman H. A., assignor.)						
Lamson Brothers. (See Lamson, John D. R., assignor.)						
Lamson Consolidated Store Service Company. (See Burns, James M., assignor.)						
Lamson Consolidated Store Service Company. (See Cowley, James T., assignor.)						
Lamson Consolidated Store Service Company. (See Goodfellow, John H., assignor.)						
Lamson Consolidated Store Service Company. (See Juengst, Charles A., assignor.)						
Lamson, John D. R., assignor to Lamson Brothers, Toledo, Ohio. Hook and eye	509,815	Nov. 28	3066	740	65	1379
Lamson, Warren H., Bridgeport, Conn. Toy	492,963	Mar. 7	303	76, 77	62	1419
Lanagan, Michael A., assignor of one-fourth to J. Ellingworth, Mobile, Ala. Boiler tube or fire header	498,277	May 30	3046	757	63	1226

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Lancaster, John P., Cleveland, Ohio, assignor of thirty-three sixty-fourths to S. Proskey and F. Alexander, Brooklyn, N. Y. Metallic railway-tie	502,464	Aug. 1	358	86	64	632
Lancaster, Thomas H., West Point, Ga. Plow	501,014	July 4	749	196	64	136
Lance, Andrew M., Bellowsville, Pa. Churn	499,234	June 13	813	193	63	1546
Langon, Marguerite H., Bienne, Switzerland. Aluminium solder and making same	507,822	Oct. 31	3457		65	701
Lancrenon, Marie F., Paris, France. System of heating by steam	489,748	Jan. 10	1176	{ 306 307 }	62	259
Land, Harry, assignor to Wayne Works, Richmond, Ind. Drill	494,869	Apr. 4	554	140	63	108
Lander, Frank B., <i>et al.</i> (See Davis, William W., assignor.)						
Lander, J. Warren. (See Still, Oliver H., assignor.)						
Lander, Walter, <i>et al.</i> (See Davis, William W., assignor.)						
Landers, Joseph E., New Bedford, Mass. Pen	506,853	Oct. 17	1790	450	65	364
Landes, John V. (See Smith and Landes.)						
Landgraf, Friedrich A., Chemnitz, Germany. Finishing fabrics	494,759	Apr. 4	366		63	73
Landin, John, Stockholm, Sweden. Making ammonium nitrate	500,914	July 4	593		64	109
Landis, Abraham B., Waynesborough, Pa. Rotating grain-meter	492,869	Mar. 7	155	37	62	1359
Landis, Abraham B., Waynesborough, Pa. Pumping-engine	492,870	Mar. 7	157	38	62	1389
Landis, Abraham B., Waynesborough, Pa. Compensating journal-box	501,726	July 18	1900	472	64	376
Landis, Frank F., Waynesborough, Pa. Grain-separator	492,213	Feb. 21	1838	460	62	1148
Landis, Frank F., Waynesborough, Pa. Feed-water heater and purifier	508,174	Nov. 7	318	79	65	817
Landis, Israel L., Lancaster, Pa. Brush-holder	501,084	July 11	866	225	64	173
Landis, Johann H., Oerlikon, near Zurich, Switzerland. Machine for sharpening and setting saws	490,410	Jan. 24	2276	591	62	506
Landis, Levi K. (See Rote and Landis.)						
Landis, William J., Columbus, Ohio. Bicycle-handle	496,834	May 2	706	187	63	745
Landreth, Leopold, Bristol, Pa. Vehicle	494,008	Mar. 21	2015	514	62	1781
Landry, Adolphus J., Somerville, Mass. Eyeglasses	493,169	Mar. 7	620	156	62	1480
Landry, Adolphus J., Somerville, Mass. Eyeglasses	506,823	Oct. 17	1747	440	65	357
Landry, Adolphus J., Boston, Mass. Eyeglasses	499,554	June 13	1362	323	63	1643
Landry, Adolphus J., assignor to A. J. Lloyd, Boston, Mass. Eyeglasses	490,291	Jan. 24	2091	545	62	469
Lane, Almeron M., Meriden, Conn. Pendulum-ball	492,030	Feb. 21	1553	387	62	1068
Lane, Almeron M., Meriden, Conn. Clock-case sash	492,031	Feb. 21	1553	387	62	1068
Lane, Almeron M., Meriden, Conn. Clock	492,813	Mar. 7	66	15, 16	62	1371
Lane, Augustus R., New York, N. Y. Insulator	491,362	Feb. 7	507	130	62	845
Lane, Cornelius. (See Lane, John and C.)						
Lane, Fernando G., assignor of two-thirds to J. W. Kelly and F. Sterzing, Austin, Tex. Clothes-line	497,248	May 9	1366	347	63	883
Lane, Fernando G., and J. W. Kelly, assignors of one-third to F. Sterzing, Austin, Tex. Pinless clothes-line	497,247	May 9	1366	347	63	883
Lane, Frederic A., assignor of one-half to F. B. Morgan, New Haven, Conn. Oil-can	495,223	Apr. 11	1125	281	63	226
Lane, George D. (See Maddox, William J., assignor.)						
Lane, George M., Asbury Park, N. J. Electric-arc-lamp carbon	495,463	Apr. 11	1520	{ 378 379 173 174 }	63	300
Lane, Henry P., Franklin, Ohio. Machine for making paper buckets	504,730	Sept. 12	681	{ 173 174 }	64	1411
Lane, James H., assignor of one-half to H. B. Chichester, Chicago, Ill. Lock for pipe connections	509,742	Nov. 28	2944	712	65	1355
Lane, James H., assignor of one-half to H. B. Chichester, Chicago, Ill. Pipe-coupling	509,743	Nov. 28	2945	712	65	1355
Lane, John and C., Holly, Mich. Wire-fence machine	492,214	Feb. 21	1839	{ 460 461 }	62	1148
Lane, Levi E., Lyons, assignor of two-thirds to E. S. Corwin, Phelps, and C. J. Rehkgutler, Claverack, N. Y. Wagon-brake	498,958	June 6	368	88	63	1457
Lane, Lizzie, Dunellen, N. J. Electrical head-clamp for relieving pain	506,516	Oct. 10	1255	313	65	252
Lane, Madison W., assignor of one-half to F. H. Doggett, Hillsborough, Ohio. Stalk or trash cutter	499,744	June 20	1664	400	63	1708
Lane, Thomas W., Boston, Mass., assignor to Electric Gas Lighting Company, Portland, Me. Electric gas-lighter	489,653	Jan. 10	1025	267	62	229
Lane, Thomas W., Boston, Mass., assignor to Electric Gas Lighting Company, Portland, Me. Electric gas-lighting apparatus	499,298	June 13	915	222	63	1564
Lane, Thomas W., Boston, Mass., and C. E. Lee, Chicago, Ill., assignors to Electric Gas Lighting Company, Portland, Me. Electric gas-lighting apparatus	499,297	June 13	913	221	63	1563
Lane, William G., Pictou, Canada. Coal-dumping car	501,148	July 11	988	252	64	194
Lane, William J., Poughkeepsie, N. Y. Support for moving bodies	501,949	July 25	2261	565	64	456
Lane, Willoughby N., Mount Sterling, Ky. Fence	508,809	Nov. 14	1450	359	65	1045
Laney, William S., Lithopolis, Ohio. Washing-machine	507,711	Oct. 31	3276	{ 800 801 }	65	666
Lanfair, Herbert D., assignor to Miller's Falls Company, Miller's Falls, Mass. Hack-saw machine	502,978	Aug. 8	1259	308	64	811
Lanfair, Herbert D., Erving, assignor to Miller's Falls Company, Miller's Falls, Mass. Spoke-shave	508,274	Nov. 14	733	181	65	908
Lang, Adam, Cleveland, Ohio. Propelling mechanism	504,427	Aug. 29	3345	836	64	1244
Lang, Frank S., Helena, Mont. Damper for furnace-pipes	493,363	Mar. 14	940	241	62	1558
Lang, Frank S., Helena, Mont. Stove-reservoir	499,299	June 13	916	222	63	1561
Langan, David H., Leetonia, Pa. Tug-hook	508,521	Nov. 14	899	221	65	940
Langdon, Herbert P., East Constable, N. Y. Device for preventing the swarming of bees	509,438	Nov. 28	2456	591	65	1264
Langdon, William C., Erie, assignor of one-half to P. E. Shieler, Mercer, Pa. Mechanical motor	505,946	Oct. 3	220	57	65	44
Lange, Friedrich E., Glashütte, Germany. Watchcase-spring	511,150	Dec. 19	2265	555	65	1859
Lange, Georg E. O., Berlin, Germany. Vacuum-pump	509,541	Nov. 28	2628	636	65	1295
Lange, Hinrich, assignor of one-half to H. McDonald, Newark, N. J. Baby-carriage	508,726	Nov. 14	1204	299	65	1000
Lange, Philip, assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Dynamo-electric machine or motor	500,400	June 27	2752	{ 677 678 }	63	1911
Langen, Eugen, Cologne, Germany. Refining sugar	495,614	Apr. 18	1759		63	361
Langer, Gotthold, St. Louis, Mo., assignor of one-half to H. C. Withers, Carrollton, Ill. Velocipede	494,870	Apr. 4	555	140	63	108
Langer, Gotthold, assignor to H. G. Stiebel, Jr., St. Louis, Mo. Street-sprinkler	503,093	Aug. 8	1425	{ 351 352 }	64	842
Langer, Gotthold, assignor to H. G., Jr., and A. C. Stiebel, St. Louis, Mo. Street-sprinkler	497,074	May 9	1101	283	63	835
Langford, John T., Newton, Mass. System of exhausting air from Artesian wells and connecting pipes	495,812	Apr. 18	2072	523	63	415
Langford, John T., Newton, Mass. Combined valve for air and liquids	507,661	Oct. 31	3205	784	65	653
Langheinz, Edward L., Brooklyn, N. Y. Trolley-pole catcher	494,871	Apr. 4	558	140	63	108
Langhorst, John H., Jackson, Cal. Timepiece-escapement	504,223	Aug. 29	3261	813	64	1228

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Langjahr, Emile, Trübau, Austria-Hungary. Apparatus for simultaneously weaving two or more fabrics	509,476	Nov. 28	2530	{ 610 611 }	{ 65 65 }	1277
Langlais, Pascal J., Milwaukee, Wis. Valve-gear	511,085	Dec. 19	2156	531	65	1838
Langmuir, Woodburn, Toronto, Canada. Cushion-tire	490,714	Jan. 31	274	715	62	620
Langmuir, Woodburn, Toronto, Canada. Vehicle-tire	496,418	May 2	41	12	63	626
Langmuir, Woodburn, Toronto, Canada. Cushion-tire	502,731	Aug. 8	835	202	64	734
Langsford, Samuel P., et al. (See Phillips, James M., assignor.)						
Langton, Alfred, Deptford Pier, England. Steam-generator	491,217	Feb. 7	256	63	62	796
Langville, Louis S., Troy, N. Y. Treating black-ash residuum of wood-pulp manufacture	506,051	Oct. 3	387		65	76
Langwith, Frank A., Brooklyn, assignor of two-thirds to J. J. Myers and G. E. McCormick, New York, N. Y. Time gas lighter and extinguisher	495,556	Apr. 18	1663	419	63	345
Lanier, James B. (See Towel, Samuel A., assignor.)						
Lanigan, Jane, executrix. (See Graves, John W., assignor.)						
Lanigan, Thomas, et al. (See Graves, John W., assignor.)						
Laning, Jay F., Norwalk, Ohio. Index	493,552	Mar. 14	1240	{ 317 318 }	{ 62 62 }	1615
Lannert, John A., and W. R. Jeavons, Cleveland, Ohio. Hydrocarbon-burner	499,300	June 13	917	222	63	1564
Lannert, John A., and W. R. Jeavons, Cleveland, Ohio. Vapor-burner	504,129	Aug. 29	3103	776	64	1199
Lanouette, Victor F., Dover, N. H. Brick-machine	491,657	Feb. 14	974	{ 245 246 }	{ 62 62 }	959
Lanphere, Henry W., Indian Lake, N. Y. Churn	495,202	Apr. 11	1098	273	63	222
Lansberg Brake Company. (See De Forest, Wyatt F., assignor.)						
Lansberg Brake Company. (See Hoff, John A., assignor.)						
Lansingh, Killian V. R., Chicago, Ill. Filter	496,614	May 2	348	95	63	623
Lantz, William F., Akron, Ohio. Attachment for squares	503,050	Aug. 8	1356	335	64	831
Lapage, Richard H., et al. (See Borries, August von, assignor.)						
Lapeyre, Joseph A., New Orleans, La. Racing book, sheet, or card	497,189	May 9	1272	323	63	866
Lapham, Charles, et al. (See Weaver, William, assignor.)						
Lapham, Joseph H. and O. T., Cleveland, Ohio. Washboard	491,181	Feb. 7	199	51	62	785
Lapham, Owen T. (See Lapham, Joseph H. and O. T.)						
Lapham, William W., San Francisco, Cal. Game apparatus	509,316	Nov. 21	2206	533	65	1204
Lapin, Jean. (See Croes, Mergaert, and Lapin.)						
Laporte, Saül, assignor of one-half to J. Coursolle, Ottawa, Canada. Dial-fastening for watches	506,824	Oct. 17	1748	440	65	357
Lapp, John, Rochester, N. Y. Steam boiler and heater	491,404	Feb. 14	1205	301	62	1005
Lapp, John, Rochester, N. Y. Steam-boiler	494,211	Mar. 28	2357	596	62	1859
Lappe, Alfred A. (See Lappe, Charles H. and A. A.)						
Lappe, Charles H. and A. A., Allegheny, Pa. Machine for coloring leather	504,224	Aug. 29	3262	814	64	1228
Lapsoln, Georges V. G., Paris, France. Pneumatic tire	496,571	May 2	283	76	63	671
Laraway, George W., Hartford, Conn., assignor of one-half to J. E. West, St. Cloud, Minn. Machine for making pails	504,881	Sept. 12	939	{ 242 243 }	{ 64 64 }	1461
Lard, Allan E., Chicago, Ill. Sleeping-car berth	511,533	Dec. 26	2909	708	65	1991
Lariat Manufacturing Company. (See Shaw, Edgar, assignor.)						
Larimer, John J., Crab Tree, Pa. Ditching-plow	507,913	Oct. 31	3603	889	65	727
Larish, Wilbur F., Oshkosh, Wis. Sanding-drum	491,658	Feb. 14	975	246	62	959
Larkins, A. O. (See Rodgers, William H., assignor.)						
Larkins, Samuel O., Blair, Nebr. Hanger for electric incandescent lamps	492,215	Feb. 21	1843	461	62	1149
Larned, Sherwood J. (See Lockwood and Larned.)						
Larned, Sherwood J., Evanston, Ill., and F. A. Pickernell, Newark, N. J., assignors to American Telephone and Telegraph Company, of New York. Telephone circuit and apparatus	501,085	July 11	867	225	64	173
Larned, Sherwood J., Evanston, Ill., and F. A. Pickernell, Newark, N. J., assignors to American Telephone and Telegraph Company, of New York. Station apparatus for telephone-circuits	501,086	July 11	870	226	64	174
Larrabee, Henry L., assignor of one-third to C. A. Brown, Peabody, Mass. Last	509,384	Nov. 28	2332	565	65	1239
Larsen, Anton, New York, N. Y. Elevator	495,813	Apr. 18	2073	523	63	415
Larsen, Anton, New York, N. Y. Refrigerator	510,273	Dec. 5	725	175	65	1547
Larsen, Peter C. (See Mortenson and Larsen.)						
Larson, Andrew, Lexington, Nebr. Sulky-harrow	510,071	Dec. 5	390	86	65	1483
Larson, Carl A., Sioux City, Iowa. Hot-air furnace	499,926	June 20	1971	479	63	1763
Larson, Charles J., Lake Park, Minn. Steam-boiler separator	505,709	Sept. 26	2362	597	64	1753
Larson, James C., Appleton, Minn. Pocket-knife	509,228	Nov. 21	2059	497	65	1177
Larson, Martin L., Warren, Minn. Stove	505,772	Sept. 26	2461	620	64	1772
Larsson, Henry W., and J. A. Brouillard, Springfield, Mass., said Brouillard assignor to Upson Nut Company, Unionville, Conn. Door spring and check	511,299	Dec. 19	2513	612	65	1904
Larsson, Johan, assignor to himself and F. Peterson, Ludington, Mich. Floating signal for locating sunken vessels	504,225	Aug. 29	3264	815	64	1229
Lary, Morris. (See Lewis, William H., assignor.)						
Lasbury, George B., et al. (See Jones, John M., assignor.)						
Lascel, George W., Lynn, Mass. Sewing-machine needle	507,548	Oct. 31	2990	734	65	613
Lash, John F., assignor to Z. A. Lash, Toronto, Canada. Ink-well	498,174	May 23	2859	714	63	1179
Lash, Wellington S. (See Maxhimer, Leonard L., assignor.)						
Lash, Zebulon A. (See Lash, John F., assignor.)						
Laska, Mathias A., New Orleans, La. Rain-water cut-off	498,663	May 30	3696	913	63	1342
Lasky Company. (See Morley, Albert, assignor.)						
Laskey, Philip B., Marblehead, Mass. Needle-clamp carrier for sewing-machines	498,212	May 23	2931	730	63	1191
Laskey, Stephen, Chicago, Ill. Hemmer	495,814	Apr. 18	2075	523	63	416
Laski, Albert de, Cleveland, Ohio. Circular loom	502,231	July 25	2714	{ 685 686 }	{ 64 64 }	542
Laski, Albert de, Cleveland, Ohio. Circular loom	503,544	Aug. 15	2160	541	64	989
Laski, Albert de, Cleveland, Ohio. Take-up mechanism for circular looms	503,663	Aug. 22	2664	668	64	1100
Lassar, Zabby, assignor of two-thirds to C. C. Dunn and A. Conner, Stinesville, Ind. Stone-channeling machine	497,379	May 16	1611	407	63	941
Lässoe, Valdemar F., et al. (See Hesse, Gustaf E., assignor.)						
Lastelle, Henry P., de, assignor to Société Nouvelle de Constructions Systeme Tollet, Paris, France. Separable skeleton structure	491,288	Feb. 7	365	91, 92	62	818
Lasure, John B., Lebo, Kans. Check-row-wire anchor	509,913	Dec. 5	115	26	65	1431
Lather, John W., Edinburg, N. Y. Mail-bag	502,520	Aug. 1	458	110	64	651
Latham, James R., New York, N. Y., and F. E. Williams, Alhambra, Cal. Fastening	508,027	Nov. 7	69	20	65	771
Latham, James R., New York, N. Y., and F. E. Williams, Alhambra, Cal. Buttoner	511,534	Dec. 26	2912	708	65	1992
Lathrop, Frank E., Wichita, Iowa. Rein-holder	507,684	Oct. 31	3232	791	65	658
Latimer, James D., San Francisco, Cal. Toy	510,919	Dec. 19	1878	461	65	1786
Latimer, John W., assignor to Milwaukee Harvester Company, Milwaukee, Wis. Mowing-machine	509,317	Nov. 21	2207	{ 533 534 }	{ 65 65 }	1204

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Latimer, Lorenzo D., Windsor, Cal. Gate latch and support	507,231	Oct. 24	2452	604	65	497
Latin, David F., Clinton, Mass. Locking device for folding cranks	503,747	Aug. 22	2512	625	64	1070
Latshaw, W. H., trustee. (See Shepler, Cassius R., assignor.)						
Latta, Emmet G., Friendship, assignor of one-half to H. D. Blakeslee, Buffalo, N. Y. Strap-loop	505,710	Sept. 26	2363	597	64	1753
Latta, Emmet G., Friendship, N. Y., assignor to W. Lyman, Middlefield, Conn. Sight for firearms	507,278	Oct. 24	2527	623	65	510
Lattig, Jacob W., Easton, Pa. Electric signaling apparatus and system	496,786	May 2	637	167	63	731
Lattig, Jacob W., Easton, Pa. Electric signal apparatus	496,787	May 2	631	168	63	732
Lattig, Jacob W., Easton, Pa. Electric signal apparatus and system	499,125	June 6	645	155	63	1503
Lattig, Jacob W., Easton, Pa. Electric signaling apparatus and system for railways	499,126	June 6	648	155	63	1504
Lattig, Jacob W., Easton, Pa. Electric signal apparatus	502,626	Aug. 1	633	151	64	633
Lattig, Jacob W., Easton, Pa. Railway-track electric annunciator	502,627	Aug. 1	635	152	64	683
Lattig, Jacob W., assignor to National Switch and Signal Company, Easton, Pa. Relay	492,689	Feb. 28	2596	643	62	1314
Lattimore, Daniel J., assignor of three-fourths to E. C. Hammack and M. Tucker, St. Louis, Mo. Embossing-machine	490,912	Jan. 31	3110	798	62	683
Latulip, Frederick, Syracuse, N. Y., assignor to Syracuse Specialty Manufacturing Company, of New York. Ferrule. (Reissue.)	11,357	Aug. 8	1472	361	64	851
Latz, George, Baltimore, Md. Safety-fender for cars	493,556	May 30	3517	870	63	1310
Laube, Godfried. (See Hymans, Joseph, assignor.)						
Lauber, Adam C., Cincinnati, Ohio. Portable house or tent	490,203	Jan. 17	1937	508	62	426
Lauch, Richard. (See Ulrich and Lauch.)						
Lauch, Richard, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Substantive brown dye	503,148	Aug. 15	1527		64	874
Lauch, Richard, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Brown dye	509,623	Nov. 28	2757		65	1321
Lauch, Richard, and C. Krekeler, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Black azo dye	502,363	Aug. 1	199		64	602
Lauch, Richard, and C. Krekeler, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Reddish-blue azo dye	502,369	Aug. 1	200		64	602
Lander, James N., assignor of one-half to C. W. Sherburne, Boston, Mass. Safety-stop for locomotives	500,810	July 4	440	116	64	81
Lauderdale, Queenie T., Dyersburg, Tenn. Invalid's hot tray	489,019	Jan. 3	62	18	62	16
Laughlin, Elizabeth S., Pittsburg, Pa. Cabbage-cutter	492,814	Mar. 7	68	16	62	1371
Laughlin, Henry A., Pittsburg, Pa. Steam-boiler	490,118	Jan. 17	1788	466	62	397
Laughlin, Henry A., Pittsburg, Pa. Steam-boiler	490,119	Jan. 17	1790	467	62	398
Laughlin, Henry A., Pittsburg, Pa. Steam-boiler	490,120	Jan. 17	1793	468	62	393
Laughlin, Henry A., Pittsburg, Pa. Steam-boiler	509,318	Nov. 21	2211	534	65	1205
Lauboff, Joseph, Detroit, Mich. Bottle-stopper	491,119	Feb. 7	86	24	62	765
Laumann, Josef, assignor to Gebrüder Schönberger, Vienna, Austria-Hungary. Repeating small-arm	508,228	Nov. 7	407	99	65	834
Laurie, John, assignor of one-fourth to G. Yakie, Baltimore, Md. Window-screen attachment	496,364	Apr. 25	2940	734	63	594
Laussédats, Auguste J. B., Paris, France. Cork-retainer	502,126	July 25	2540	637	64	508
Lauth, John N., assignor of one-half to J. Green, St. Louis, Mo. Treating car-axles	505,405	Sept. 19	1799	465	64	1635
Laux, Isaac R., Wadsworth, Ohio. Injector	501,569	July 18	1645	412	64	332
Laval, George de, Warren, Mass., assignor to Geo. F. Blake Manufacturing Company, New York, N. Y. Steam-engine	495,742	Apr. 18	1966	495	63	296
Laval, George de, Warren, Mass., assignor to Geo. F. Blake Manufacturing Company, New York, N. Y. Pumping-engine	502,521	Aug. 1	460	110	64	651
Laval, George de, Warren, Mass., assignor to Geo. F. Blake Manufacturing Company, New York, N. Y. Automatic feed apparatus	503,972	Aug. 29	2852	716	64	1153
Laval, George de, Warren, Mass., assignor to Geo. F. Blake Manufacturing Company, New York, N. Y. Air-compressor	511,086	Dec. 19	2157	531	65	1838
Lavender, Charles F. (See Fane and Lavender.)						
Lavender, Charles F., assignor of one-half to T. Fane, Toronto, Canada. Wheel-tire	503,704	Aug. 22	2436	607	64	1054
Lavender, Charles F., assignor of one-half to T. Fane, Toronto, Canada. Axle-bearing for wheels	510,179	Dec. 5	569	132	65	1517
Lavey, Samuel S., Lima, Ohio. Type-writing machine	496,419	May 2	42	12	63	626
Lavigne, Joseph P. (See Bradley and Lavigne.)						
Lavigne, Joseph P., New Haven, Conn. Micrometer-gage	508,952	Nov. 21	1598	392	65	1087
Lavigne, Joseph P., New Haven, Conn. Expansible bit	509,667	Nov. 28	2832	624	65	1335
Lavigne, Joseph P., New Haven, Conn. Micrometer-gage	510,688	Dec. 12	1442	356	65	1694
Lavigne, Joseph P., assignor of one-half to R. H. Brown, New Haven, Conn. Air-cushion tire	490,827	Jan. 31	2959	760	62	654
Lavigne, Joseph P., assignor of one-half to R. H. Brown, New Haven, Conn. Bicycle-tire	490,828	Jan. 31	2961	760	62	654
Lavigne, Joseph P., assignor of one-half to R. H. Brown, New Haven, Conn. Self-holding tire for bicycles	490,829	Jan. 31	2963	761	62	655
Lavigne, Joseph P., assignor of one-half to R. H. Brown, New Haven, Conn. Bicycle-tire	490,830	Jan. 31	2964	761	62	655
Lavigne, Rose B., assignor to Lavigne & Scott Manufacturing Company, New Haven, Conn. Meat-tender	506,179	Oct. 3	615	158	65	119
Lavigne & Scott Manufacturing Company. (See Lavigne, Rose B., assignor.)						
Lavine, Joseph F., Greenburg, N. Y. Horse-tail holder	508,953	Nov. 21	1599	392	65	1088
Law Battery Company. (See Hayden, Mortimer M., assignor.)						
Law, Robert and R. J., Toledo, Ohio. Hod	509,334	June 27	2654	650	63	1894
Law, Robert J. (See Law, Robert and R. J.)						
Lawbaugh, George W., Geneseo, Ill. Clothes-pounder	501,606	July 18	1706	425	64	343
Lawes, Alonzo, Kincaid, Kans. Rail-joint	494,680	Apr. 4	239	60	63	49
Lawler, Albert B. (See Bridgewater, Christopher A., assignor.)						
Lawless, John H., Jersey City, N. J. Suction and force pump	510,180	Dec. 5	570	132	65	1517
Lawless, Thomas F. (See Hancock, Lovelace, and Lawless.)						
Lawless, William T. (See Hellyer and Lawless.)						
Lawley, William F., Kennedy, Ala. Tanner's tool	511,300	Dec. 19	2514	612	65	1904
Lawley, William F., Kennedy, Ala. Tanning hides	511,301	Dec. 19	2515		65	1904
Lawrence, Joseph M., New Whatcom, Wash. Self-binder	511,243	Dec. 19	2413	587	65	1886
Lawrence, Armand M., Newark, N. J. Railway-ticket holder	505,773	Sept. 26	2463	621	64	1772
Lawrence, Daniel F., assignor of one-half to T. W. Records, Blue Springs, Mo. Cultiva-	499,745	June 20	1665	400	63	1709

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Lawrence, Edwin F. (See Lawrence, John H., assignor.)						
Lawrence Electric Company. (See Lawrence, William, assignor.)						
Lawrence, George W., Eau Claire, Wis. Refrigerator ice-rack	501,281	July 11	1187	301	64	231
Lawrence, Herbert W., Montevideo, Minn. Thill-coupling	511,302	Dec. 19	2515	612	65	1904
Lawrence, John H., assignor of one-half to E. F. Lawrence, Sterling, Ill. Door-hanger	496,127	Apr. 25	2552	643	63	521
Lawrence, Orville H., and E. M. Letts, Waverly, N. Y., assignors of seven-tenths to said Lawrence and H. J. Baldwin. Pipe-bending machine	498,126	May 23	2791	698	63	1167
Lawrence, R. M., <i>et al.</i> (See Lawrence, William B., assignor.) (Reissue.)						
Lawrence, Robert B. (See Pollard, Paxton, assignor.)						
Lawrence, Robert S., London, England, assignor to F. L. Siegrist, Boston, Mass. Apparatus for carbureting gas	509,174	Nov. 21	1955	477	65	1158
Lawrence, William, Chicago, Ill. Smoke-preventer	502,496	Aug. 1	419	99	64	673
Lawrence, William, Folkestone, England. Toy for games	510,033	Dec. 5	328	73	65	1471
Lawrence, William, assignor to Lawrence Electric Company, New York, N. Y. Electric engine	503,487	Aug. 15	2071	516 517	64	972
Lawrence, William, assignor to Lawrence Electric Company, New York, N. Y. Current-conveyer for electric railways	505,204	Sept. 19	1477	385	64	1574
Lawrence, William B., assignor to L. S. Sullivan and R. M. Lawrence, Columbus, Ohio. Printing-press. (Reissue.)	11,352	July 18	2197	546 547	64	427
Lawrence, William C., Casselton, N. D. Wrench	504,305	Aug. 29	3391	848	64	1253
Lawrence, William G., Agnes, Tex. Grain-drill	499,025	June 6	499	117	63	1478
Lawrence, William J., Kalamazoo, Mich. Harrow	501,012	July 4	750	196	64	137
Lawrence, William J., Kalamazoo, Mich. Harrow	503,545	Aug. 15	2165	541	64	990
Lawry, Ira F., Taunton, Mass. Stopping mechanism for carding-machines	493,870	Mar. 21	1768	451	62	1734
Lawson, Enoch, San Francisco, Cal. Gas-compressor	495,348	Apr. 11	1325	332	63	263
Lawson, John W., San Bernardino county, Cal. Lamp-draft regulator	511,052	Dec. 19	2094	518	65	1825
Lawson, Joseph A., Albany, N. Y. Office-desk	498,175	May 23	2860	715	63	1179
Lawson, Margaret H., Boston, Mass. Bicycle-garment	491,057	Jan. 31	3347	853	62	731
Lawson, Robert J. (See Ingle, Stedman, and Lawson.)						
Lawson, Samuel, assignor to himself and A. T. Welch, New York, N. Y. Gas-engine	498,476	May 30	3370	840	63	1285
Lawson, Thomas A. (See Green and Lawson.)						
Lawton, Clarence A., Denver, Colo. Hoisting-whim	496,942	May 9	904	237	63	801
Lawton, Lewis, Trenton, N. J. Pottery-kiln furnace	491,569	Feb. 14	835	212	62	931
Lawton, Lewis, Trenton, N. J. Steam-boiler furnace	491,570	Feb. 14	837	212	62	931
Layman, Hiram D., Little Rock, Ark. Automatic railway pumping mechanism	489,962	Jan. 17	1523	398	62	344
Layman, Hiram D., Little Rock, Ark. Automatic railway pumping machinery	490,666	Jan. 31	2714	698	62	606
Layman, Hiram D., Little Rock, Ark. Automatic railway-pump	506,241	Oct. 10	775	191	65	152
Layton, Ralph D., St. Matthews, S. C. Mechanical movement	491,896	Feb. 14	1346	334	62	1033
Lazaron, Samuel L., Savannah, Ga. Combined pen and pencil holder	495,980	Apr. 25	2328	588	63	478
Lazarus, Nathan, London, England. Spectacle or eyeglass frame	500,014	June 20	2101	508	63	1785
Le Blanc, Frank, Boston, Mass. Pile-dr. ver.	506,254	Oct. 17	1791	450	65	364
Le Blois, Leopold, Elbeuf, France. Method of and apparatus for bleaching or dyeing textile materials	489,819	Jan. 10	1276	334	62	280
Le Brun, Victor, Paris, France, assignor to G. Borgfeldt & Co., New York, N. Y. Pocket-book	510,072	Dec. 5	391	86	65	1483
Le Claire, J. A., <i>et al.</i> (See Fasching, Elias E., assignor.)						
Le Fevre, Charles F., Hagerstown, Md. Cement	504,477	Sept. 5	270		64	1320
Le Grand, Melvin. (See Du Bois and Le Grand.)						
Le Gresley-Cox, Ernest, Covington, assignor of one-half to W. C. Flower, New Orleans, La. Pin	497,801	May 23	2280	573	63	1077
Le Noir, Frederick. (See Akarman and Le Noir.)						
Le Plongeon, Augustus, Brooklyn, N. Y. Toy	502,101	July 25	2500	628	64	500
Le Valley, Henry E., Providence, R. I. Arm-rest and support for guitars	491,755	Feb. 14	1122	283	62	929
Leach, John N., Boston, Mass. Automatic feeder for steam-engine boilers	498,397	May 30	3245	807 808	63	1262
Leader Cash Register Company. (See Bierley, Henry A., assignor.)						
Leader Cash Register Company. (See Bierley, Henry A., assignor.) (Reissue.)						
Lear, Mason D., Kane, Pa. Clothes pin lathe	490,206	Jan. 17	1942	509	62	427
Learmonth, Alexander, and A. A. Beltman, Tower City, N. D. Seed-planter	491,363	Feb. 7	509	131	62	845
Learmonth, Robert, Buffalo, N. Y. Apparatus for supplying purified water to locomotives	495,496	Apr. 18	1572	395	63	329
Learned, Henry, Pomona, Fla. Orange-cleaning machine	503,210	Aug. 15	1629	400	64	894
Learned, William B., assignor to E. Howard Watch and Clock Company, Boston, Mass. Cannon-pinion for watches	496,162	Apr. 25	2600	654	63	530
Leary, William A., Holyoke, Mass. Fountain-pen	500,811	July 4	442	116	64	81
Leatch, William, Cleveland, Ohio. Railway-car brake	494,816	Apr. 4	471	118	63	91
Leathers, John E., Peterborough, N. H. Nail or staple	495,664	May 30	3697	913	63	1342
Leavens, Fenner A. (See Kinsell and Leavens.)						
Leaver, James M. (See Vance and Leaver.)						
Leaver, James M., assignor of one-half to E. J. Vance, Bay City, Mich. Box	501,088	July 11	879	226	64	176
Leavitt, Francis A., Portland, Me. Awning	510,274	Dec. 5	727	176	65	1547
Leavitt, Frank M. (See Norton and Leavitt.)						
Leavitt, Frank M., Brooklyn, N. Y., assignor to E. W. Bliss Company, Limited, London, England. Clutch mechanism for power-presses	490,715	Jan. 31	2784	715	62	620
Leavitt, John E., Boston, Mass. Skirt-supporter	492,406	Feb. 28	2140	535	62	1221
Leavitt, John E., Boston, assignor of one-half to C. A. Patten, Somerville, Mass. Garment-shaper	492,514	Feb. 28	2324	576	62	1258
Leavy, Michael, Pittsfield, Mass. Cut-out for electric circuits	490,292	Jan. 24	2092	545	62	469
Lebach, Selig, Frankfurt-on-the-Main, Germany. Dumping-wagon	496,163	Apr. 25	2601	654 655	63	530
Lebel, Florian. (See Dubrule and Lebel.)						
Lechner, Francis M., Columbus, Ohio. Mining-machine	503,607	Aug. 22	2287	570 571 712 713	64	1027
Leconte, Victor, Pères, Paris, France. Feeding mechanism for sewing-machines	509,744	Nov. 28	2946		65	1356
Lederer, Leonhard, assignor to C. F. Boehringer & Sohne, Waldhof, near Mannheim, Germany. Making derivatives of amido-crotonic acid	499,301	June 13	918		63	1564
Lederer, Leonhard, Munich, assignor to C. F. Boehringer & Soehne, Waldhof, near Mannheim, Germany. Amido-crotonylanilid and making it	503,748	Aug. 22	2513		64	1070
Lederle, Theodore. (See Schublein, George, assignor.)						
Ledford, James H., La Fayette, Ky. Corn-harvester	494,640	Apr. 4	177	44	63	36
Ledig, Randolph, Newark, N. J. Beer-cooler	493,383	Mar. 14	964	248	62	1562
Leding, Robert. (See Jenisch, Waldemar, assignor.)						
Lee, Anderson, Evansville, Ind. Hinge-setting machine	507,914	Oct. 31	3604	889	65	727

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Lee, Benjamin. (See Kirk and Lee.)						
Lee, Charles and C. L., Jr., Burbank, Ohio. Fruit-picker	505,556	Sept. 26	2095	532	64	1704
Lee, Charles E. (See Lane and Lee.)						
Lee, Charles L., Jr. (See Lee, Charles and C. L., Jr.)						
Lee, Charles T., Boston, Mass. Incandescent-lamp socket	503,349	Aug. 15	1861	460	64	934
Lee, Clinton R., Davenport, Iowa. Device for grading broom-corn stems	492,032	Feb. 21	1354	387	62	1088
Lee, David A., and M. F. Snyder, Marietta, Ind. Car-coupling	502,304	Aug. 1	79	18, 19	64	581
Lee Fire Proof Construction Company. (See Lee, Thomas A., assignor.) (Reissue.)						
Lee, George B., Providence, R. I. Metallic setting for stained-glass windows	500,587	July 4	75	22	64	15
Lee, George S., Hawthorne, N. J., assignor, by mesne assignments, to East-Coast Manufacturing Company of New Jersey. Composition of matter for pavements, &c.	490,667	Jan. 31	2716	698	62	606
Lee, George S., Hawthorne, N. J., assignor, by mesne assignments, to East-Coast Manufacturing Company of New Jersey. Roofing material	490,668	Jan. 31	2716	698	62	606
Lee, George W., Granbury, Tex. Combined plow and harrow	495,895	Apr. 18	2204	555	63	440
Lee, Henry M., Waterville, Me. Piston-head	490,913	Jan. 31	3111	798	62	683
Lee, James P. (See Richards, Francis H., assignor.)						
Lee, James P., Ilion, N. Y. Straight-pull bolt-gun	506,319	Oct. 10	892	220 221 222 223 223 223	65	182
Lee, James P., Ilion, N. Y. Straight-pull bolt-gun	506,320	Oct. 10	904	224 224 225	65	184
Lee, James P., Ilion, N. Y. Straight-pull bolt-gun	506,321	Oct. 10	910	225 226	65	185
Lee, James P., Ilion, N. Y. Magazine-gun	506,322	Oct. 10	913	227	65	186
Lee, James P., Ilion, N. Y. Magazine-case for firearms	506,323	Oct. 10	917	227	65	187
Lee, John C. (See Skaggs, Newton J., assignor.)						
Lee, John E., Conshohocken, Pa. Surgeon's ligature-receptacle	490,207	Jan. 17	1944	510	62	427
Lee, John E., Conshohocken, Pa. Thermocauter	490,969	Jan. 31	3197	817	62	700
Lee, John E., Conshohocken, Pa. Surgical-ligature receptacle	491,315	Feb. 7	422	110	62	827
Lee, John E., Conshohocken, Pa. Inhaler	491,778	Feb. 14	1165	291	62	996
Lee, Joseph G., assignor of one-half to R. E. Lee, Dallas, Tex. Well-drilling machinery	500,142	June 27	2342	566	63	1839
Lee, Joseph P., Wyalusing, Pa. Metal-working machine	510,512	Dec. 12	1105	267 268	65	1634
Lee, Kenneth. (See Waterman and Luther, assignors.)						
Lee, Nathan H., assignor of one-half to C. E. Glazier, Watertown, N. Y. Savings-deposit safe	497,671	May 16	2072	517	63	1023
Lee, Patrick, and J. A. O'Farrell, Boise City, Idaho; said Lee assignor to said O'Farrell. Car-coupling	490,147	Jan. 17	1842	481	62	408
Lee, Robert E. (See Lee, Joseph G., assignor.)						
Lee, Sydney. (See Williams, Thomas J., assignor.)						
Lee, Thomas, Home City, Ohio. Dust-separator	498,557	May 30	3518	870	63	1310
Lee, Thomas, Home City, Ohio. Conduit-joint with switch and cut-off valve	498,558	May 30	3519	871	63	1310
Lee, Thomas A., New York, N. Y. Floor, roof, &c.	500,208	June 27	2451	597 598	63	1858
Lee, Thomas A., Kansas City, Mo. Fireproof partition	501,692	July 18	1732	432	64	347
Lee, Thomas A., Kansas City, Mo. Non-shearing rod for strengthening concrete work	505,664	Sept. 26	2278	578	64	1739
Lee, Thomas A., New York, N. Y., assignor to Lee Fire Proof Construction Company, of Colorado. Fireproof floor. (Reissue)	11,356	Aug. 8	1467	360	64	850
Lee, William B., assignor of one-half to D. Wolf and Z. A. Johnson, Ozark, Mo. Plow or cultivator tooth	505,425	Sept. 19	1839	473	64	1642
Leech, William T., and G. Himelspark, Philadelphia, Pa., assignors, by mesne assignments, to American Napping Machine Company, of Maine. Cloth-napping machine	493,215	Mar. 7	683	174 175	62	1492
Leedham, Russell C., Salt Lake City, Utah Ter. Roller-skate	504,226	Aug. 29	3265	815	64	1229
Leeds, Charles S., et al. (See Trent, Lamartine C., assignor.)						
Leemann, Henry, Louisiana, Mo. Horse-detacher	497,190	May 9	1274	323	63	866
Leeson & Co., J. R. (See Bates, Henry A., assignor.)						
Leeson, Joseph R. (See Spach, Jean C. and F. A., assignors.)						
Leeson, Joseph R. (See Wardwell, Simon W., Jr., assignor.)						
Leeuwen, Jacobus J. van. (See Kruiksbrink and Leeuwen.)						
Lefebure, Bernard. (See Blanks and Lefebure.)						
Lefever, Amos B., Leacock, Pa. Car-coupling	502,305	Aug. 1	81	19	64	581
Leforestier, Alexandre, Philadelphia, Pa. Machine for rolling and drawing metal	497,126	May 9	1185	303	63	850
Legg, A. M. (See Niles, Peter H., assignor.)						
Legg, Benjamin A., Allegheny, Pa. Slate-cleaning device	489,152	Jan. 3	259	72	62	60
Legg, Benjamin A., and A. Keil, McKeesport, assignors to S. S. Brown, Pittsburg, Pa. Mining-machine	501,795	July 18	2023	499	64	397
Leggatt, John A., Hamilton, Canada. Bolt	500,143	June 27	2343	567	63	1839
Leggett, Clinton H., New York, N. Y. Bottle for glue, &c.	501,282	July 11	1188	301	64	231
Leggett, Walter I., Galesburg, Ill. Strainer	508,175	Nov. 7	319	79	65	817
Leggett, Walter I., Galesburg, Ill. Cake rest or holder	508,176	Nov. 7	320	79	65	817
Leggett, William, Nutley, N. J. Hose-nozzle	490,445	Jan. 24	2325	604	62	514
Legroe, Alfred. (See Clark, James R., assignor.)						
Leggott, Henry. (See Marsh, Edwin, assignor.)						
Lehberger, Frederick. (See Lehberger, George, assignor.)						
Lehberger, George, assignor of one-half to F. Lehberger, New Castle, Pa. Wire fence	497,523	May 16	1845	465	63	982
Lehman, Charles L., et al. (See Pentz, Levi, assignor.)						
Lehman, Daniel C., Fultonville, N. Y. Book-rest	490,569	Jan. 24	2523	649	62	554
Lehman, Israel J., et al. (See Pentz, Levi, assignor.)						
Lehman, Otto A., Hoboken, N. J. Closure or cover for pocket-books	489,710	Jan. 10	1112	287	62	246
Lehmann, Adolph J., Liverpool, England, assignor to A. Banel, New York, N. Y. Music-leaf support	499,555	June 13	1362	323	63	1643
Lehmann, David, Halstead, Kans. Fish-hook	503,864	Aug. 22	2667	668	64	1100
Lehmann, Edmund, Bautzen, Germany. Hand nailing implement	489,020	Jan. 3	63	18	62	16
Lehmann, Franz, Cöpenick, Germany. Producing leaf-metal patterns on woven fabrics	491,364	Feb. 7	510		62	845
Lehmann, Friedrich A., assignor to M. Hille, Dresden, Germany. Mixing-valve for petroleum or other motors	500,401	June 27	2753	678	63	1912
Lehmann, Heinrich, assignor to C. Doehring, New York, N. Y. Ceiling or wall	503,721	Aug. 22	2466	613	64	1060
Lehmann, Karl L., Chicago, Ill. Tower	489,963	Jan. 17	1524	399	62	344
Lehmann, Karl L., Chicago, Ill. Tower	489,964	Jan. 17	1525	399 400	62	344
Lehmer, William, Chicago, Ill. Tire-shrinker	490,751	Jan. 31	2845	730	62	630

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Lehnkering, August L., <i>et al.</i> (See Ellis, Edgar E., assignor.)						
Lehr, Horace, and J. Diehl, Easton, Pa. Pedal attachment for organs	490,970	Jan. 31	3198	817	62	700
Lehr, Horace, and J. Diehl, Easton, Pa. Coupler and connection for organs	509,914	Dec. 5	116	26	65	1432
Lehr, Horace, and J. Diehl, Easton, Pa. Key-leveling device	509,915	Dec. 5	118	26	65	1432
Lehr, Nicholas P., and J. H. Wolfe, Fremont, Ohio. Sulky-plow	494,530	Mar. 28	2871	718	62	1953
Leibert, Owen F., Bethlehem, Pa. Clutch	506,517	Oct. 10	1256	{ 313 } { 314 }	65	252
Leibert, Owen F., Bethlehem, Pa. Apparatus for casting steel or other ingots	506,518	Oct. 10	1257	{ 314 } { 315 }	65	252
Leibman, Frank J., assignor to E. P. Reichhelm & Co., New York, N. Y. Gas-burner	501,283	July 11	1190	301	64	231
Leicht, Ferdinand von, Mirabel, Cal. Water-wheel bucket	499,127	June 6	650	156	63	1504
Leigh & Co., Evan A. (See Thorp, James, assignor.)						
Leighton, George A., assignor to W. C. Lovejoy, Newaygo, Mich. Clothes-drier	490,570	Jan. 24	2525	650	62	554
Leighton, Herbert J., Syracuse, N. Y. Protractor-bevel	490,121	Jan. 17	1797	{ 468 } { 469 }	62	399
Leighton, Walter F., Boston, Mass. Thill-coupling	491,182	Feb. 7	200	51	62	786
Leighton, Walter H., Manchester, N. H. Puzzle	496,202	Apr. 25	2658	667	63	540
Leimberger, Frederick W., Petersburg, Va. Trunk-handle	489,820	Jan. 10	1279	335	62	251
Leiner, Daniel D. (See Shamp, Jesse M., assignor.)						
Leiner, William, Milwaukee, Wis. Attachment for musical instruments	493,099	Mar. 7	508	128	62	1460
Leininger, Augustus. (See Shreiner and Leininger.)						
Leininger, Augustus, and E. M. Shreiner, Canton, Ohio. Tricycle	497,028	May 9	1031	263	63	822
Leineweber, August, De Witt, Nebr. Cultivator	508,028	Nov. 7	71	20, 21	65	771
Leineweber, Herman, assignor to Chicago Meat Chopper Company, Chicago, Ill. Meat-chopping apparatus	502,440	Aug. 1	324	76, 77	64	625
Leinwather, Aloys M., Basle, Switzerland. Car-wheel	490,571	Jan. 24	2526	650	62	554
Leinwather, Aloys M., Basle, Switzerland. Ball-caster	494,009	Mar. 21	2016	514	62	1781
Leinwather, Aloys M., Basle, Switzerland. Furniture-caster	494,925	Apr. 4	629	160	63	121
Leinwather, Aloys M., and E. Riggensbach, Basle, Switzerland. Car-truck	491,897	Feb. 14	1348	{ 334 } { 335 }	62	1033
Leipnitz, Friedrich W., Berlin, Germany. Car-coupling	497,672	May 16	2074	518	63	1023
Leipziger, Siegmund. (See Seibert, Nicholas, assignor.)						
Leischer, Charles, Pierre, S. D. Car-coupling	499,235	June 13	813	193	63	1546
Leisen, Frank J., Woodbridge, N. J. Propeller	508,324	Nov. 7	563	138	65	862
Leiser, Isidor. (See Kayser, William J., assignor.)						
Leister, William H., Westminster, Md. Labeling-machine	507,372	Oct. 24	2695	662	65	544
Leitch, Archibald K., Deltotte, Ceylon. Lock	491,779	Feb. 14	1166	291	62	996
Leitch, James N., assignor to W. G. Ellis, Amesbury, Mass. Car-coupling	495,981	Apr. 25	2330	589	63	479
Leitch, Robert R., Baltimore, Md. Steam-trap	508,727	Nov. 14	1305	299	65	1000
Leith, Harvey I., Providence, R. I. Bottle	489,965	Jan. 17	1527	400	62	345
Leith, Harvey I., Providence, R. I. Bottle	489,966	Jan. 17	1530	400	62	345
Leith, Harvey I., Providence, R. I. Bottle	489,967	Jan. 17	1532	400	62	345
Leith, Harvey I., Providence, R. I. Bottle	505,469	Sept. 26	1903	490	64	1668
Leiwenich, Charles C., Chicago, Ill. Vehicle	495,743	Apr. 18	1967	496	63	397
Leiwenich, Charles C., Chicago, Ill. Dust and oil guard for car-wheels	498,176	May 23	2864	715	63	1179
Leiwenich, Charles C., Chicago, Ill. Wagon-axle	498,177	May 23	2865	716	63	1180
Leland, Edwin A., assignor to J. S. Levis, Brooklyn, N. Y. Spring-hinge	496,264	Apr. 25	2760	690	63	559
Leland, Faulconer & Norton Company. (See Norton, Charles H., assignor.)						
Leland, Harry W., Jersey City, N. J. Circuit-protector	497,430	May 16	1694	427	63	956
Leland, Sanford D., Holyoke, Mass. Self-acting tap-head	496,420	May 2	43	12, 13	63	626
Leim, Otto, Paris, France. Change-receiver	499,556	June 13	1363	324	63	1643
Lemain, George, Pawtucket, R. I. Cotton-gin rib	510,073	Dec. 5	392	86	65	1483
Lemaire, Paul. (See Einstein, James, assignor.)						
Lembach, Adolph, <i>et al.</i> (See Ziegler, Josef, assignor.)						
Lemley, Ernest H. (See Russ, John D., assignor.)						
Lemm, Hiram, Storm Lake, Iowa. Whiffletree-hook	497,328	May 16	1535	386	63	927
Lemman, John, Wakefield, Mass. Car-seat	504,882	Sept. 12	943	243	64	1462
Lemp, Hermann. (See Wightman and Lemp.)						
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding apparatus	504,496	Sept. 5	308	78		1327
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Method of and apparatus for regulating alternating-current dynamos	504,497	Sept. 5	311	78, 79	64	1328
Lemp, Hermann, and M. J. Wightman, Hartford, Conn., assignors to Schuyler Electric Company, of Connecticut. Thermal cut-out for electric lamps	493,629	Mar. 21	1383	351	62	1659
Lenarz, Felix A., Shiloh, assignor of one-half to C. F. Moore, Cleveland, Ohio. Wagon-reach	502,419	Aug. 1	283	67	64	618
Lenderoth, William, Stapleton, N. Y. Brick	508,428	Nov. 14	734	181	65	908
Lendry, Ludwig, New York, N. Y. Bust-supporter	507,373	Oct. 24	2698	662	65	544
Lenfest, Bertram A. (See Ford and Lenfest.)						
Lenhart, Samuel B. (See Albright and Lenhart.)						
Lennard, Frederic, London, England. Method of and apparatus for distilling tar, &c.	499,557	June 13	1365	{ 324 } { 325 } { 326 }	63	1644
Lennard, Per J., Stamford, Conn. Caster	491,710	Feb. 14	1056	267	62	976
Lentsch, Atto, Schöningen, Germany. Centrifugal creamer	507,442	Oct. 24	2805	687	65	566
Lentz, Peter B. (See Hamill, Lentz, and Cole.)						
Leo, Ansel, London, England. Collapsible ladder	501,950	July 25	2263	566	64	456
Leonard, Arthur G., New York, N. Y. Bucket-and-tank fire-extinguisher	498,937	June 6	330	77, 78	63	1450
Leonard, Arthur G., New York, N. Y. Railway-signal	502,441	Aug. 1	325	77	64	626
Leonard, Ben S. (See Platt, William M., assignor.)						
Leonard, Caswell L., Steam Corner, and W. A. Carter, Yeddo, Ind. Gate	510,689	Dec. 12	1444	356	65	1695
Leonard, Charles H., Grand Rapids, Mich. Roof for portable houses	510,920	Dec. 19	1880	461	65	1786
Leonard, David, assignor to F. G. Kneeland and J. R. Knight, St. Louis, Mich. Spring-bed	509,040	Nov. 21	1727	427	65	1114
Leonard, David A., Shannon, Ill. Nut-lock	504,596	Sept. 5	466	119	64	1356
Leonard, Franklin, Chadwick's Mills, assignor to Leonard Manufacturing Company, New Hartford, N. Y. Harvesting-machine	501,890	July 18	2166	537	64	422
Leonard, George D., New Haven, Conn. Nose-bag for animals	494,428	Mar. 28	2701	678	62	1933
Leonard, John W., Chicago, Ill. Bicycle-lock	509,175	Nov. 21	1959	477	65	1158
Leonard Manufacturing Company. (See Leonard, Franklin, assignor.)						
Leonard, Mason E., assignor to Leonard Smokeless Powder Company, Manchester, N. J. Smokeless powder	507,279	Oct. 24	2533		65	511
Leonard, Michael B., Richmond, Va., assignor, by mesne assignments, to Electric Selector and Signal Company, of West Virginia. Electric apparatus for controlling signals	507,518	Oct. 24	2935	{ 720 } { 721 }	65	589
Leonard, Peter A., Erie, Mich. Wire-stretcher	510,349	Dec. 5	834	201	65	1568

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Leonard Smokeless Powder Company. (See Leonard, Mason E., assignor.)						
Leonard, William V., Portsmouth, England. Hinge for collapsible boxes	498,178	May 23	2367	716	63	1180
Leonhard, Gottlob T., Paterson, N. J. Machine for making vegetable parchment-paper	500,915	July 4	594	{ 155 156 }	64	109
Leonhardt, August F. (See Cunningham, Martin J., assignor.)						
Leonhardt & Co., A. (See Bender, Fritz, assignor.)						
Leonhardt & Co., A. (See Bender and Kämmerer, assignors.)						
Leonhardt, Martin W., St. Louis, Mo. Disintegrator	500,916	July 4	597	156	64	110
Leonhardt Wagon Manufacturing Company. (See Leonhardt, William, assignor.)						
Leonhardt, William J., Chicago, Ill. Coffin	494,297	Mar. 28	2491	628	62	1884
Leonhardt, William, assignor to Leonhardt Wagon Manufacturing Company, Baltimore, Md. Street-car fender	497,583	May 16	1935	486	63	997
Leoni, Philippe, Paris, France. Automatic perfume-delivery apparatus	504,842	Sept. 12	886	228	64	1451
Lepley, Daniel F., Berlin, Pa. Valve-gear	492,302	Feb. 21	1968	{ 490 491 }	62	1175
Lepper, Nathan S. (See Conklin, Theodore F., assignor.)						
Lepsius, Bernhard, Griesheim, Germany. Preparing explosive compounds	492,089	Feb. 21	1639		62	1106
Leroux, Charles J., and J. H. Fischbach, Paris, France. Coating metallic sheets	500,237	June 27	2496		63	1867
Lesenberg, Carl C. (See Poppenburg, John von der, assignor.)						
Lesher, William W. (See Dettra, Benjamin F., assignor.)						
Leslie, Edwin, Buffalo, N. Y. Bread-toaster	509,916	Dec. 5	119	27	65	1432
Leslie, George, et al. (See Musham, William H., assignor.)						
Leslie, John S. (See McNaughton, James, assignor.)						
Leslie Manufacturing Company. (See Rugg, Charles W., assignor.)						
Leslie, Newton G., Kalamazoo, Mich. Copy-holder	500,715	July 4	293	79	64	54
Leslie, Robert, New York, N. Y. Air circulating and cooling device	493,036	Mar. 7	417	104	62	1441
Leslie, Robert, New York, N. Y. Exhaust-fan	505,902	Oct. 3	162	42	65	32
Lessard, Jeremie, Cohoes, N. Y. Car-coupling	509,817	Nov. 2	3068	{ 740 741 }	65	1380
Lester, Elizabeth A., Peoria, Ill. Dress-protector	498,801	June 6	80	20	63	1403
Lester, Mame, Logansport, Ind. Type-writer easel	505,557	Sept. 26	2096	532	64	1704
Lester, Mame, Logansport, Ind. Attachment for unloading box-cars	505,558	Sept. 26	2097	532	64	1704
Letson, Augustus F., assignor to C. E. Letson, Buffalo, N. Y. Railway-switch	489,536	Jan. 10	866	227	62	196
Letson, Catherine E. (See Letson, Augustus F., assignor.)						
Letson, Samuel B., Colfax, Wash. Washing-machine	489,609	Jan. 10	972	253	62	217
Letts, Ellsworth M. (See Lawrence and Letts.)						
Leuthold, Ernst T., Dresden, Germany. Adjustable shelf-support	510,804	Dec. 12	1632	406	65	1730
Leutz, William F., Toledo, Ohio. Buckle-guard	497,547	May 16	1880	473	63	988
Levassor, Louis E., assignor of one-half to A. L. Peirce, Cincinnati, Ohio. Autographic copying and recording apparatus	498,436	May 30	3309	821	63	1274
Levedahl, Axel, and F. Yagermann, assignors to Gardner Sewing Machine Company, Aurora, Ill. Fabric-winding machine	510,034	Dec. 5	328	73	65	1471
Lever, Oswald, and W. S. Grundy, Philadelphia, Pa. Chenille-cutting machine	491,218	Feb. 7	257	64	62	797
Lever, Oswald, and W. S. Grundy, Philadelphia, Pa. Cop and bobbin winding mechanism	503,325	Aug. 15	1824	{ 451 452 }	64	927
Lever, Thomas H., assignor of one-fourth to E. A. Carter, St. Louis, Mo. Machine for blacking boots or shoes	500,502	June 27	2896	712	63	1937
Lever, Walter S., assignor of forty-nine one-hundredths to W. M. and W. A. Stone, Knoxville, Iowa. Lubricant	498,742	May 2	560	150	63	720
Levering, Edwin A., Philadelphia, Pa. Dental flask	497,723	May 16	2154	538	63	1038
Levey, John, T. H. Butler, and C. A. MacDonald, assignors to Hercules Iron Works, Chicago, Ill. Refrigerating-machine	508,141	Nov. 7	271	67	65	808
Levi, Joseph, New York, N. Y. Indicating telegraphic messages	495,744	Apr. 18	1969	496	63	397
Levin, Adolph L., Denver, Colo. Change-delivering device	506,195	Oct. 3	649	{ 165 166 }	65	125
Levin, Amesach, assignor of one-half to J. König, Brooklyn, N. Y. Velocipede	495,942	Apr. 18	2268	571	63	452
Levin, Arvid M., Cleveland, Ohio. Switching device	500,335	June 27	2655	650	63	1894
Levin, J. M., et al. (See Manderfield, George J., assignor.)						
Levin, Rudolph L., Menominee, Mich. Fire and burglar alarm	508,954	Nov. 21	1601	392	65	1058
Levin, Rudolph L., Menominee, Mich. Wrist-pin turner	511,053	Dec. 19	2095	518	65	1826
Levin, Samuel, et al. (See Manderfield, George J., assignor.)						
Levino, Dolph L. (See Nash, Richard, assignor.)						
Levis, John S. (See Leland, Edwin A., assignor.)						
Levison, Joseph A., New York, N. Y. Necktie-clasp	495,170	Apr. 11	1052	262	63	213
Levitt, Robert W. (See Beck and Levitt.)						
Levy, Abraham, Boston, Mass., assignor to Colby & Co., Brooklyn, N. Y. Waistband for trousers	490,446	Jan. 24	2326	604	62	515
Levy, Alexander, et al. (See Turner, Alonzo G., assignor.)						
Levy, Herman L., Brooklyn, N. Y. Shirt-waist	493,170	Mar. 7	621	156	62	1481
Levy, Joseph L., New York, N. Y. Eyeglasses	495,224	Apr. 11	1126	281	63	227
Levy, Joseph L., New York, N. Y. Car-truck	502,522	Aug. 1	461	{ 111 112 }	64	651
Levy, Isaac M., assignor of one-third to F. Minzesheimer, Chicago, Ill. Combined ash pan and sieve	507,624	Oct. 31	3134	767	65	640
Levy, Israel, Kouts, Ind. Heel-pad	491,756	Feb. 14	1123	284	62	989
Levy, Louis E. and M., Philadelphia, Pa.; said Louis E. Levy assignor to said M. Levy. Screen for photomechanical printing	492,333	Feb. 21	2017	502	62	1185
Levy, Louis W., et al. (See Brass, Robert, assignor.)						
Levy, Louis W., New York, N. Y. Opera-glass holder	491,711	Feb. 14	1057	267	62	976
Levy, Max. (See Levy, Louis E. and M.)						
Levy, Max, Philadelphia, Pa. Screen for making photomechanical printing-plates	498,127	May 23	2793	699	63	1167
Levy, Max, Philadelphia, Pa. Holder for plates in the manufacture of photo-engravings	501,597	Sept. 5	467	119	64	1357
Lévy, Salomon S. (See Jourdan, Armand G., assignor.)						
Levy, Simon C., Philadelphia, Pa. Clock attachment for bicycles	495,254	Apr. 11	1187	297	63	238
Lewellyn, Myron. (See Owens and Lewellyn.)						
Lewin, J. M., et al. (See Manderfield, George J., assignor.)						
Lewin, Jacob, New York, N. Y. Sofa-bed	492,729	Feb. 28	2656	658	62	1327
Lewin, Jacob, assignor to himself and Alexander Brothers, New York, N. Y. Folding bed	498,179	May 23	2868	716	63	1180
Lewin, Samuel, et al. (See Manderfield, George J., assignor.)						
Lewis, Aaron D., Canton, Mo., and S. Witherell, Fort Madison, Iowa; said Witherell assignor to said Lewis. Electric perforating-pen	498,519	May 30	3445	855	63	1298
Lewis, Alphonso T., Knoxville, Tenn. Car-coupling	501,432	July 11	1435	360	64	276
Lewis, Benjamin F., assignor to C. W. Long, Amesbury, Mass. Thill-coupling	500,101	June 20	2235	544	63	1808
Lewis, Charles H., Baltimore, Md. Brush or tool holder	504,452	Sept. 5	224	60	64	1312
Lewis, Charles S., assignor of one-half to W. E. Fulton, Waterbury, Conn. Fare-register	504,731	Sept. 12	682	174	64	1411

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Lewis, David M., Washington, D. C. Garbage-receptacle	508,325	Nov. 7	564	138	65	862
Lewis, Edward D., assignor to E. T. and M. C. Trumbull and J. B. Disbrow, Savona, N. Y. Metallic culvert	494,576	Apr. 4	78	19	63	16
Lewis, Elgie J., Middleport, N. Y. Machine for paring fruit or vegetables	508,729	Nov. 14	1207	300	65	1001
Lewis, Elliott L., Troy, N. Y. Nicotine-absorbent	495,186	Apr. 11	1077	266	63	218
Lewis & Fowler Girder Rail Company. (See Wood, William C., assignor.)						
Lewis & Fowler Manufacturing Company. (See Dollard, Albert H., assignor.)						
Lewis & Fowler Manufacturing Company. (See Fowler and Hutton, assignors.)						
Lewis, Frank E. (See Pinkham and Lewis.)						
Lewis, Frank J. (See Mauldin, James L., assignor.)						
Lewis, Frank M., North Lansing, assignor to W. B. and G. F. Vetter, Lansing, Mich. Spoke-holder	498,719	May 30	3806	938	63	1360
Lewis, Franklin F. (See Lewis, Stephen B. and F. F.)						
Lewis, Fred J. (See Hayes and Lewis.)						
Lewis, Frederick K. (See Pfaff and Lewis.)						
Lewis, Frederick N., Jackson, Mich. Attachment for ironing boards or tables	511,151	Dec. 19	2266	555	65	1859
Lewis, George T., Philadelphia, Pa. Manufacturing zinc oxide	495,593	Apr. 18	1725		63	355
Lewis, George T., Philadelphia, Pa. Manufacturing oxide of zinc	501,189	July 11	1049		64	206
Lewis, George T., Philadelphia, Pa. Preparing oxide-of-zinc pigment	502,822	Aug. 8	991		64	763
Lewis, George W. (See Weeks and Lewis.)						
Lewis, George W., Peru, Ill. Gas-engine	511,535	Dec. 26	2913	709	65	1992
Lewis, Harry A., assignor of three-fifths to J. T. Dyer, Norristown, Pa. Electric-railway system	506,124	Oct. 3	506	{ 131 132 }	{ 65 65 }	{ 99 99 }
Lewis, Herbert R. (See Tiefert, Leonard C., assignor.)						
Lewis, Isaac N., Fort Wadsworth, N. Y. Electric car-lighting system	504,681	Sept. 5	604	{ 154 155 }	{ 64 64 }	{ 1384 1384 }
Lewis, Isaac N., Fort Wadsworth, N. Y. Automatic time-recorder	507,585	Oct. 31	3072	751	65	627
Lewis, James, Penarth, England. Measuring apparatus for liquids	503,149	Aug. 15	1529	375	64	875
Lewis, James B., Scottsville, N. Y. Dumping-wagon	495,096	Apr. 11	904	228	63	189
Lewis, James R., New Madrid, Mo. Merchandise-supporting hook	505,837	Oct. 3	54	14	65	13
Lewis, James W., Ganister, Pa. Oil-cloth cutter	503,546	Aug. 15	2167	541	64	990
Lewis, James W., and W. J. Estep, Ganister, Pa. Bait-box	503,722	Aug. 22	2467	613	64	1060
Lewis, James W., and J. M. Irwin, Quincy, Ill. Bookbinding	506,125	Oct. 3	509	132	65	99
Lewis, John, Nashville, Tenn. Basket grate	495,418	Apr. 11	1433	361	63	283
Lewis, John, New York, N. Y. Window	499,236	June 13	815	193	63	1546
Lewis, John A. (See Reneau, Charles W., assignor.)						
Lewis, John F. (See Mattes and Lewis.)						
Lewis, John H., and A. Weenink, Chicago, Ill. Sliding-door lock	509,130	Nov. 21	1893	463	65	1145
Lewis, John M., Jermyn, Pa. Fastener for buckles, &c	496,421	May 2	46	13	63	627
Lewis Knitting Company. (See Lewis, Stephen B. and F. F., assignors.)						
Lewis, Loyal V., Kendallville, Ind. Feed-water purifier and heater	493,406	Mar. 14	993	256	62	1570
Lewis, Mortimer G., New York, N. Y. Bench-vise	493,364	Mar. 14	941	241	62	1559
Lewis, Richard, Norristown, Pa., and G. Morgan, West New Brighton, N. Y. Apparatus for cleaning and polishing coated metal plates	509,745	Nov. 28	2948	{ 713 714 }	{ 65 65 }	{ 1356 1356 }
Lewis, Richard, Norristown, Pa., and G. Morgan, West New Brighton, N. Y. Apparatus for coating iron or steel plates with metal or alloy	509,746	Nov. 28	2949	714	65	1356
Lewis, Samuel H. (See Goodwin and Lewis.)						
Lewis, Samuel W., Brooklyn, N. Y. Flush-tank apparatus	496,572	May 2	284	76	63	671
Lewis, Samuel W., Brooklyn, N. Y. Hydrant-valve. (Reissue)	11,360	Aug. 15	2203	550	64	997
Lewis, Samuel W., Brooklyn, N. Y. Water-closet	509,319	Nov. 21	2212	{ 534 535 }	{ 65 65 }	{ 1205 1205 }
Lewis, Stephen B. and F. F., assignors to Lewis Knitting Company, Janesville, Wis. Knit garment	508,429	Nov. 14	735	181	65	908
Lewis, Theodore G., assignor to Buffalo Dental Manufacturing Company, Buffalo, N. Y. Dental heater	509,176	Nov. 21	1960	478	65	1158
Lewis, Thomas, Townsend, N. Y. Feed-trough	489,589	Jan. 10	943	245	62	211
Lewis, Thomas B., Renovo, Pa. Automatic brick-press	491,712	Feb. 14	1059	268	62	977
Lewis, Walter, Philadelphia, Pa. Bridle for brushes	498,065	May 23	2699	675	63	1150
Lewis, Walter, and A. H. Ross, Philadelphia, Pa. Ash-sifter	508,728	Nov. 14	1206	{ 299 300 }	{ 65 65 }	{ 1000 1000 }
Lewis, Wilfred, assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Bending-roll	491,968	Feb. 14	1453	362	62	1055
Lewis, Wilfred, assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Planing-machine for metals	497,754	May 16	2201	{ 550 551 552 553 }	{ 63 63 63 63 }	{ 1047 1047 1047 1047 }
Lewis, Wilfred, assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Bending-roll	500,286	June 27	2564	626	63	1878
Lewis, William, Des Moines, Iowa. Well-drilling machinery	489,021	Jan. 3	64	19	62	16
Lewis, William, Sauk Centre, Minn. Draft-equalizer	492,939	Mar. 7	263	67	62	1411
Lewis, William D. (See Smith, Ransom A., assignor.)						
Lewis, William E., Corry, Pa. Ink-well	509,917	Dec. 5	120	27	65	1432
Lewis, William H., Rome, assignor to M. Lary, New York, N. Y. Spring-pillow	490,447	Jan. 24	2327	604	62	515
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Camera-shutter	494,256	Mar. 28	2428	612	62	1872
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic-camera shutter	510,805	Dec. 12	1633	406	65	1730
Lewis, William M., New Hartford, Iowa. Horse-power	493,827	Mar. 21	1707	434	62	1722
Lewis, William M., Thurber, Tex. Steam-pressure and water-level recorder for boilers	495,815	Apr. 18	2077	524	63	416
Lewis, William T., Buffalo, N. Y., assignor to S. Welsh, Philadelphia, Pa. Coin-controlled machine	495,498	Apr. 18	1574	396	63	329
Lewis, William W. (See Garrard and Lewis.)						
Lewy, Carl, Charlottenburg, near Berlin, Germany. Glass tile	510,644	Dec. 12	1373	336	65	1681
Lexa, Josef, and J. Herold, Prague, Austria-Hungary. Evaporating-pan	493,827	Dec. 5	121	27, 28	65	1432
Ley, Francis, Derby, England. Drive-chain	494,962	Apr. 4	679	175	63	130
Ley, Rudolph, Arnstadt, Germany. Pegging-machine	492,906	Mar. 7	217	53, 54	62	1401
Leyburn, Edward J., Lexington, Va. Drink-mixer	489,821	Jan. 10	1280	335	62	281
Leyda, Isaac N. (See Leyda, James H. and I. N.)						
Leyda, James H. and I. N. Allegheny, Pa. Obstetrical appliance	504,598	Sept. 5	468	120	64	1357
Leyner, John G., Denver, Colo. Rock-drill clamp	496,573	May 2	286	76	63	671
Leyner, John G., Denver, Colo. Direct-acting engine	508,430	Nov. 14	736	182	65	909
Libbey Glass Company. (See Kimble, Loren W., assignor.)						
Libbey Glass Company. (See Owens, Michael J., assignor.)						
Libbey, Hosea W., Boston, Mass. Wheel	490,391	Jan. 24	2252	585	62	501

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Libbey, Hosea W., Boston, Mass. Automatic aerial railway.....	491,572	Feb. 14	839	213	62	931
Libbey, Hosea W., Boston, Mass. Conductor's registering trip-slip.....	492,764	Feb. 28	2717	675	62	1338
Libbey, Hosea W., Boston, Mass. Car-wheel.....	492,907	Mar. 7	220	55	62	1401
Libbey, Hosea W., Boston, Mass. Combined spring-hinge and door-check.....	494,988	Apr. 4	718	182	63	137
Libbey, Hosea W., Boston, Mass. Ventilator.....	500,336	June 27	2656	651	63	1894
Libbey, Hosea W., Boston, Mass. House-door letter-box.....	502,673	Aug. 1	726	174	64	699
Libbey, Hosea W., Boston, Mass. Passenger-car.....	502,908	Aug. 8	1126	277	64	789
Libbey, Hosea W., Boston, Mass. Electric battery.....	504,180	Aug. 29	3104	777	64	1199
Libbey, Hosea W., Boston, Mass. Electric locomotive.....	506,786	Oct. 17	1682	{ 423 424 }	{ 65 65 }	{ 345 345 }
Libbey, Hosea W., Boston, Mass. Bicycle.....	509,919	Dec. 5	123	28	65	1433
Libby, Charles L., assignor to E. P. Bullard, Bridgeport, Conn. Attachment for boring-mills.....	511,736	Dec. 26	3236	{ 793 794 }	{ 65 65 }	{ 2049 2049 }
Libby, Sam H. (See Wakefield and Libby.)						
Libby, Sam H., Lynn, Mass., assignor to General Electric Company, of New York. Brush-holder.....	500,144	June 27	2344	567	63	1839
Liberty Manufacturing Company. (See Wilson, James E., assignor.)						
Library Bureau. (See Godfrey, Charles B., assignor.)						
Lichtenstein, Herman, Hoboken, N. J., assignor to S. W. Richards, New York, N. Y. Umbrella-runner.....	501,089	July 11	880	927	64	176
Lickey, John W., Rushville, Ill. Lifting device.....	489,610	Jan. 10	974	253	62	218
Lidback, John A., Portland, Me. Combination metal-working machine.....	508,029	Nov. 7	73	21	65	771
Liddell, Walter S., Charlotte, N. C. Cotton-press.....	500,238	June 27	2496	{ 610 611 }	{ 63 63 }	{ 1867 1867 }
Liddell, William, Brooklyn, N. Y. Perforating and cutting machine.....	492,871	Mar. 7	159	38	62	1390
Liddell, William, Brooklyn, N. Y., assignor to W. A. Bingham, Bloomfield, N. J. Paper-bag machine.....	491,573	Feb. 14	840	213	62	932
Liddell, William, Brooklyn, N. Y., assignor to W. A. Bingham, Bloomfield, N. J. Paper-bag machine.....	492,498	Feb. 28	2302	571	62	1254
Lidell, Parker C. (See Deweese, William F., assignor.)				{ 583 584 585 }	{ 62 62 62 }	{ 1265 1265 1265 }
Lieb, George W., Newark, N. J. Machine for making button-backs.....	492,534	Feb. 28	2351	{ 583 584 585 }	{ 62 62 62 }	{ 1265 1265 1265 }
Lieb Sons. (See Lieb, Thomas, assignor.)						
Lieb, Thomas, Brooklyn, assignor to Lieb Sons, New York, N. Y. Handle for faucets.....	494,577	Apr. 4	79	19	63	17
Liebenstein, Edward H. (See Hudel and Liebenstein.)						
Lieber, Carl H., Indianapolis, Ind. Supporting-standard for pictures.....	501,149	July 11	989	252	64	195
Lieberich, Heinrich, Neustadt, Germany. Filter.....	491,574	Feb. 14	843	213	62	932
Liebert, Morris A., Brooklyn, N. Y. Horseshoe.....	508,142	Nov. 7	273	68	65	808
Liebing, Bernhard, Barop, Germany. Lubricator.....	509,668	Nov. 23	2833	684	65	1335
Liebrecht, Arthur, Breslau, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Basic bismuth gallate.....	495,497	Apr. 18	1573	.....	63	329
Lied, Fred, Columbus, Ohio. Warming device.....	502,370	Aug. 1	201	48	64	602
Lifschütz, Isaac, Grünau, near Berlin, Germany. Violet-red dye.....	500,917	July 4	598	.....	64	110
Liggett, Turbayne & Company. (See Turbayne, William A., assignor.)						
Liggett, William K. (See Pleukharp and Liggett.)						
Liggett, William K., Columbus, Ohio. Corn-harvester.....	509,229	Nov. 21	2060	497	65	1177
Liggett, William K., Columbus, Ohio. Corn-harvester.....	509,230	Nov. 21	2063	498	65	1178
Light, Cyrus, assignor to G. F. Light, Lebanon, Pa. Stove-lining.....	494,578	Apr. 4	79	19	63	17
Light, George F. (See Light, Cyrus, assignor.)						
Light, Melven, Sheldon, Ill. Umbrella-support.....	504,843	Sept. 12	888	228	64	1451
Lightbody, John P., San Francisco, Cal. Balanced slide-valve.....	489,128	Jan. 3	224	60	62	52
Lightbody, John P., San Francisco, Cal. Balanced slide-valve.....	489,129	Jan. 3	225	61	62	52
Lightburn, Harry W. (See Urbach, John T., assignor.)						
Lighter, John T. (See Dulany, James G., assignor.)						
Lightfoot, Benjamin H. (See Smith, Martin V., assignor.)						
Lightpipe, James A., San Francisco, Cal. Coin-controlled machine.....	500,015	June 20	2102	509	63	1785
Lightner, Claude O., and F. W. Fransway, Baraboo, Wis. Stop-motion for spooling-machines.....	494,298	Mar. 28	2492	{ 628 629 }	{ 62 62 }	{ 1884 1884 }
Lightner, Zachariah F., Darby, Pa. Train-pipe coupling.....	510,806	Dec. 12	1634	406	65	1730
Ligier, Leon R., Douglas, Wyo. Tool-handle fastener.....	511,087	Dec. 19	2159	532	65	1838
Ligo, George H. (See Black and Ligo.)						
Ligon, Thomas S., Dolark, Ark., assignor of one-half to B. B. Timberlake. Pan-lifter.....	496,422	May 2	47	13	63	627
Likly, Henry, Rochester, N. Y. Hat-tray.....	489,968	Jan. 17	1533	401	62	346
Liley, Frederick S. (See Liley, John T. and F. S.)						
Liley, John T. and F. S., London, England. Self-opening umbrella.....	498,665	May 30	3698	913	63	1342
Lilienfeld, Bernhard. (See Grove and Lilienfeld.)						
Lill, William F., Newton, Mass. Ball-cock.....	500,265	June 27	2535	620	63	1873
Lillard, Don. P. (See Grove and Lillard.)						
Lillard, William B. (See Hall and Lillard.)						
Lilley, James L., assignor to F. W. Mann, Milford, Mass. Bone-cutting machine.....	498,398	May 30	3247	808	63	1262
Lillie, George, Peoria, Ill. Hand-truck.....	500,661	July 4	209	54	64	41
Lillie, Samuel M., Philadelphia, Pa. Evaporating liquids.....	491,659	Feb. 14	977	246	62	959
Lillie, Samuel M., Philadelphia, Pa. Evaporating apparatus.....	498,938	June 6	332	78	63	1451
Lillie, William F., Hamilton, assignor of one-half to F. D. Kees, Beatrice, Neb. Corn-husking device.....	505,711	Sept. 26	2364	597	64	1754
Linabury, Charles E., assignor of one-half to A. Beers, Dansville, Mich. Map-stand.....	490,253	Jan. 17	2015	527	62	441
Linberg, Charles J., assignor to Continental Gas Stove Company, St. Louis, Mo. Heating-drum.....	494,963	Apr. 4	681	175	63	130
Lincke, Lena, Berlin, Germany. Folding umbrella.....	491,605	Feb. 14	1209	302	62	1005
Lincoln, Robert B. (See Halvorson, Cromwell A. B., assignor.)						
Lincoln, Robert B., Boston, Mass. Pressure regulator or governor.....	498,014	May 23	2623	656	63	1137
Lincoln Sewing Machine Company. (See Stiles, George A., assignor.)						
Lincoln, William H., Worcester, Mass. Puzzle.....	505,603	Sept. 26	2174	549	64	1719
Lind, Erik G., and K. P. Gustafsson, Näs-Station, Sweden. Stone-dressing machine.....	492,033	Feb. 21	1555	388	62	1089
Lind, Hugh, assignor of one-half to J. R. Snyder, Whitewater, Colo. Bicycle.....	502,232	July 25	2720	686	64	542
Lindberg, Charles, et al. (See Gardeen, Oscar S., assignor.)						
Lindemann, August. (See Lindemann, Charles and A.)						
Lindemann, Charles and A., Milwaukee, Wis. Manufacture of sheet-metal elbows.....	502,044	July 25	2411	607	64	483
Lindemann, Paul, Leipsic-Gohlis, Germany. Apparatus for manufacturing sweets.....	508,955	Nov. 21	1602	393	65	1028
Lindemeyer, Philip, Jr., Jersey City, N. J., assignor to Rogers Printing Company, Baltimore, Md. Picture-support.....	506,599	Oct. 10	1371	344	65	275
Lindemuth, Harry H., Harrisburg, Pa. Vertical boiler.....	490,669	Jan. 31	2717	699	62	606
Lindemuth, Harry H., Harrisburg, Pa. Water-tube boiler.....	492,499	Feb. 28	2304	{ 571 572 }	{ 62 62 }	{ 1254 1254 }

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Lindenthal, Gustav, Pittsburg, Pa. Railway cross-tie	500,266	June 27	2536	620	63	1873
Lindenthal, Gustav, New York, N. Y. Chain cable	500,267	June 27	2538	621	63	1874
Linder, George, assignor of one-half to F. Klein, Milwaukee, Wis. Thrust-bearing for elevators	510,645	Dec. 12	1373	336	65	1681
Linder, Mons. A., Pullman, Ill. Sink and bath-tub	489,485	Jan. 10	785	207	62	181
Linderöth, Henrik P. (See Ishöy and Linderöth.)						
Lindeström, Hjalmar, Moline, Ill. Compensating lever for plows	489,486	Jan. 10	786	207	62	181
Lindeström, Hjalmar, Moline, Ill. Compensating lever, &c.	492,730	Feb. 28	2657	658	62	1327
Lindeström, Hjalmar, Rockford, Ill. Wheel-plow	504,531	Sept. 5	368	93	64	1338
Lindholm, Andrew P. (See Schroeder and Lindholm.)						
Lindley, Thomas H., Savannah, Iowa. Gate and mechanism therefor	505,274	Sept. 19	1581	412	64	1594
Lindner, Emerann, Akron, Ohio. Combined trammel and calipers	497,802	May 23	2281	573	63	1077
Lindner, Richard A., Sheboygan Falls, Wis. Adjustable display-rack	507,740	Oct. 31	3310	810	65	673
Lindner, Robert. (See Klien and Lindner.)						
Lindquist, August, assignor of one-half to C. Dalin, Chariton, Iowa. Grave-alarm	500,072	June 20	2197	535	63	1802
Lindsay, George, Kansas City, Kans. Belt-tightener	507,625	Oct. 31	3135	767	65	640
Lindsay, James, Waterbury, Conn. Cutting and gripping tool	509,920	Dec. 5	124	28	65	1433
Lindsay, John H., Brooklyn, N. Y. Air-valve for steam-radiators	499,463	June 13	1214	290	63	1617
Lindsay, William H., Bristol, England. Clutch	502,732	Aug. 8	636	203	64	734
Lindsey, Leroy J., Moscow, Iowa. Corn-planter	494,926	Apr. 4	630	160	63	121
Lindsey, Lucien B. (See Sears and Lindsey.)						
Lindsey, William M., Dennyville, N. C. Washing-machine	499,237	June 13	816	194	63	1546
Lindstrom, Axel, Ogden, Utah Ter. Curtain-exhibitor	490,572	Jan. 24	2526	650	62	555
Lindstrom, John, Henderson, Ky. Self-acting water-key for wind-instruments	504,354	Sept. 5	60	16	64	1282
Lindstrom, Ole. (See Wennberg and Lindstrom.)						
Line, William A., Carlisle, Pa. Dropping or gaveling attachment for harvesters	500,402	June 27	2754	678	63	1912
Lines, John, assignor to Scovill Manufacturing Company, Waterbury, Conn. Making sheet-metal mounts for brushes, &c.	492,216	Feb. 21	1844	461	62	1149
Lines, John, assignor to Scovill Manufacturing Company, Waterbury, Conn. Combined curtain ring and pin	504,532	Sept. 5	369	93	64	1338
Ling, Edward E., Scarborough, Me. Oil solvent	507,586	Oct. 31	3073		65	628
Ling, Jacob H., Detroit, Mich. Coin-operated mechanism for phonographs	495,557	Apr. 18	1664	419	63	345
Lingner & Kraft. (See Kraft, Georg W., assignor.)				420		
Linhard, John A. (See Phillips and Linhard.)						
Link-Belt Engineering Company. (See Caskey, Samuel S., assignor.)						
Link-Belt Engineering Company. (See Dodge, James M., assignor.)						
Link, Gustav, Duff, Nebr. Pilot-car	505,406	Sept. 19	1800	465	64	1635
Link, Harvey L., assignor of one-half to H. N. Bellows, Denver, Colo. Lock	495,419	Apr. 11	1434	361	63	283
Link, Judge W., and A. E. Wilcox, Sinclairville, N. Y. Hoof-spreader	492,985	Mar. 7	337	85	62	1426
Linke, Emil F., et al. (See Clausen, Edward E., assignor.)						
Linkfield, Ralph E., assignor of one-half to W. F. Dean, Minneapolis, Minn. Stand for use in blacking boots or shoes	498,066	May 23	2700	675	63	1150
Linkletter, Robert, Jersey City, N. J. Drive-screw	494,681	Apr. 4	240	60	63	49
Linkletter, Robert, Jersey City, N. J. Transom-lifter	508,390	Nov. 7	672	165	65	882
Linn, A. M. (See Rowley, James F., assignor.)						
Linn, James A., Liberty, Ill. Garden-rake	509,921	Dec. 5	125	29	65	1433
Linnahan, Francis J. (See Nies and Linnahan.)						
Linnell, Herbert M., et al. (See Mashinter, William P., assignor.)						
Linscott, John M., Worcester, Mass. Let-off mechanism for looms	501,518	July 18	1569	395	64	316
Linscott, John M., Worcester, assignor to J. H. McNab, Clinton, Mass. Positive shuttle-motion for looms	496,574	May 2	288	77	63	671
Linsmayer, August, Dayton, Ohio. Latch and lock combined	508,890	Nov. 14	1451	360	65	1045
Lintner, George A., Minneapolis, Minn. Potential-indicator	495,225	Apr. 11	1129	281	63	227
Lintner, George A., Minneapolis, Minn. Potential indicator	509,578	Nov. 28	2688	650	65	1307
Lintner, William T., et al. (See Dial, Wilbur F., assignor.)						
Linton, Aaron. (See Parrish and Linton.)						
Linton, Charles E. (See Parrish and Linton.)						
Linton, George E., Worcester, Mass. Electric switch	500,918	July 4	599	157	64	110
Linton, Richard J., Manchester, England. Mechanism for printing folded fabrics, &c.	500,770	July 4	380	98, 99	64	71
Lintz, Martin, Socorro, N. Mex. Ter. Cork for bottles	489,081	Jan. 3	149	41	62	36
Linvile, Samuel R., Philadelphia, Pa., and L. F. Hettmansperger, Camden, N. J., assignors to United States Printing Telegraph Company, Philadelphia, Pa. Printing-telegraph	504,732	Sept. 12	688	175	64	1412
Linzeler, Henri A., and P. R. P. Dubault, Paris, France. Coupling for metallic flexible tubing	510,481	Dec. 12	1057	254	65	1624
Liottard, Louis F., Paterson, N. J. Reed for looms	491,575	Feb. 14	844	214	62	932
Lipe, Charles E. (See Pross and Lipe.)						
Lipe, Charles E., and A. T. Brown, Syracuse, N. Y. Velocipede	510,606	Dec. 12	1302	316	65	1668
Lipe, Willard C., Syracuse, N. Y. Nail	510,035	Dec. 5	330	74	65	1472
Lipp, Louis, Cincinnati, Ohio. Water-closet seat	499,026	June 6	500	117	63	1478
Lipp, Louis, Cincinnati, Ohio. Combined strap and pivot hinge	502,306	Aug. 1	82	19	64	501
Lippe, Jacob. (See Barret, Frederick A., assignor.)						
Lippert, Ernst T., Pittsburg, Pa. Saw	497,499	May 16	1817	457	63	976
Lippincott, Fisher H., Philadelphia, Pa., assignor to American Soda Fountain Company, Jersey City, N. J. Soda-water apparatus	508,326	Nov. 7	565	139	65	862
Lippincott, Fisher H., Philadelphia, Pa., assignor to American Soda Fountain Company, Trenton, N. J. Soda-water apparatus	508,327	Nov. 7	567	139	65	863
Lippitt, Theodore C., Shenandoah, Iowa. Nut-wrench	507,587	Oct. 31	3074	752	65	628
Lippy, David, Mansfield, Ohio. Store-service apparatus	489,537	Jan. 10	868	227	62	197
Lippy, David, Mansfield, assignor of one-half to D. L. Spotts, Canton, Ohio. Car-coupling	495,158	Apr. 11	1032	257	63	209
Lippy, David, Mansfield, assignor of one-half to D. L. Spotts, Canton, Ohio. Car-coupling	495,159	Apr. 11	1033	257	63	209
Lippy, David, Mansfield, assignor of one-half to D. L. Spotts, Canton, Ohio. Car-coupling	495,160	Apr. 11	1033	257	63	209
Lippy, David, assignor to Barr Cash and Package Carrier Company, Mansfield, Ohio. Store-service apparatus	501,480	July 11	1505	379	64	229
Lisk, David A., assignor of one-half to T. V. Fox, Clifton Springs, N. Y. Bottom for metal pails	505,318	Sept. 19	1660	428	64	1608
Lisk, David A., Clifton Springs, and T. D. Brown, Canandaigua, N. Y. Oil-can	504,788	Sept. 12	793	200	64	1432
Lispenard, George, Brooklyn, N. Y., assignor, by mesne assignments, to Wallis-Lispenard Cotton Picker and Machinery Company, of New Jersey. Cotton-harvester	494,105	Mar. 21	2172	554	62	1810
Lissner, Ignaz, Kamenz, Germany. Heating-stove	495,349	Apr. 11	1326	332	63	264

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List, Joseph J. S., Rockdale, near Sydney, New South Wales. Automatic continuous rail-way-brake.....	495,499	Apr. 18	1575	396	63	329
Lister, Joseph, Chicago, Ill. Expansion-joint.....	502,733	Aug. 8	837	203	64	724
Lister, Joseph, Chicago, Ill. Boiler-furnace.....	511,536	Dec. 26	2917	710	65	1992
Lister, Robert A., and M. Pedersen, Dursley, England. Centrifugal machine.....	502,859	Aug. 8	1042	255	64	773
Lister, Robert A., and M. Pedersen, Dursley, England. Centrifugal liquid-separator.....	504,809	Sept. 12	828	210 211	64	1438
Litch, Lemuel W., Swampscott, assignor to Lynn Counter Company, Lynn, Mass. Heel-stiffener machine.....	503,608	Aug. 22	2291	572	64	1027
Litchfield, Hattie L., <i>et al.</i> (See Benjamin, Edwin, assignor.)						
Lithgow Manufacturing Company. (See Kennedy, Logan P., assignor.)						
Litner, Harry, assignor of one-half to M. M. Zeigler, Akron, Ohio. Guard for adjacent rail-way-rails.....	495,943	Apr. 18	2269	571	63	452
Littell, Frederic G., Brooklyn, N. Y. Bottle-washer.....	510,866	Dec. 12	1789	439	65	1756
Littell, Harvey M. (See Goetz and Smith, assignors.)						
Littell, William F., Denver, Colo. Indicator-lock.....	506,647	Oct. 10	1440	361 362	65	289
Little, Arthur D., Boston, Mass., assignor, by mesne assignments, to W. M. Norris, Princeton, N. J., and H. Burk, Philadelphia, Pa. Tawing hides.....	498,067	May 23	2702		63	1150
Little, Eugene. (See Amsbury, Albert, assignor.)						
Little, Francis, Marshall, Tex. Cinder and smoke consuming apparatus.....	491,738	Feb. 14	1037	277 278	62	984
Little, Harry M., Rivera, Cal. Cultivator.....	494,010	Mar. 21	2017	514	62	1781
Little, Orton C., assignor to D. T. H. MacKinnon, Menasha, Wis. Bolt.....	491,660	Feb. 14	979	247	62	960
Little, Orton C., assignor of one-half to D. T. H. MacKinnon, Menasha, Wis. Pulley-arm pattern.....	494,257	Mar. 28	2429	612	62	1872
Little, William D., Syracuse, N. Y. Adjuster and leveler for billiard-tables.....	507,915	Oct. 31	3605	889	65	727
Little, William M., Vandalia, Ill., assignor to R. L. Little Manufacturing Company, of Illinois. Tag-machine.....	493,592	Mar. 14	1314	336 337	62	1631
Littlefield, Frank A., assignor to Pepperell Machine Company, Pepperell, Mass. Steam-trap.....	491,456	Feb. 7	695	176	62	882
Littlefield, George, Burlington, Wis. Vapor-generating burner.....	493,171	Mar. 7	622	156	62	1481
Littlejohn, Charles F., Bridgeport, Conn. Connection for steam-engines.....	490,852	Jan. 31	2994	766 767	62	661
Littlejohn, Charles F., Bridgeport, Conn. Valve-gear.....	490,853	Jan. 31	2995	767	62	661
Littleworth, Malcolm C., Duluth, Minn. Safety-clutch for inclined railways.....	502,420	Aug. 1	284	68	64	618
Livengood, Winfield S., assignor to I. H. Dibble, Kansas City, Mo. Lifting-jack.....	490,293	Jan. 24	2093	546	62	469
Livengood, Winfield S., assignor to W. Small, Jr., Kansas City, Mo. Journal-bearing.....	510,807	Dec. 12	1635	406 407	65	1730
Livengood, Winfield S., W. H. Chadbourne, and J. M. Gibbons, assignors, by mesne assignments, to J. E. Knight, E. Kelly, Kansas City, and W. A. Alderson, Westport, Mo. Bal-ing-press.....	495,944	Apr. 18	2270	572	63	452
Livermore, Darwin O., Los Gatos, Cal. Sash-fastener.....	509,922	Dec. 5	126	29	65	1433
Livers, John A. (See Ullrich, Lewis L., assignor.)						
Livesay, George W. (See Parker, George B., assignor.)						
Livesey, Alfred W. P., London, England. Note, account, or other book.....	511,339	Dec. 26	2534	630	65	1930
Livingston, Andrew W., San Francisco, Cal., assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Can-body-forming machine.....	489,969	Jan. 17	1535	401	62	346
Livingston, Andrew W., San Francisco, Cal., assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Can-soldering machine.....	492,034	Feb. 21	1557	388	62	1089
Livingston, Edward, assignor of one-half to H. M. Isaacson, New Orleans, La. Automatic fire extinguisher and alarm.....	504,926	Sept. 12	1017	262	64	1476
Livingstone, Thomas W. (See Loveman, McCrary, and Livingston.)						
Livingstone, Daniel H., Philadelphia, Pa. Door and key fastener.....	511,022	Dec. 19	2052	508	65	1817
Livoni, John A. O., Marion, Kans. Hame-staple.....	505,470	Sept. 26	1905	491	64	1068
Livsey, Isaac M. (See Rushworth and Livsey.)						
Lloyd, Andrew J. (See Landry, Adolphus J., assignor.)						
Lloyd, Charles, West River, Md. Mechanical movement.....	507,142	Oct. 24	2293	563	65	469
Lloyd & Co., W. A. (See Lovelace, Robert S., assignor.)						
Lloyd, George, St. Catharines, Canada. Water-heater.....	496,788	May 2	633	169	63	732
Lloyd, Gordon W., Detroit, Mich. Joint for gas or water pipes.....	494,147	Mar. 28	2254	574	62	1840
Lloyd, Henry H., Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Secondary battery.....	490,254	Jan. 17	2016	527	62	442
Lloyd, Marshall B. (See White, Clarence O., assignor.)						
Lloyd, Marshall B., assignor of one-half to E. H. Holbrook, Jr., Minneapolis, Minn. Automatic grain-scale.....	493,275	Mar. 14	790	205	62	1530
Lloyd, Marshall B., assignor to Lloyd Scale Company, Minneapolis, Minn. Bag-holding weighing-scale.....	500,337	June 27	2657	651	63	1895
Lloyd, Robert H., and R. Reirsen, Tacoma, Wash. Chute.....	509,041	Nov. 21	1729	427 428	65	1114
Lloyd, Robert M., New York, N. Y. Manufacture of secondary-battery electrodes.....	491,684	Feb. 14	1015	257	62	968
Lloyd, Robert M., New York, N. Y. Machine for making storage-battery grids.....	510,208	Dec. 12	1637	407	65	1731
Lloyd Scale Company. (See Lloyd, Marshall B., assignor.)						
Lloyd, Thomas, Boston, Mass. Burnisher.....	494,872	Apr. 4	560	140	63	108
Lloyd, William H., Boston, Mass. Water-closet demonstrator.....	497,584	May 16	1946	486	63	998
Lobben, Peder, assignor to I. Johnson, Worcester, Mass. Ball-bearing for shafts.....	503,609	Aug. 22	2293	572	64	1027
Lobdell, Henry, West Troy, N. Y. Adhesive paste.....	492,515	Feb. 28	2325		62	1259
Lobeck, Bart, Buffalo, N. Y. Boring-machine.....	499,027	June 6	501	117	63	1478
Lobsitz, George L., Newark, N. J. Ice-supporting rack for refrigerators.....	499,841	June 20	1836	446	63	1738
Lochman, Charles W., Crescent City, Cal. Ventilator.....	490,027	Jan. 17	1647	428	62	368
Lochmann, John, New York, N. Y. Letter-file.....	510,350	Dec. 5	835	201	65	1568
Lochmann, Oskar P., Leipzig, Germany. Musical box.....	498,278	May 30	3047	758	63	1226
Lochmann, Oskar P., Leipzig-Gohlis, Germany. Mechanically-played musical instrument.....	510,351	Dec. 5	836	202	65	1569
Lochmann, Paul, Gohlis, near Leipzig, Germany. Governor.....	491,219	Feb. 7	258	64	62	797
Locke, Daniel W., Bucyrus, Ohio. Sulky.....	503,428	Aug. 15	1974	490	64	954
Locke, Delmont, Brooklyn, N. Y. Banner.....	496,423	May 2	48	13	63	627
Locke, Edward H. (See Adams, John H., assignor.)						
Locke, Fred M., Victor, assignor of one-half to G. A. Paddock, Auburn, and W. C. Page, Palmyra, N. Y. Insulator-pin.....	493,434	Mar. 14	1037	268	62	1578
Locke, Fred M., Victor, assignor of one-half to G. A. Paddock, Auburn, and W. C. Page, Palmyra, N. Y. Insulator-pin.....	510,809	Dec. 12	1639	407	65	1731
Locke, George S. (See Oakes, Harry E., assignor.)						
Locke, Herbert M., Washington, D. C. Door-hinge.....	493,230	Mar. 7	711	182	62	1498
Locke, Nathaniel C., Salem, Mass. Regulating-valve.....	497,985	May 23	2579	645	63	1129
Locke, Nathaniel C., Salem, Mass. Regulating-valve.....	509,923	Dec. 5	127	29, 30	65	1434

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Locker, Alfred, and E. F. Gennert, New York, N. Y. Air-compressor pump.....	501,090	July 11	882	227	64	176
Lockhart, John M. (See Campbell, James A., assignor.)						
Lockhart, William S., assignor to Automatic Gem and Gold Separator Syndicate, Limited, London, England. Ore-separator.....	500,662	July 4	210	54	64	41
Lockhart, William S., assignor to Automatic Gem and Gold Separator Syndicate, Limited, London, England. Machine for sorting materials according to size.....	500,771	July 4	382	99	64	71
Lockhart, William S., assignor to Automatic Gem and Gold Separator Syndicate, Limited, London, England. Washing and separating minerals.....	509,818	Nov. 28	3070	{ 741 742 743 }	65	1381
Lockhart, William S., and E. W. Streeter, London, England; said Streeter assignor to said Lockhart. Hydraulic mineral-separating apparatus.....	489,532	Jan. 10	869	{ 227 228 }	62	197
Lockstaedt, Charles C., Chicago, Ill. Hanger.....	494,148	Mar. 28	2255	574	62	1840
Lockstaedt, Charles C., Chicago, Ill. Bedstead.....	498,399	May 30	3248	{ 808 809 }	63	1262
Lockstaedt, Charles C., Chicago, Ill. Refrigerator.....	498,400	May 30	3250	809	63	1263
Lockstaedt, Charles C., Chicago, Ill. Press.....	502,523	Aug. 1	466	112	64	652
Lockwood & Co., C. N. (See Howell, John A., assignor.)						
Lockwood, Elias R., Beatrice, Nebr. Drilling-machine.....	504,599	Sept. 5	470	120	64	1357
Lockwood, John B., Helmvile, Mont. Clothes-pin.....	490,971	Jan. 31	3199	817	62	700
Lockwood, John B., Helmvile, Mont. Water-wheel and elevator.....	495,816	Apr. 18	2080	524	63	417
Lockwood, John S., et al. (See Knight and Steele, assignors.)						
Lockwood, Samuel U., Minneapolis, Minn. Saw-swage.....	493,435	Mar. 14	1038	268	62	1578
Lockwood, Thomas D. (See Lockwood and Larned.)						
Lockwood, Thomas D., Melrose, Mass., and S. J. Larned, Evanston, Ill., assignors to American Telephone and Telegraph Company, of New York, and American Bell Telephone Company, Boston, Mass. Electric signaling.....	501,087	July 11	874	226	64	175
Lockwood, Thomas J., Muncie, Ind., assignor to National Cash Register Company, Dayton, Ohio. Adding device and register.....	500,919	July 4	600	157	64	110
Lodor, James C., Wilmington, N. C. Labeling or mailing machine.....	502,045	July 25	2413	608	64	483
Lodyguine, Alexandre de, Paris, France. Incandescent electric lamp.....	498,901	June 6	276	64	63	1441
Lodyguine, Alexandre de, Paris, France, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Manufacturing filaments for incandescent lamps.....	494,149	Mar. 28	2256	574	62	1840
Lodyguine, Alexandre de, Paris, France, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Manufacturing filaments for incandescent lamps.....	494,150	Mar. 28	2258		62	1840
Lodyguine, Alexandre de, Paris, France, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Filament for incandescent lamps.....	494,151	Mar. 28	2260		62	1840
Loebbe, Frederick C. and G. E., Brooklyn, N. Y. Plumber's portable furnace.....	500,239	June 27	2498	611	63	1867
Loebbe, Gottlob E. (See Loebbe, Frederick C. and G. E.)						
Loersch, Jean, Jr., Dusseldorf, Germany. Coffin.....	501,190	July 11	1050	265	64	206
Loeser, Leo, Buffalo, N. Y. Bridle-blind.....	502,197	July 25	2660	672	64	531
Loetscher, Christian, Dubuque, Iowa. Mortising-machine.....	495,350	Apr. 11	1327	333	63	264
Loevenhart, Henry C., assignor of one-half to J. H. Loevenhart, Lexington, Ky. Bedstead attachment.....	511,340	Dec. 26	2585	630	65	1930
Loevenhart, Jacob H. (See Loevenhart, Henry C., assignor.)						
Loewenberg, Joseph, et al. (See Moskowitz and Young, assignors.)						
Loewenstein, Solomon. (See Berg, Alexander, assignor.)						
Loewenthal, Albert, Berlin, Germany. Cooking-stove.....	499,128	June 6	651	156	63	1504
Loewer, Henry, assignor to Loewer Sole-Rounder Company, Rochester, N. Y. Sole-rounding machine.....	502,421	Aug. 1	285	{ 68 69 70 }	64	619
Loewer Sole-Rounder Company. (See Loewer, Henry, assignor.)						
Lofdahl, Eric O., Rockford, Ill. Combined bit and saw.....	505,712	Sept. 26	2365	597	64	1754
Lofton, Herbert M., Savannah, Ga. Air-brake valve.....	503,244	Aug. 15	1682	{ 413 414 }	64	903
Logan, Charles L., Los Angeles, Cal. Fare-register.....	499,746	June 20	1667	401	63	1709
Logan, Esther, administratrix. (See Logan, John.)						
Logan, John, deceased, Waltham, Mass.; E. Logan, administratrix. Combined watch balance-spring and collet.....	507,549	Oct. 31	2991	734	65	613
Logan, John, deceased, Waltham, Mass.; E. Logan, administratrix. Apparatus for coloring steel ribbons.....	510,352	Dec. 5	837	202	65	1569
Logan, Martin, New York, N. Y. Drain for stalls.....	502,004	July 25	2341	{ 586 587 }	64	470
Logan, Swift & Brigham Envelope Company. (See Swift, Daniel W., assignor.)						
Logue, Hugh, Philadelphia, Pa., assignor to American Meter Company, New York, N. Y. Gas-meter frame.....	490,149	Jan. 17	1845	481	62	409
Logue, William A., Sunset, Mont. Whist game-board.....	490,148	Jan. 17	1844	481	62	409
Lohbiller, Anton, Boston, Mass. Safety-valve.....	496,058	Apr. 25	2451	619	63	501
Lohbiller, Anton, Boston, Mass. Safety-valve.....	498,802	June 6	81	20	63	1403
Löhers, Heinrich, Heidelberg, Germany. Tooth-brush.....	490,831	Jan. 31	2966	761	62	655
Lohzes, John, Elizabeth, N. J. Vehicle-axle.....	489,487	Jan. 10	787	208	62	181
Lohlker, Adam H., St. Paul, Minn. Paper-hanging machine.....	505,109	Sept. 19	1326	342	64	1548
Lohman, Henry J., McKeesport, Pa. Sliding door.....	500,016	June 20	2105	{ 509 510 }	63	1786
Lohmann, Wilhelm C. T., and C. V. Andersen, Copenhagen, Denmark. Lubricator.....	494,106	Mar. 21	2178	556	62	1812
Löhnert, Elsbeth. (See Löhnert, Herman, assignor.)						
Löhnert, Herman, assignor to E. Löhnert, Bromberg, Germany. Nut-lock.....	505,947	Oct. 3	222	58	65	44
Lohr, Charles, Milwaukee, Wis. Stone-dressing machine.....	511,628	Dec. 26	3071	751	65	2019
Lohr, Frank, Freeport, Ill. Attachment for trotting-sulkies.....	493,630	Mar. 21	1385	351	62	1659
Lomas, John R., West Haven, assignor to B. Shoninger, New Haven, Conn. Attachment for pianos.....	491,946	Feb. 14	1423	355	62	1048
Lombard, Levi W., assignor to B. F. Spinney and J. N. Smith, Lynn, Mass. Loom.....	510,431	Dec. 12	976	233	65	1609
Lombard, Nathaniel, Boston, Mass. Lasting-machine.....	507,550	Oct. 31	2992	{ 734 735 }	65	613
Lombard, Nathaniel, Boston, Mass. Lasting-machine.....	507,551	Oct. 31	2996	735	65	614
Lombard, Nathaniel, assignor of one-half to H. A. Clark, Boston, Mass. Car-brake.....	492,691	Mar. 7	187	46	62	1396
Lombard, Nathaniel, assignor to H. A. Clark, Boston, Mass. Circular-weaving machine.....	494,107	Mar. 21	2179	{ 557 558 }	62	1812
Lombard, Nathaniel, assignor to H. A. Clark, Boston, Mass. Circular-weaving machine.....	494,108	Mar. 21	2182	558	62	1812
Lombard, Nathaniel, Boston, assignor of one-half to H. A. Clark, Brookline, Mass. Automatic gas-cut-off apparatus.....	501,951	July 25	2266	567	64	456
Lomer, Louis L., Brooklyn, assignor to F. Wesel Manufacturing Company, New York, N. Y. Printer's case-stand.....	508,143	Nov. 7	274	68	65	808

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Loneragan, Philip J., Denver, Colo. Overalls	506,052	Oct. 3	3-8	102	65	76
Long, Adam A., assignor of one-half to H. S. Durand, Rochester, N. Y. Pneumatic tire	505,919	Oct. 3	186	46	65	36
Long, Albert, Chicago, Ill., and C. McCumber, Fond du Lac, Wis. Water-heater	505,521	Sept. 26	2034	519	64	1691
Long, Benjamin M. (See Decker and Long.)						
Long, Charles W. (See Lewis, Benjamin F., assignor.)						
Long, Clark R., and C. H. Kline, Halsey, Oreg. Steam-cooker	501,952	July 25	2267	567	64	456
Long, Daniel W., and C. Dimick; said Long assignor to said Dimick; said Dimick assignor of two-thirds to A. G. Hawley and C. B. Cheadle, Lockport, Ill. Advertising-valise	501,013	July 4	752	197	64	137
Long, David N., Buffalo, N. Y. Excavating shafts	500,017	June 20	2108	510	63	1786
Long, David W., Springfield, Ohio. Paint-brush	499,842	June 20	1837	446	63	1738
Long, Eli L., Cheektowaga, N. Y. Alternating dumping-grate	501,623	July 18	1735	432	64	348
Long, Eugene F., Scranton, Pa. Bird-warbler	491,571	Feb. 14	831	212	62	931
Long, Frank B., Los Angeles, Cal. Key-touch adjuster for pianofortes	499,564	Jan. 10	907	237	62	205
Long, Horace B., assignor of one-half to G. S. Boutelle, Worcester, Mass. Milk-aerator	489,164	Jan. 3	273	77	62	63
Long, Jacob, Allegheny, assignor of one-half to G. M. Von Bounhorst, Pittsburg, Pa. Coupling	510,353	Dec. 5	838	202	65	1569
Long, James W. (See Stone, Charles H. and A., assignors.)						
Long, John W., Jackson, Miss. Attachment for musical instruments	498,853	June 6	183	45	63	1425
Long, Malcolm W., Harrisburg, Pa., assignor of one-half to T. W. Snow, Batavia, Ill. Electric motor	501,842	July 18	2080	513 514	64	407
Long Manufacturing Company. (See Long, William H., assignor.)						
Long, Samuel F., Philadelphia, Pa., assignor to United States Metallic Packing Company, of Pennsylvania. Metallic rod-packing	494,817	Apr. 4	472	118	63	91
Long, Samuel F., Philadelphia, Pa., assignor to United States Metallic Packing Company, of Pennsylvania. Metallic rod-packing	494,818	Apr. 4	474	119	63	91
Long, Samuel N., assignor to S. N. Long Syrup Company, St. Louis, Mo. Hermetically-sealed bucket	496,835	May 2	707	187	63	745
Long, Samuel N., assignor to S. N. Long Syrup Company, St. Louis, Mo. Hermetically-sealed bucket	510,867	Dec. 12	1791	440	65	1757
Long, Timothy, Cleveland, Ohio. Cash-register	492,035	Feb. 21	1559	3-8 389	62	1089
Long, Timothy, assignor of one-half to Excelsior Iron Works Company, Cleveland, Ohio. Elevator-bucket	504,335	Sept. 5	62	17	64	1282
Long, Valentine J., Jr., assignor to W. D. Doty, Jr., Rochester, N. Y. Measuring device for canisters	509,330	Nov. 21	2215	535	65	1206
Long, William H., assignor to Long Manufacturing Company, Washington, Ill. Hay or hog rack	500,920	July 4	605	158	64	111
Long, William K., Cleveland, Ohio. Brush	499,678	June 13	1552	373	63	1676
Long, William K., and C. H. Henry, Cleveland, Ohio. Wagon-body	492,090	Feb. 21	1639	408	62	1106
Long, William P. (See Oliphint, Alfred, assignor.)						
Longden, Charles E., assignor to Seamless Rubber Company, New Haven, Conn. Syringe-coupling	506,882	Oct. 17	1845	461	65	374
Longenecker, Charles K., assignor to Weston Engine Company, Painted Post, N. Y. Crank-shaft	491,487	Feb. 7	698	176	62	882
Longmore, James, and W. L. Watson, London, England. Machine for decorticating ree, &c.	493,778	Mar. 21	1625	413 414	62	1707
Longmore, James, and W. L. Watson, London, England. Combing-machine	497,380	May 16	1613	407 408	63	942
Longstreth, Charles, assignor to United States Metallic Packing Company, Philadelphia, Pa. Metallic rod-packing	503,723	Aug. 22	2468	613	64	1060
Longstreth, Ezra R., and L. B. Spung, Dumontville, Ohio. Apparatus for administering medicated vapors	491,430	Feb. 7	601	152	62	863
Longworth, Daniel, London, England. Power-hammer	498,354	May 30	3186	793 794	63	1250
Lonning, Christ J., Nevada, Iowa. Windmill	498,068	May 23	2703	676	63	1150
Lonsdale, William, assignor of one-half to A. Freeman, Chicago, Ill. Curling-iron	496,575	May 2	229	77	63	672
Look, Elizabeth B., Boston, Mass. Thread cutter and holder	495,500	Apr. 18	1577	397	63	330
Look, John C., San José, Cal. Car-coupling	493,933	Mar. 21	1872	477 478	62	1754
Look, John C., San José, Cal. Car-coupling	494,067	Mar. 21	2104	536 537	62	1797
Loomer, Henry M., Boston, Mass., assignor to Tapley Machine Company, Portland, Me. Heel-burnishing machine	505,050	Sept. 12	1219	314	64	1514
Loomis, Burdett, Hartford, Conn. Furnace-grate	503,211	Aug. 15	1631	400	64	894
Loomis, E. Y. (See Colby, Edward J., assignor.)						
Loos, Lloyd F., et al. (See Bagley, Alonzo E., assignor.)						
Loose, Robert D., Springfield, Ill. Track-clearer for mowers	506,324	Oct. 10	919	228	65	187
Lord, Charles A., assignor of one-half to T. A. Kirkpatrick, San Francisco, Cal. Trolley-catcher	498,355	May 30	3188	794	63	1250
Lord, Charles G., et al. (See Whitzel, Russel B., assignor.)						
Lord, Edward M. (See Foreman, Lord, and Foreman.)						
Lord, Hugh C., Erie, Pa. Hub-attaching device	496,265	Apr. 25	2762	691	63	559
Lord, Isaac W., Cucamonga, Cal. Fruit-picker	496,520	May 2	202	54	63	655
Lord, Isaac W., Cucamonga, Cal. Lamp-filler	511,054	Dec. 19	2097	519	65	1826
Loree, James K., Howell, Mich. Folding umbrella	507,588	Oct. 31	3075	752	65	628
Loree, Manfred U., Miamisburg, assignor of two-thirds to G. Driggs and O. Kasimisky, Dayton, Ohio. Cash-register	499,171	June 6	721	171 172	63	1515
Loree, Manfred U., Dayton, assignor of one-half to A. L. Foster, Miamisburg, Ohio. Hammer-holder	499,238	June 13	817	194	63	1546
Loree, Perry E., Dayton, Ohio. Autographic register	499,679	June 13	1553	374 375	63	1676
Lorenz, Anton, Guttenberg, N. J. Mangle	494,277	Mar. 28	2458	619	62	1877
Lorenz, Herman. (See Frank, Frederick W., assignor.)						
Lorenz, John, Chicago, Ill. Artificial stone	509,924	Dec. 5	128		65	1434
Lorenz, John C. and J., Titusville, Pa. Pump for oil-wells	494,927	Apr. 4	631	160 161	63	122
Lorenz, Joseph. (See Lorenz, John C. and J.)						
Lorenz, William A. (See Honiss, William H., assignor.)						
Lorey, William. (See Froelich, Lorey, and Guenther.)						
Lorimer, Joseph H., Philadelphia, Pa. Dyeing-machine	505,471	Sept. 26	1906	491	64	1669
Lorio, Joseph N. (See Shaw and Lorio.)						
Lorrain, James G., London, England. Method of and apparatus for extinguishing fires	501,519	July 18	1571	395	64	317
Lortz, George M., assignor of one-half to E. M. Antisdel, Utica, N. Y. Bed-bottom	494,682	Apr. 4	240	61	63	49
Loser, William, Denver, Colo. Checking attachment for harness	499,172	June 6	724	172	63	1516

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Losey, James, assignor of two-thirds to E. W. Battles and O. E. Jennings, Freeport, Mich. Portable gate.	490,077	Jan. 17	1723	{ 449 450	62	384
Losey, James, assignor of two-thirds to E. W. Battles and O. E. Jennings, Freeport, Mich. Gate.	504,392	Sept. 5	129	34	64	1294
Loss, Henrik V., Philadelphia, Pa. Hydraulic packing.	492,217	Feb. 21	1845	462	62	1149
Loss, Henrik V., Philadelphia, Pa. Hydraulic riveting-machine.	496,059	Apr. 25	2452	{ 619 620	63	501
Lothrop, Matthew H., Jacinto, Cal. Tire-protector.	509,925	Dec. 5	130	30	65	1434
				{ 849 850 851 852	65	701
Lott, Charles S., London, England. Breech-loading gun.	507,823	Oct. 31	3458			
Louchet, Paul, Paris, France. Brush-mounting.	511,152	Dec. 19	2267	555	65	1859
Loucks, James C., and W. W. Huelster, Grand Rapids, Mich. Rotary guard for cars.	497,331	May 16	1614	408	63	912
Loud, Herbert, Everett, Mass. Snatch-block.	494,873	Apr. 4	561	141	63	109
Louden Machinery Company. (See Louden, William, assignor.)						
Louden, William, Fairfield, Iowa. Hay-sling.	493,276	Mar. 14	793	205	62	1531
Louden, William, Fairfield, Iowa. Hay-elevator.	498,666	May 30	3699	914	63	1342
Louden, William, Fairfield, Iowa. Hay-carrier.	498,748	May 30	3257	{ 950 951	63	1369
Louden, William, assignor to Louden Machinery Company, Fairfield, Iowa. Hay-carrier track.						
Loudenbeck, Zacharias, Marengo, Ill. Window-screen.	493,216	Mar. 7	685	175	62	1493
Loudenburg, Peter, Modena, Ill. Wire-stretcher.	498,939	June 6	334	78	63	1451
Loudin, Frederick J., Ravenna, Ohio. Sash-fastener.	508,891	Nov. 14	1452	360	65	1046
Lougee, Hayes, <i>et al.</i> (See Adams, Nathaniel F., assignor.)	510,432	Dec. 12	978	233	65	1609
Loughridge Brake and Car Company. (See Loughridge, Jacob E., assignor.)						
Loughridge, Jacob E., Philadelphia, Pa., assignor to Loughridge Brake and Car Company, Camden, N. J. Brake mechanism for railway-cars.	495,255	Apr. 11	1187	298	63	238
Loughry, James C., Greensburg, Pa. Cracker-box.	505,110	Sept. 19	1328	343	64	1548
Louis, Otto T., Philadelphia, Pa. Electrical measuring instrument.	510,074	Dec. 5	393	87	65	1483
				{ 99 100	64	644
Lounsbery, Horace W., Wellsborough, Pa. Steam-engine valve.	502,497	Aug. 1	420			
Love Electric Traction Company. (See Love, John C., assignor.)						
Love Electric Traction Company. (See Towson, Morris S., assignor.)						
Love, Eli C. (See Cook, William H., assignor.)						
Love, James. (See Cardinal and Love.)						
Love, James, Barking, assignor to Gas Economising Foreign Patents, Limited, London, England. Apparatus for carbureting gas or air.	490,972	Jan. 31	3200	818	62	700
Love, John C., assignor to Love Electric Traction Company, Chicago, Ill. Trolley.	490,028	Jan. 17	1649	428	62	369
Love, John C., assignor to Love Electric Traction Company, Chicago, Ill. Clearer for slot- ted conduits.	498,437	May 30	3312	825	63	1275
Love, John C., assignor to Love Electric Traction Company, Chicago, Ill. Conduit-rail- way trolley.	511,342	Dec. 26	2587	630	65	1931
Love, John C., assignor to Love Electric Traction Company, Chicago, Ill. Trolley for con- duit railways.	511,343	Dec. 26	2589	{ 631 632	65	1931
Love, John C., Philadelphia, Pa., assignor to Love Electric Traction Company, Chicago, Ill. Cleaning device for railway-conduits.	511,341	Dec. 26	2586	630	65	1931
Love, John C., Philadelphia, Pa., assignor to Love Electric Traction Company, Chicago, Ill. Support for electrical conductors.	511,344	Dec. 26	2594	632	65	1932
Love, John C., Philadelphia, Pa., assignor to Love Electric Traction Company, Chicago, Ill. Tension device for electric conductors.	511,345	Dec. 26	2596	632	65	1932
Love, John C., Philadelphia, Pa., assignor to Love Electric Traction Company, Chicago, Ill. Trolley-bar carrier for cars.	511,346	Dec. 26	2599	{ 632 633	65	1933
Love, Louis E., Paducah, Ky. Stove attachment.	504,356	Sept. 5	63	17	64	1283
Loveall, Frank W., assignor of one-half to T. Misner, Cleveland, Ohio. Miter-box.	497,524	May 16	1846	466	63	982
Lovejoy, Fredric C., Albany, N. Y. Scaffold-horse.	498,749	May 30	3559	951	63	1370
Lovejoy, Wilford C. (See Leighton, George A., assignor.)						
Lovejoy, William W., Cohasset, Mass. Catheter-holder.	503,973	Aug. 29	2853	716	64	1153
Lovelace, Elijah E. (See Hancock, Lovelace, and Lawless.)						
Lovelace, Robert S., Henstridge, assignor to W. A. Lloyd & Co., Birmingham, England. Crank.	503,865	Aug. 22	2668	669	64	1100
Loveland, Alfred W. (See Hayward, King, and Loveland.)						
Lovell, Charles W., <i>et al.</i> (See Bredenberg, Alfred, assignor.)						
Lovell, Charles W., and A. Bredenberg, Brooklyn, N. Y. Book-covering machine.	493,553	Mar. 14	1241	{ 318 319 320 321	62	1616
Lovell, Charles W., and A. Bredenberg, Brooklyn, assignors of one-third to J. W. Lovell, New York, N. Y. Book-trimming machine.	490,877	Jan. 31	3031	{ 779 780	62	669
Lovell, George H. (See Merrill and Lovell.)						
Lovell, John W. (See Lovell and Bredenberg, assignors.)						
Lovell, John W., <i>et al.</i> (See Bredenberg, Alfred, assignor.)						
Lovell Manufacturing Company. (See Lovell, Melvin N., assignor.)						
Lovell, Melvin N., assignor to Lovell Manufacturing Company, Limited, Erie, Pa. Cash- register and indicator.	489,382	Jan. 3	608	{ 163 164	62	131
Lovell, Melvin N., assignor to Lovell Manufacturing Company, Limited, Erie, Pa. Cash- register and indicator.	489,383	Jan. 3	612	{ 164 165 166	62	132
Lovell, Melvin N., assignor to Lovell Manufacturing Company, Limited, Erie, Pa. Tablet and key locking device for cash-registers.	489,384	Jan. 3	616	166	62	133
Lovell, Thomas H., and G. Buckingham, Cleveland, Ohio. Burglar-alarm.	493,037	Mar. 7	418	104	62	1441
Loveman, Sam, G. W. McCrary, and T. W. Livingston, Dalton, Ga. Cloth-measuring machine.	498,128	May 23	2794	699	63	1167
Loveridge, Frederick H. (See Van Denburgh and Loveridge.)						
Loveridge, Frederick H., assignor to Standard Electric Company, Chicago, Ill. Dynamo- electric machine.	500,403	June 27	2755	679	63	1912
Lovett, Morris J., Midlothian, Tex. End-gate.	506,519	Oct. 10	1258	315	65	253
Low, Abbott A. (See Johnson, Louis K., assignor.)						
Low, Abbot A., Brooklyn, N. Y. Combination pocket implement.	491,780	Feb. 14	1167	292	62	997
Low, Abbot A., Brooklyn, N. Y. Card-canceling machine.	505,627	Sept. 26	2208	559	64	1726
Low, Everett M., Worcester, Mass. Ball-and-socket-joint clamping device.	490,150	Jan. 17	1846	482	62	409
Low, Garrett W. (See Shakespeare and Low.)						
Low, Garrett W., and W. Shakespeare, Jr., Kalamazoo, Mich. Ground-glass adjuster for cameras.	493,305	Mar. 14	942	242	62	1559

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Low, Garrett W., and W. Shakespeare, Jr., Kalamazoo, Mich. Photographic-printing frame.	505,111	Sept. 19	1329	343	64	1548
Low, Isaac W., Washburn, Ark. Knife	496,521	May 2	204	54	63	656
Low, James E., and M. Dahl, Chicago, Ill.; said Dahl assignor to said Low. Tool-holder	491,316	Feb. 7	423	110	62	827
Low, James E., and M. Dahl, Chicago, Ill.; said Dahl assignor to said Low. Tool-holder	491,317	Feb. 7	425	110	62	828
Low, Philip B., New York, N. Y. Apparatus for coaling ships at sea	489,749	Jan. 10	1178	307 308 309	62	259
Lowder, David S., <i>et al.</i> (See Gardner, Fulton, assignor.)						
Lowe, Frederick W., Philadelphia, Pa. File-cutting machine	506,053	Oct. 3	389	102 103	65	76
Lowe, George, Buffalo, N. Y. Fender for cars	496,424	May 2	49	14	63	627
Lowe, John M., Omaha, Nebr. Machine for reinking type-writer ribbons	506,126	Oct. 3	510	132 133	65	99
Lowe, Robert E., Brooklyn, N. Y. Spring-hinge and check	491,898	Feb. 14	1348	335	62	1033
Lowell Machine Shop. (See Canning, William P., assignor.)						
Lowell Machine Shop. (See Falls, Alonzo, assignor.)						
Lowell Machine Shop. (See Hildreth, Charles L., assignor.)						
Lowell Machine Shop. (See Hildreth, Stephens, and Whitaker, assignors.)						
Lowell Machine Shop. (See Randall, Charles F., assignor.)						
Lowell Machine Shop. (See Shepherd and Midgley, assignors.)						
Lowell Machine Shop. (See Whitaker, Channing, assignor.)						
Lowell Oiler Company. (See Humphrey, Henry P., assignor.)						
Lowell, Sidney V. (See Curley, Edwin A., assignor.)						
Lowenberg, Benjamin, Norfolk, Va. Combined shirt-collar and necktie	500,921	July 4	606	158	64	111
Lowenberg, Benjamin, Norfolk, Va. Shirt and collar therefor	500,922	July 4	607	158	64	111
Lowenstein, Gothard, Brooklyn, N. Y. Fire-escape	500,018	June 20	2109	511	63	1786
Lowenthal, Isidore. (See Goldman, Edward, assignor.)						
Lower, George Z., Carlisle, Pa. Box-printing machine	495,420	Apr. 11	1436	362 363	63	283
Lowinsky, Marcus W., London, England. Buttonhole-facing	492,731	Feb. 28	2657	658	62	1327
Lowinsky, Marcus W., London, England. Wheel for vehicles	495,817	Apr. 18	2081	524 525	63	417
Lowrie, Harvey C., Denver, Colo. Permutation-padlock	502,307	Aug. 1	83	19, 20	64	581
Lowrie, Harvey C., Denver, Colo. Permutation-padlock	502,308	Aug. 1	86	20	64	582
Lowry, Alexander M. (See La Burt, John, assignor.)						
Lowry, George A., Chicago, Ill. Hog-scraper	497,724	May 16	2155	539	63	1038
Lowry, George A., Des Moines, Iowa, assignor, by mesne assignments, to Warder, Bushnell & Glessner Company, Springfield, Ohio, and Walter A. Wood Mowing and Reaping Machine Company, Hoosick Falls, N. Y. Automatic feeder for twine-machines	491,947	Feb. 14	1425	355	62	1048
Lowry, George D., Wheeling, Mo. Traction-engine	492,303	Feb. 21	1972	491 492	62	1176
Lowry, William H., Mountain Grove, Mo. Box-fastener	503,285	Aug. 15	1752	433	64	915
Lowth, James, Chicago, Ill. Pump attachment for velocipedes	510,036	Dec. 5	332	74	65	1472
Lowy, Adolf, New York, N. Y. Guard for penholders	510,690	Dec. 12	1445	356	65	1695
Loyd, William T., assignor to himself and H. P. Harrison, Hiawatha, Kans. Shoe	502,328	Nov. 7	568	139	63	863
Lozier, Henry A., trustee. (See Huss, Rudolph W., assignor.)						
Lozier, Henry A., Cleveland, Ohio. Wheel-tire	498,667	May 30	3700	914	63	1342
Lozier Manufacturing Company. (See Moore and Burwell, assignors.)						
Lozier, Robert T., assignor to Edison General Electric Company, New York, N. Y. Automatic circuit-breaker for motors	492,036	Feb. 21	1561	389	62	1090
Lubbers, John H., Jeannette, Pa. Window-glass leer	492,765	Feb. 28	2718	675 676 677	62	1339
Lubking, Adolph H., assignor of one-half to H. St. George, Pomeroy, Wash. Feeder and spreader for thrashing-machines	505,948	Oct. 3	223	58	65	44
Luburg, Charles E., Philadelphia, Pa., assignor to Luburg Manufacturing Company, of Pennsylvania. Tire for bicycles	505,530	Sept. 26	2035	519	64	1692
Luburg, Charles E., Philadelphia, Pa., assignor to Luburg Manufacturing Company, of Pennsylvania. Support for bicycle-saddles	510,275	Dec. 5	728	176	65	1547
Luburg Manufacturing Company. (See Luburg, Charles E., assignor.)						
Lucas, Abe N., B. Zindel, and M. S. Schmit, Fort Howard, Wis. Pressure-regulator	500,145	June 27	2345	567	63	1840
Lucas, Cecil H., Gillivan, Ohio. Gate	504,357	Sept. 5	64	17	64	1283
Lucas, Christian E., Atlanta, Ga. Sash-holder	509,042	Nov. 21	1731	428	65	1115
Lucas, Francis M., Eskridge, Kans. Churn-dasher	493,828	Mar. 21	1707	435	62	1722
Lucas, James G., New York, N. Y. Ventilator	493,407	Mar. 14	995	257	62	1570
Lucas, John M., Cadiz, Ohio. Egg-separator	492,892	Mar. 7	188	46	62	1396
Lucas, John T., Centerville, Wash. Gang or cultivator plow	500,405	June 27	2757	679	63	1912
Lucas, Louis L., assignor of one-half to G. H. Benson, Falconer, New York. Wax pad	494,109	Mar. 21	2184	558	62	1813
Lucchesini, Alessandro, Florence, Italy. Date-stamping machine	495,187	Apr. 11	1078	267	63	218
Lucè, Bartlett P., Boston, Mass. Lamp-burner	501,284	July 11	1191	301	64	232
Luce, Edwin W., Meadville, Pa. Screw-stopper lock	490,356	Jan. 24	2202	574	62	491
Luce, Edwin W., Meadville, Pa. Automatic car-brake	493,100	Mar. 7	510	128	62	1460
Luce, Edwin W., Meadville, Pa. Oil-can and filler	511,440	Dec. 26	2772	671	65	1963
Luce, Fredrick R., <i>et al.</i> (See Moulton, Luther V., assignor.)						
Luce, William B., Brookline, Mass. Electric indicator	500,404	June 27	2756	679	63	1912
Luce, William B., assignor of one-third to E. S. Ritchie & Sons, Brookline, Mass. Electric arc lamp	505,051	Sept. 12	1222	315	64	1514
Luce, William B., assignor of one-third to E. S. Ritchie & Sons, Brookline, Mass. Electric arc lamp	507,916	Oct. 31	3606	889	65	727
Lucia, Joel, Nahma, Mich. Hose-reel	507,019	Oct. 17	2060	508	65	416
Luckenbach, Wilson I. (See Yeager, Luckenbach, and Balliet.)						
Lüders, Reinhold T. G., Berlin, Germany. Clutch	498,884	June 6	240	56	63	1435
Ludgin, Louis, Chicago, Ill. Combined book-holder and reading-stand	510,075	Dec. 5	395	87	65	1484
Ludgin, Louis, Chicago, Ill. Map-case	510,607	Dec. 12	1304	318	65	1668
Ludlow, Charles G., Chicago, Ill., assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Device for attaching pressure-gages to boilers	495,594	Apr. 18	1726	435	63	355
Ludloff, Friedrich, Berlin, Germany. Centrifugal separator and regulating the supply thereto	504,422	Sept. 5	182, 48	64	63	1305
Ludlow, Rodney F., Springfield, Ohio. Car-coupling	500,338	June 27	2658	651	63	1895
Ludlow, Ross A., Globe, assignor of two-thirds to L. C. F. and O. H. O. Wynne, Hanford, Cal. Churn	502,628	Aug. 1	637	152	64	684
Ludlow, Samuel W., Madisonville, Ohio. Fire-alarm apparatus	502,734	Aug. 8	838	203	64	735
Ludowici, Wilhelm, Tockgrim, Germany. Ridge or gutter tile machine	493,366	Mar. 14	943	242	62	1559
Ludwig, Adolph, Brooklyn, N. Y. Frame for blotters	506,520	Oct. 10	1259	315	65	253

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Ludwig, Gotthilf L., Raton, N. Mex. Ter. Drain for stall-floors	495,203	Apr. 11	1098	273	63	222
Ludwig, Oscar, assignor of three-fourths to J. L. Board, R. D. Wardwell, and E. M. Board, trustee, Chicago, Ill. Smelting-furnace	505,112	Sept. 19	1330	343	64	1549
Ludwig, William C. (See Christopher, John M., assignor.)						
Luebbsen, Charles M., Baltimore, Md. Basket-carrier for bicycles	498,015	May 23	2625	656	63	1137
Luebkert, Henry, <i>et al.</i> (See Heinlein, John F., assignor.)						
Luehrs, Michel D., Cleveland, Ohio. Bolt-cutter	508,549	Nov. 14	939	231	65	948
Luehrs, Michel D., Cleveland, Ohio. Bolt-cutter	511,441	Dec. 26	2774	671	65	1964
Luethi, Fredrick C., and J. M. E. Riedel, Fort Wayne, Ind. Adjustable foot for tables	510,691	Dec. 12	1446	357	65	1695
Luff, Joseph. (See Page, Justin E., assignor.)						
Luginbühl, Benjamin M., Bluffton, Ohio. Truss	501,796	July 18	2025	499	64	397
Lugo, Orazio, New York, N. Y., assignor to Cosmic Alloy and Metal Depositing Company, of New Jersey. Electro-depositing metals	493,277	Mar. 14	795	206	62	1531
Lugrin Flexible Door Company. (See Jelts, Frederick, assignor.)						
Lugrin Flexible Door Company. (See Lugrin, Horatio N. H., assignor.)						
Lugrin, Henry A., Brooklyn, assignor to A. Wittnauer, New York, N. Y. Stop-watch	505,052	Sept. 12	1223	315	64	1514
Lugrin, Horatio N. H., Worcester, Mass. Apparatus for lighting the interior of buildings	494,299	Mar. 28	2494	629	62	1884
Lugrin, Horatio N. H., Worcester, Mass., assignor to Lugrin Flexible Door Company, Portland, Me. Flexible door	490,448	Jan. 24	2329	604 605	62	515
Lugrin, Horatio N. H., Worcester, Mass., assignor to Lugrin Flexible Door Company, Portland, Me. Flexible shutter	493,477	May 30	3372	840	63	1285
Luhmann, Eduard, Andernach, Germany. Making carbonic acid	503,286	Aug. 15	1753	433	64	915
Luhmann, Eduard, Andernach, Germany. Apparatus for making carbon dioxide	507,143	Oct. 24	2293	563 564	65	469
Luhmann, Eduard, Andernach, Germany. Making carbon dioxide	507,741	Oct. 31	3311	811	65	674
Luhmann, Eduard, Andernach, assignor to Sürther Maschinenfabrik, vormals H. Hammer-schmidt, Sürth, near Cologne, Germany. Making pure carbonic-acid gas	491,365	Feb. 7	510		62	845
Lührig, Carl, Dresden, Germany. Tramway-vehicle	502,442	Aug. 1	327	77, 78	64	626
Lührig, Carl, Dresden, Germany. Locomotive-vehicle	502,443	Aug. 1	329	78, 79	64	626
Lührig, Carl, Dresden, Germany, assignor, by mesne assignments, to Lührig Coal Wash-ing Company, of West Virginia. Separating and cleaning coal and other minerals. (Re-issue)	11,334	May 9	1474	370 371	63	900
Lührig Coal Washing Company. (See Lührig, Carl, assignor.) (Reissue.)						
Luke, James A., assignor to E. S. Van Tuyl, Petrolia, Canada. Vehicle-spring	504,043	Aug. 29	2967	742	64	1173
Lull, Thurston, Ainsworth, Neb. Cultivator	490,151	Jan. 17	1848	482	62	409
Lum, William, assignor to himself and L. M. Garrett, Carthage, Miss. Cotton-scraper	508,431	Nov. 14	738	182	65	909
Lumley, William, Chicago, Ill. Temporary binder	499,432	June 13	1164	278 279	63	1608
Lumley, William, Chicago, Ill. Letter or bill file	499,433	June 13	1166	279	63	1608
Lunbeck, Edwin B., and C. P. Cummings, Monte Vista, Colo. Exhibiting device	511,088	Dec. 19	2160	532	65	1839
Lund, Richard, Fall River, Mass. Shuttle-binder for looms	494,719	Apr. 4	302	76	63	61
Lund, Willis S., Nashua, N. H. Harness-saddle	496,088	Apr. 25	2495	630	63	509
Lundahl, Johan F., Homestead, Pa. Tonges	510,037	Dec. 5	334	74	65	1472
Lundberg, Rudolph, assignor of two-thirds to H. W. Blackwood, New York, and P. Bjur-berg, Brooklyn, N. Y. Sofa-bed	497,191	May 9	1274	323 324	63	866
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Dy-namo-electric machine	490,449	Jan. 24	2331	605	62	516
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Dy-namo-electric machine	490,809	Jan. 31	2932	753	62	648
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Dy-namo-electric machine or electric motor	490,810	Jan. 31	2935	753	62	649
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Dy-namo-electric machine or electric motor	505,665	Sept. 26	2280	578	64	1739
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Apparatus for controlling the application of electrical currents	507,144	Oct. 24	2295	564 565	65	469
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Rotary fan	511,442	Dec. 26	2775	672	65	1964
Lundershausen, Otto, Berlin, Germany. Toilet-glass	510,076	Dec. 5	398	88	65	1485
Lundquist, Gustaf F., Silverton, Colo. Pocket-knife	510,038	Dec. 5	335	75	65	1472
Lundström, Albert, Boston, Mass. Tailor's stove	497,029	May 9	1032	263	63	822
Lundstrom, Carl J., assignor to D. H. Burrell & Co., Little Falls, N. Y. Cheese-press	505,571	Sept. 26	2122	537	64	1709
Lundy, John C., assignor of one-half to F. A. Fairchild, Winnipeg, Canada. Attachment for thrashing-machines	502,979	Aug. 8	1250	308	64	811
Lundy, Richard W. (See Moore and Lundy.)						
Lundy, Richard W., South Bend, Ind. Track for door-hangers	500,146	June 27	2346	567	63	1840
Lundy, Richard W., South Bend, Ind. Door-hanger	509,131	Nov. 21	1894	463	65	1145
Lundy, Richard W., South Bend, Ind. Adjustable track for door-hangers	509,132	Nov. 21	1895	463	65	1145
Lundy, Sinclair G., assignor of one-half to C. H. Knight, Elizaville, Ky. Machine for meas-uring wall-paper	491,488	Feb. 7	699	177	62	883
Lunge, George, Zurich, Switzerland, and C. H. M. Lyte, London, England. Making basic lead salts and caustic alkali	510,979	Dec. 19	1994		65	1807
Lungren, Charles M., Bayonne, N. J. Pneumatic tire	493,554	Mar. 14	1254	321	62	1618
Lunken, Edmund H. (See Ritter and Lunken.)						
Lunken, Edmund H., Cincinnati, Ohio. Combined burglar and fire proof shutter	504,533	Sept. 5	369	93	64	1338
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Lubricator	492,091	Feb. 21	1641	408	62	1106
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Straightway-valve	494,579	Apr. 4	81	20	63	17
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Straightway-valve	494,580	Apr. 4	82	20	63	17
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Straightway-valve	494,581	Apr. 4	84	20	63	18
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Straightway-valve	494,582	Apr. 4	85	21	63	18
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Lubricator	498,438	May 30	3313	825	63	1275
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Valve	498,439	May 30	3314	825	63	1275
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Safety-valve	498,803	June 6	82	21	63	1403
Lunken, Edmund H., assignor to Lunkenheimer Company, Cincinnati, Ohio. Steam-whistle	503,547	Aug. 15	2168	542	64	990
Lunkenheimer Company. (See Lunken, Edmund H., assignor.)						
Lunkenheimer Company. (See Ritter and Lunken, assignors.)						
Lupfer, Edgar N., <i>et al.</i> (See Hiser, Sherman N., assignor.)						
Lupfer, Edgar N., and C. H. Hiser, Springfield, Ohio. Metallic casket	508,432	Nov. 14	739	182	65	909
Lupher, Preston W., Pittsburg, Pa. Removable front for street-cars	508,892	Nov. 14	1454	360	65	1046
Luppen, Luppe, Pekin, Ill. Cultivator	508,481	Nov. 14	824	204 205	65	926

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Luppert, George, Williamsport, Pa. Bed-slat support	500,406	June 27	2759	679	63	1913
Lupton, Thomas N., Winchester, Va. Shutter-worker	503,866	Aug. 22	2669	669	64	1100
Lurie, Abraham, New York, N. Y. Bench-vise	502,127	July 25	2541	637	64	508
Luscher, John F., St. Louis, Mo. Adjustable mitring machine	507,742	Oct. 31	3312	811	65	674
Luscomb, John F., Marshfield, Mass. Musical instrument	491,183	Feb. 7	202	51	62	786
Luscomb, John F., Marshfield, Mass. Banjo	504,810	Sept. 12	830	211	64	1439
Lusk, Harvey W., Monmouth, Ill. Nut-lock	508,177	Nov. 7	321	80	65	817
Lussigny, Henri A. A., Paris, France. Carrotting fur	501,797	July 18	2027	.....	64	397
Lussigny, Henri A. A., Paris, France. Carrotting fur	501,798	July 18	2027	.....	64	397
Lusted, Charles, Sr., Lafayette, La. Grass-cutting attachment	508,080	Nov. 7	76	21, 22	65	772
Luster, Henry S., North Ridgeville, Ohio. Thread-holding cabinet	495,351	Apr. 11	1331	333	63	264
Lustnauer, Eugen, Pforzheim, Germany. Pocket-eraser	501,570	July 18	1646	412	64	332
Lutgen, Charles H., Dunkirk, N. Y. Swage-block for horseshoe-heels	497,329	May 16	1535	387	63	927
Lutgen, Mathias, West Bend, Iowa. Floor-clamp	493,506	Mar. 14	1161	296	62	1599
Luther, Benjamin G., Worcester, Mass. Gluing attachment for matching-machines	493,101	Mar. 7	514	129	62	1461
Luther, Charles H., Jr. (See Waterman and Luther.)						
Luther, William H., Glen Ellyn, Ill. Automatically-folding crane for mail-bags	501,150	July 11	990	252	64	195
Luthy, Adolph, New York, N. Y. Fastening for jewelry-pins, &c.	494,583	Apr. 4	86	21	63	18
Lutz, William E., and T. Kopp, Philadelphia, Pa. Attachment for bicycles	496,266	Apr. 25	2764	691	63	560
Lux, Nicholas, Topeka, Kans. Paper-feeding attachment	492,218	Feb. 21	1847	462	62	1150
Lyall, James, New York, N. Y. Woven fabric for wheel-tires	504,883	Sept. 12	944	244	64	1462
Lyall, James, New York, N. Y. Woven fabric for wheel-tires	505,294	Sept. 19	1626	420	64	1603
Lyall, James, New York, N. Y. Woven fabric for wheel-tires	505,949	Oct. 3	225	58, 59	65	41
Lybarger, John P., Van Wert, assignor to J. R. Ashton, Lima, Ohio. Automatic elevator	507,712	Oct. 31	3277	{ 801 802 }	{ 65 65 }	{ 667 667 }
Lykke, John, assignor of one-third to J. Felbel, New York, N. Y. Saw	493,934	Mar. 21	1875	478	62	1754
Lytle, Alice A., Kinzua, Pa. Dish-drainer	497,673	May 16	2074	518	63	1023
Lytle, Jefferson Y., assignor of one-half to F. F. Smith, S. L. Boddy, and D. H. Bloom, Chattanooga, Tenn. Machine for sharpening gin-saws	505,774	Sept. 26	2464	621	64	1772
Lytle, Jennie R., Dowagiac, Mich. Nursery-case for children's carriages	501,520	Aug. 18	1373	395	64	317
Lytle, Robert W. (See Strusholm, Anders M., assignor.)						
Lytle, William P., assignor of one-half to W. J. Simpson, Philadelphia, Pa. Game or exercising apparatus	503,379	Aug. 15	1911	473	64	948
Lyman, Adelin B., Cleveland, Ohio. Lightning conductor and arrester	492,219	Feb. 21	1849	463	62	1150
Lyman, George N., Sr. (See McGrath, John, assignor.)						
Lyman, Thomas, Bloomington, Ill. Smoke-consumer	497,330	May 16	1536	387	63	927
Lyman, William. (See Latta, Emmitt G., assignor.)						
Lynam, John S. (See Adams and Lynam.)						
Lynch, Arthur C. (See Christoph, George W., assignor.)						
Lynch, Charles D., Detroit, Mich. Valve	491,809	Feb. 14	1352	335	62	1634
Lynch, Edward P. (See Stebbins, Milton W., assignor.)						
Lynch, John H., Lowell, Mass. Vernier-calipers	506,703	Oct. 17	1538	324	65	318
Lynch, Michael L., Fort Worth, Tex. Cattle-guard	506,242	Oct. 10	777	192	65	159
Lynch, Patrick H., assignor to himself and D. F. Beggs, New York, N. Y. Handle-clamp for street or stable brooms	508,592	Nov. 14	900	221	65	940
Lynch, Robert L., Leepport, Ky. Picture-support	498,902	June 6	278	64	63	1441
Lynde, James H., Sale, England. Automatic fire-extinguishing sprinkler	506,704	Oct. 17	1540	385	65	319
Lynn Counter Company. (See Litch, Lemuel W., assignor.)						
Lynn, Elmore P. (See Lynn, Mirabeau N. and E. P.)						
Lynn, Elmore P., Cincinnati, Ohio. Bottle-sealing device	491,433	Feb. 7	605	153	62	864
Lynn, John C. H., Danville, Pa. Lamp-filling attachment for oil-cans	508,730	Nov. 14	1208	300	65	1001
Lynn, Mirabeau N. (See Sheldon and Lynn.)						
Lynn, Mirabeau N., Rising Sun, Ind. Bottle-sealing device	491,431	Feb. 7	602	152	62	864
Lynn, Mirabeau N., Rising Sun, Ind., and E. P. Lynn, Cincinnati, Ohio. Bottle-sealing device	491,432	Feb. 7	604	153	62	864
Lynn, William H. (See McKay, John L., assignor.)						
Lyon, Cassini A., et al. (See Smith, Levi W., assignor.)						
Lyon, Charles D., Lynn, assignor of one-half to H. A. Fisher, Swampscott, Mass. Car-brake handle	491,969	Feb. 14	1455	363	62	1055
Lyon, Edward H., Brooklyn, N. Y. Galvanic battery	502,405	Aug. 1	239	61	64	613
Lyon, George W. (See Wheeler and Lyon.)						
Lyon, Gustave, Paris, France. Piano-forte-action	495,745	Apr. 18	1969	497	63	337
Lyon & Healy. (See Durkee, George B., assignor.)						
Lyon & Healy. (See Peloubet, Jarvis, assignor.)						
Lyon, Henrietta J., Newark, N. J. Corset	506,705	Oct. 17	1541	385	65	319
Lyon, James C., Baltimore, Md. Manufacturing linoleum or oil floor-cloth	500,812	July 4	443	116	64	82
Lyon, Jay C., Judd's Bridge, Conn. Propagating-box	495,049	Apr. 11	814	205	63	171
Lyon, John C., East Orange, N. J. Disinfectant apparatus	497,100	May 9	1140	292	63	842
Lyon, John W., Providence, R. I. Vulcanizing apparatus	511,629	Dec. 28	3073	751	65	2019
Lyon, William, Burlington, Iowa. Woodworking-machine	506,919	Oct. 17	1899	473	65	365
Lyon, William F., Detroit, Mich. Grain-door for cars	492,926	Mar. 7	247	63	62	1407
Lyons, Ben, Philadelphia, Pa. Leggin	498,279	May 30	3048	758	63	1226
Lyons, Robert, Peiro, Iowa. Listed-corn cultivator and harrow	496,884	May 9	810	213	63	783
Lysle, Robert W. (See Macan, William A., assignor.)						
Lyte, Cecil H. M. (See Lunge and Lyte.)						
Lyte, Cecil H. M. (See Lyte, Farnham M. and C. H. M.)						
Lyte, Farnham M., London, England. Electrode	507,374	Oct. 24	2698	663	65	545
Lyte, Farnham M., London, England. Electrolytically decomposing fused metallic chlorides	510,276	Dec. 5	728	{ 176 177 }	{ 65 65 }	{ 1547 1547 }
Lyte, Farnham M. and C. H. M., London, England. Producing chlorine and purifying lead	503,429	Aug. 15	1975	490	64	955
Lytell, William H., Portland, Oreg. Apparatus for producing illusory dramatic effects	498,669	May 30	3702	914	63	1343
Lytell, William H., Portland, Oreg. Apparatus for producing illusory dramatic effects	498,669	May 30	3703	{ 914 915 }	{ 63 63 }	{ 1343 1343 }
Lytle, Albert E., assignor to S. D. Oviatt, Chicago, Ill. Heater for fireplaces, &c.	492,732	Feb. 28	2658	659	62	1327
Lytle, Frank J., Humboldt, Nebr. Neck-yoke	503,150	Aug. 15	1531	376	64	875
M. A. Furbush & Son Machine Company. (See Knowlton and Meyer, assignors.)						
M. B. Shantz Company. (See Eshleman, Samuel B., assignor.)						
M. Ohmer's Sons Company. (See Ohmer, Wilfred L., assignor.)						
Mabbett, Truman, Philadelphia, Pa. Ice shredder or shaver	500,923	July 4	608	158	64	111
Maben, Benjamin S., Gilead, Me. Combined sofa and bath-tub	496,885	May 9	812	213	63	783
Mable, William, assignor of three-fourths to M. H. Akin, J. A. C. Kiscock, and F. C. Avery, Fort Collins, Colo. Car-coupling	495,501	Apr. 18	1577	397	63	330
Mable, William, assignor of five-eighths to J. A. C. Kiscock, M. H. Akin, and F. C. Avery, Fort Collins, Colo. Combined car and air-brake coupling	495,502	Apr. 18	1579	397	63	330

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Mabon, Ernest L. <i>et al.</i> (See Dion, Charles J., assignor.)						
Mabry, Willis. (See Barber, Bates, Mabry, and Sketon.)						
MacCarthy, Daniel F., St. Paul, Minn. Seal-lock	495,097	Apr. 11	905	228	63	189
MacColl, Hector, Saxonia, Strandtown, Ireland. Stern-bearing for screw-propeller shafts.	505,666	Sept. 26	2281	579	64	1739
MacDonald, Allan A., Newark, N. J., assignor to John A. Riley & Sloan Company, of New Jersey. Cast-off for suspenders	502,674	Aug. 1	728	174	64	700
MacDonald, Charles A. (See Levey, Butler, and MacDonald.)						
MacDonald, John W., Pittsburg, Pa. Ice-cream freezer	489,565	Jan. 10	909	237	62	205
MacDuff, Edward and J., Cohoes, N. Y. Bobbin-holder for spindles	495,818	Apr. 18	2082	525	63	417
MacDuff, John. (See MacDuff, Edward and J.)						
MacEachen, Samuel, assignor of one-half to T. J. Foster, Scranton, Pa. Apparatus for drilling wells	503,051	Aug. 8	1357	335 336	64	831
MacFadden, Carl K., Chicago, Ill. Electric-arc lamp	492,815	Mar. 7	69	16, 17	62	1371
MacGregor, Albert G., Chicago, Ill. Type-cleaner for type-writing machines	508,904	Nov. 14	1506	368	65	1052
MacHaffie, John, Schenectady, N. Y. Electric motor	500,663	July 4	211	55 56 57	64	41
MacIntosh, Elizabeth H., Little Rock, Ark. Dough-raiser	505,364	Sept. 19	1734	449	64	1622
MacKellar, Smiths & Jordan Company. (See Popp, Hermann S., assignor.)						
MacKenzie, George W., Beaver, Pa. Curtain-fixture	507,146	Oct. 24	2399	565	65	470
MacKenzie, Joseph A., Weldon, Tex. Trepheine	493,730	Mar. 21	1547	394	62	1691
MacKinnon, Duncan T. H. (See Little, Orton C., assignor.)						
MacLeod, Charles, Chicago, Ill. Garbage-receptacle	503,212	Aug. 15	1632	401	64	594
MacNeece, William, Philadelphia, Pa. Desk	489,611	Jan. 10	975	251	62	218
MacRae, Charles J., assignor of three-fourths to E. J. Piper and H. H. Bollman, St. Louis, Mo. Adjustable music-stand	502,980	Aug. 8	1261	308	64	811
MacTaggart, Charles, Philadelphia, Pa. Girder clamp and hanger	507,743	Oct. 31	3314	811	65	674
MacVeagh, Van Rensselaer, St. Paul, Minn. Box-lid support	498,401	May 30	3251	809	63	1263
Macan, William A., assignor of one-half to R. W. Lysle, Philadelphia, Pa. Detachable jacket for steam-pipes	507,145	Oct. 24	2298	565	65	470
Macartney, John H., San Francisco, Cal. Fan attachment for rocking-chairs	509,926	Dec. 5	130	30	65	1434
Macay, Juan F. N., Charapoto, Ecuador. Extracting silver from ores	504,109	Aug. 29	3074		64	1194
Macdonald, James, and J. S. Metcalf, assignors to Metcalf-Macdonald Company, Chicago, Ill. Construction of hopper-bottom grain-bins	507,324	Oct. 24	2614	643	65	528
Macdonald, Thomas A., Paterson, N. J. Device for utilizing water-power	507,375	Oct. 24	2699	663	65	545
Macdonald, William R., Allegheny, Pa. Pneumatic ventilator	509,231	Nov. 21	2065	498	65	1178
Macdonell, Allan G., New York, N. Y. Advertising device	491,900	Feb. 14	1353	336	62	1034
Macdougall, Matthew, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Machine-screw machine	502,371	Aug. 1	203	48	64	603
Macdougall, Matthew, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Screw-cutting machine	502,675	Aug. 1	729	175	64	700
Mace, Garwin A., Menomonee Falls, Wis. Limekiln	509,439	Nov. 23	2458	591	65	1264
Mace, Stuart R., Moulton, Iowa. Device for handling liquids	491,644	Feb. 14	1264	314	62	1017
Macfarlane, Alexander, Austin, Tex. Educational appliance	505,687	Sept. 26	2281	579	64	1740
Machado, John, Boston, Mass. Apparatus for drying hair	495,558	Apr. 18	1667	420	63	346
Machenheimer, John, Sr., Nauvoo, Ill. Car-coupling	503,052	Aug. 8	1360	336	64	831
Machenheimer, John, Sr., Nauvoo, Ill. Car-coupling	503,053	Aug. 8	1361	336	64	831
Machen, James H. (See Bohn and Machen.)						
Macher, John, assignor of two-thirds to R. Glasser, Pittsburg, Pa. Apparatus for decorating glass	501,014	July 4	752	197	64	137
Macintosh & Co., Charles. (See Golding, William, assignor.)						
Mack, Carl F., R. M. Stough, guardian, assignor of one-half to C. P. Young, York, Pa. Bottling-machine	503,094	Aug. 8	1426	352	64	843
Mack, Frederick J., <i>et al.</i> (See Saunders, Alanson H., assignor.)						
Mack, Gustav, Nuremberg, Germany. Railway-rail-splashing apparatus	505,205	Sept. 19	1478	385	64	1574
Mack, Hugo S., <i>et al.</i> (See Appleton, Charles J., assignor.)						
Mack, John A. (See Fleming and Mack.)						
Mack, Patrick H., Bradford, Pa. Swivel-bar for temper-screws	496,315	Apr. 25	2852	711	63	577
Mack, Patrick H., Bradford, Pa. Hole-straightener	496,316	Apr. 25	2852	711	63	577
Mack, Patrick H., Bradford, Pa. Enlarging under reamer for oil or Artesian wells	496,317	Apr. 25	2854	711 712	63	577
Mack, Patrick H., assignor to Oil Well Supply Company, Bradford, Pa. Casing-spear	492,371	Feb. 21	2075	519	62	1196
Mack, William. (See Deeds and Mack.)						
Mack, William A. (See Abercrombie and Mack.)						
Mack, William A., Cleveland, Ohio. Sewing-machine table	508,031	Nov. 7	77	22, 23	65	772
Mack, William A., Norwalk, Ohio, assignor to Standard Sewing Machine Company, of Ohio. Feeding mechanism for sewing-machines	510,268	Dec. 12	1792	440	65	1757
Mack, William B., Boston, Mass. Locomotive-boiler	500,716	July 4	295	80	64	55
Mack, William B., Boston, Mass. Locomotive-boiler	503,287	Aug. 15	1754	433	64	916
Mack, William B., Boston, Mass. Locomotive-boiler	506,054	Oct. 3	395	103	65	77
Mackay, William M., Newark, N. J., assignor to Richardson & Boynton Company, New York, N. Y. Sectional steam-boiler	496,089	Apr. 25	2496	630 631	63	510
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Cloud-creator or nebulator	490,481	Jan. 24	2388	618	62	527
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Proscenium-adjuster	490,482	Jan. 24	2390	619	62	527
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Apparatus for producing scenic effects	490,483	Jan. 24	2392	619	62	528
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Wave-maker	490,484	Jan. 24	2395	619	62	528
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Sliding stage	490,485	Jan. 24	2397	620	62	529
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Telescopic stage	490,486	Jan. 24	2398	620	62	529
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Luxanaleator	490,487	Jan. 24	2400	620	62	529
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Floating stage	490,488	Jan. 24	2402	620	62	530
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Appliance for theaters	490,489	Jan. 24	2403	621	62	530
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Apparatus for producing increased realism in scenic effects	490,490	Jan. 24	2404	621 622 623	62	530
Mackaye, Steele, assignor to Spectatoria Company, Chicago, Ill. Spectatorium	494,068	Mar. 21	2107	537	62	1797
Mackenzie, Cosmo T., <i>et al.</i> (See Jervis, Oliver P., assignor.)						
Mackenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Cab for locomotives	505,163	Sept. 19	1410	363	64	1562
Mackenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Steam-chest-cover casing	505,164	Sept. 19	1411	363	64	1562
Mackenzie, Thomas, <i>et al.</i> (See Jervis, Oliver P., assignor.)						
Mackey, Nelson W., Chicago, Ill. Convertible case and display-stand for charts	511,089	Dec. 19	2160	532	65	1839

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Mackey, William T., Vancouver, Canada. Gang-saw mill.....	501,799	July 18	2028	{ 499 500 }	64	397
Mackie, Robb, Cincinnati, Ohio, assignor, by mesne assignments, to Electric Selector and Signal Company, of West Virginia. Device for selecting and operating mechanical apparatus.....	507,147	Oct. 24	2300	566	65	470
Mackie, Robb, Cincinnati, Ohio, assignor, by mesne assignments, to Electric Selector and Signal Company, of West Virginia. Apparatus for selecting and operating mechanical devices.....	507,148	Oct. 24	2304	567	65	471
Mackie, Susan A., London, England. Washboiler.....	493,631	Mar. 21	1386	352	62	1660
Mackinney, William C., assignor to H. W. Butterworth & Sons Company, Philadelphia, Pa. Driving-gear for drying-rolls.....	503,380	Aug. 15	1912	474	64	944
Mackintosh, Donald A. S., Glasgow, Scotland. Mug for measuring beer.....	492,816	Mar. 7	70	17	62	1371
Mackintosh, Isabella, administratrix. (See Mackintosh, John C.).....	503,610	Aug. 22	2295	573	64	1027
Mackintosh, John C., deceased; I. Mackintosh, administratrix, Ludlow, Ky. Lubricator.....	495,819	Apr. 18	2083	525	63	417
Mackintosh, John W., Brookline, Mass. Phonograph.....	503,610	Aug. 22	2295	573	64	1027
Macleod, Malcolm, Los Angeles, Cal. Agricultural implement.....	499,239	June 13	819	194	63	1547
Macleod, Malcolm, Los Angeles, Cal. Cultivator.....	501,285	July 11	1193	302	64	232
Macleod, William A., Boston, Mass. Accumulator.....	491,726	Feb. 14	1079	273	62	980
Macmillan, James R., Menominee, Wis. Penholder.....	503,151	Aug. 15	1532	376	64	875
Macnamar, William, Indianapolis, Ind. Display-table.....	508,627	Nov. 14	1059	{ 262 263 }	65	972
Macneal, Charles B., Philadelphia, Pa. Brace and tie-plate for railway-rails.....	492,817	Mar. 7	71	17	62	1371
Macneal, Charles B., Philadelphia, Pa. Metallic railway tie or sleeper.....	503,054	Aug. 8	1363	336	64	837
Macomb, Richard, Providence, R. I. Hat-support.....	503,797	Aug. 22	2579	642	64	1083
Macomber, Squire H., Chicago, Ill., assignor of one-half to E. A. Rix, San Francisco, Cal. Clutch for rock-drilling machines.....	490,152	Jan. 17	1849	482	62	410
Macphail, James, Rockford, assignor to A. Ellwood, De Kalb, Ill. Cultivator.....	507,552	Oct. 31	2998	736	65	615
Macphail, James, Rockford, assignor to A. Ellwood, De Kalb, Ill. Cultivator.....	508,433	Nov. 14	741	{ 182 183 }	65	910
Macphail, James, Rockford, assignor to A. Ellwood, De Kalb, Ill. Cultivator.....	508,434	Nov. 14	743	183	65	910
Macrae, Roderick. (See Donaldson and Macrae.).....	507,074	Oct. 17	2149	533	65	430
Macy, Charles B., Noblesville, Ind. Paper-slitter.....	495,678	Apr. 18	1861	465	63	377
Macy, John W., Cincinnati, Ohio. Piano.....	502,524	Aug. 1	470	113	64	653
Macy, John W., Cincinnati, Ohio. Piano.....	504,733	Sept. 12	697	175	64	1415
Macy, John W., Cincinnati, Ohio. Piano.....	490,914	Jan. 31	3112	798	62	684
Madden, Gustav, assignor to T. C. Mosely, Chicago, Ill. Folding bath-tub.....	492,037	Feb. 21	1563	389	62	1090
Madden, James L., Lewisport, Ky. Baling press.....	493,278	Mar. 14	797	206	62	1532
Madden, Patrick J., Rochester, N. Y. Urinal-bowl.....	510,980	Dec. 19	1996	493	65	1807
Maddin, George H., and G. Selman, London, England. Embossed sign-letter.....	504,393	Sept. 5	131	34	64	1294
Maddock, William H., Pittsburg, Pa. Feed-table for rolling-mills.....	504,394	Sept. 5	132	35	64	1295
Maddock, William H., Pittsburg, Pa. Transfer mechanism for rolling-mills.....	504,395	Sept. 5	134	35	64	1295
Maddock, William H., Pittsburg, Pa. Feeding mechanism for rolling-mills.....	496,267	Apr. 25	2765	692	63	560
Maddox, Edward, Victoria, Canada. Plane.....	504,734	Sept. 12	700	176	64	1415
Maddox, Joshua P., Westbrook, Me. Trolley-head.....	502,929	Aug. 8	1170	{ 288 289 }	64	796
Maddox, R. E. (See Turner, Ephraim M., assignor.).....	490,450	Jan. 24	2333	605	62	516
Maddox, William J., Jamestown, N. Y., assignor to G. D. Lane, Susquehanna, Pa. Fold- ing table.....	498,356	May 30	3190	794	63	1250
Magdal, George C., Philadelphia, Pa. Portable book and package case.....	497,053	May 9	1062	272	63	828
Magee, Andrew P. (See Boutwell and Magee.).....	507,232	Oct. 24	2453	604	65	498
Magee, Frank A., Chelsea, assignor to Magee Furnace Company, Boston, Mass. Cooking stove or range.....	509,351	Nov. 21	2262	{ 547 548 549 550 }	65	1215
Magee, Frank A., Chelsea, assignor to Magee Furnace Company, Boston, Mass. Stove or range.....	490,122	Jan. 17	1798	469	62	399
Magee Furnace Company. (See Magee, Frank A., assignor.).....	494,720	Apr. 4	303	76, 77	63	61
Magee, John, et al. (See Tyler, Harry L., assignor.).....	510,692	Dec. 12	1447	357	65	1335
Magee, John H., Jr. (See Cumming and Magee.).....	500,588	July 4	76	22	64	15
Magee, William J., New York, N. Y. Veterinary operating-table.....	498,129	May 23	2795	699	63	1168
Magie, Lizzie J., Washington, D. C. Type-writing machine.....	496,576	May 2	290	78	63	672
Magnetic Iron Milling Company. (See Crosby, George G., assignor.).....	496,576	May 2	290	78	63	672
Magnetic Ore Milling Company. (See Crosby, George G., assignor.).....	496,576	May 2	290	78	63	672
Magney, Joseph P., and R. L. Cate, San Francisco, Cal. Knob attachment.....	496,576	May 2	290	78	63	672
Magnuson, Andrew M., et al. (See Gardeen, Oscar S., assignor.).....	496,576	May 2	290	78	63	672
Magoffin, William. (See Robison and Magoffin.).....	496,576	May 2	290	78	63	672
Mahaffey, James B., assignor of one-half to E. B. Hunting, Baltimore, Md. Cable-railway grip.....	489,870	Jan. 10	1344	351	62	294
Mahaffey, James B., assignor of one-half to E. B. Hunting, Baltimore, Md. Wood-planing machine.....	510,693	Dec. 12	1448	357	65	1695
Mahaffey, James W., Williamsport, and A. F. Haldeman, Turbotville, Pa. Lifting-jack.....	500,689	July 4	251	67	61	47
Mahan, George W., Cold Spring Harbor, N. Y. Car-coupling.....	493,102	Mar. 7	515	129	62	1461
Maher, Edward. (See Flockhart, James, assignor.).....	493,632	Mar. 21	1387	352	62	1660
Maher, John J., assignor of one-half to G. D. Webb, Worcester, Mass. Hand implement for taking down building-stagings.....	504,396	Sept. 5	135	36	64	1296
Maher, John L., Lynn, Mass. Wind-instrument.....	490,772	Jan. 31	2274	{ 738 739 }	62	636
Mahon, Charles, Washington, D. C. Track-clearer.....	490,772	Jan. 31	2274	{ 738 739 }	62	636
Mahon, John F. (See O'Byrne, Joseph, assignor.).....	495,098	Apr. 11	907	229	63	189
Mahoney, Daniel H., Olney, Ill., and H. D. Hanover, Aurora, Ind. Railway cattle-guard.....	509,133	Nov. 21	1897	464	65	1146
Mahoney, John R., Sistersville, W. Va. Propelling mechanism for boats.....	491,366	Feb. 7	511	131	62	845
Mahoney, William, New York, N. Y. Bicycle-gear.....	499,129	June 6	652	157	63	1504
Maillet, John W., North Attleborough, Mass. Combined match-box and cigar-tip cutter.....	506,920	Oct. 17	1902	473	65	385
Mailloux, Cyrien O., New York, and W. S. Barstow, Brooklyn, N. Y. Electrical system of distribution.....	506,921	Oct. 17	1910	{ 473 474 }	65	387
Mailloux, Cyrien O., New York, and W. S. Barstow, Brooklyn, N. Y. System of electri- cal distribution.....	506,921	Oct. 17	1910	{ 473 474 }	65	387

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Main, William, Brooklyn, N. Y. Electric head-lamp	491,713	Feb. 14	1060	268	62	977
Mainardi, Romolo, Chicago, Ill. Extension-table	508,628	Nov. 14	1061	263	65	972
Maisonneuve, Paul, Fruitvale, Cal. Fruit-stoning machine	505,206	Sept. 19	1479	385	64	1575
Maitland, George. (See Eichbaum, Henry, assignor.)						
Maitland, George, <i>et al.</i> (See Osborn, Francis C., assignor.)						
Majert, Wilhelm, Berlin, Germany. Making piperazine	509,087	Nov. 21	1823		65	1131
Majert, Wilhelm, Gruenau, and A. Schmidt, assignors to Chemische Fabrik auf Actien, vormals E. Schering, Berlin, Germany. Piperazin hydrate	505,113	Sept. 19	1332		64	1549
Majert, Wilhelm, Gruenau, and A. Schmidt, assignors to Chemische Fabrik auf Actien, vormals E. Schering, Berlin, Germany. Piperazin	511,303	Dec. 19	2517		65	1904
Majewski, Hugo A., and W. Beyenbach, Berlin, Germany. Manufacturing artificial marble	508,731	Nov. 14	1209	301	65	1001
Majola, Joseph L., St. Etienne, France. Guard for trees, &c.	494,874	Apr. 4	562	141	63	109
Major, Edmund, Terraville, S. D. Guide for stamp-mills	490,973	Jan. 31	3203	818	62	701
Major, Edmund, Terraville, S. D. Guide for stamp-mills	499,130	June 6	652	157	63	1505
Makely, Mitrah. (See Sadler, Samuel B. and J. R., assignors.)						
Malandin, Léon. (See Delamare-Deboutteville and Malandin.)						
Malcham, Charles J., Sheffield, England. Ejector for drop-down small-arms	499,131	June 6	653	157	63	1505
Malcolm, George F., <i>et al.</i> (See Seibert, Nicholas, assignor.)						
Malcolm, James G., Toronto, Canada. Refrigerator	505,114	Sept. 19	1334	344	64	1549
Malcolm, Richard L. (See Blanche, Henry B., assignor.)						
Maldaner, Charles, assignor to Diamond Sewing Machine Company, Chicago, Ill. Feeding mechanism for sewing-machines	496,660	May 2	431	115	63	697
Maldaner, Charles, Arlington Heights, assignor to Diamond Sewing Machine Company, Chicago, Ill. Feeding mechanism for sewing-machines	510,433	Dec. 12	979	233	65	1610
Malhot, Samuel M., Albemarle, La. Filtering apparatus	506,127	Oct. 3	512	133	65	100
Malin, Rebecca, Portland, Ind. Curtain-fixture	507,443	Oct. 24	2806	627	65	506
Maling, J. B. (See White, David S., assignor.)						
Malinowski, Aleksander, Newark, N. J. Game-board	497,452	May 16	1729	436	63	961
Malke, Frederick E. R., assignor of one-half to G. W. Jones, Chrisney, Ind. Lid for vessels	510,354	Dec. 5	840	203	65	1569
Mallasee, Lewis W., Pittsburg, Pa. Apparatus for casting ingots	504,131	Aug. 29	3105	777	64	1200
Mallett, Markham W., assignor of one-half to T. G. Rollins, Waltham, Mass. Watch-hand remover	491,781	Feb. 14	1168	292	62	997
Mallette, George W., Trenton, N. J. Saw-tooth	492,407	Feb. 28	2142	535	62	1222
Mallick, Albert F., Jamestown, N. D. Flash-light apparatus	501,800	July 18	2030	500	64	398
Mallory, George W., Guilds, Canada. Gate-latch	510,181	Dec. 5	571	133	65	1528
Mallory, Henry P. (See Urquhart and Mallory.)						
Mallory, Ogden, Auburn, Cal. Trace-buckle	496,319	Apr. 25	2857	712	63	578
Malm, Peter A., New York, N. Y. Paper-cutting machine	508,329	Nov. 7	569	140	65	863
Malmfelt, Bennet J., New York, N. Y. Machine for soldering sheet-metal cans	499,389	June 13	1078	261	63	1593
Malmros, August, Stockholm, Sweden. Centrifugal cream-separator	495,352	Apr. 11	1333	334	63	265
Malmström, Peter E., New York, N. Y. Apparatus for carbonating and dispensing beverages	494,483	Mar. 28	2781	697	62	1937
Malo, Salvador, Paris, France. Hat box or case for traveling purposes	499,132	June 6	655	158	63	1505
Maloney, John C., Beaver Falls, Pa. Pitman	491,727	Feb. 14	1081	273	62	981
Maloney, John P., assignor of one-half to H. C. Bunn, Chicago, Ill. Combined smoke-consumer and spark-arrester	491,576	Feb. 14	845	214	62	933
Maloney, Joseph A., Leavenworth, Kans. Boiler-cleaner	496,318	Apr. 25	2855	712	63	578
Maloney, Michael, Ironton, Ohio. Rail-chair	500,589	July 4	78	22	64	15
Maloon, Edgar H., and M. E. Blake, Meredith, N. H. Plow attachment	494,212	Mar. 28	2358	597	62	1860
Mamaux, Albert. (See Mamaux, Isaac, assignor.)						
Mamaux, Isaac, assignor to A. Mamaux, Pittsburg, Pa. Staple-setting machine	501,891	July 18	2169	537	64	423
Mamerow, George T. (See Kruse, Gustav, assignor.)						
Mammen, John E., assignor of one-half to H. G. Gerdes, Sterling, Ill. Automatic register for barbers' chairs	505,053	Sept. 12	1225	315	64	1515
Manahan, Thomas, New York, N. Y. Bag	498,180	May 23	2869	716	63	1181
Mancheron, Philippe, Nevers, France. Heating apparatus	491,806	Feb. 14	1208	302	62	1005
Mandel, Joseph. (See Haberthar and Mandel.)						
Manderfield, George J., assignor of one-half to J. M. and S. Levin, U. S. G. Finkbiner, and A. R. Saylor, Royersford, Pa. Stop-motion for knitting-machines	494,258	Mar. 28	2431	612	62	1872
Manderfield, George J., assignor of one-half to J. M. and S. Levin, U. S. G. Finkbiner, and A. R. Saylor, Royersford, Pa. Electrical stop-motion for knitting-machines	496,060	Apr. 25	2456	620	63	502
Mandeville, Charles, Graham, Tex. Thatch roof	509,751	Nov. 28	2957	716	65	1358
Mandigo, Peter, Dover, N. J. Wrench	493,829	Mar. 21	1708	435	62	1722
Mandioni, John J. C., Chicago, Ill. Lunch box or case	489,711	Jan. 10	1113	287	62	246
Mandleberg, Goodman C., Manchester, England. Producing ornamental india-rubber water-proof fabrics	496,978	May 9	950		63	899
Mandleberg, Goodman C., Manchester, England. Manufacturing waterproof fabrics	500,664	July 4	219		64	42
Maney, William, Piqua, Ohio. Wire twisting and cutting implement	494,429	Mar. 28	2702	678	62	1923
Manger, Frederick W., and O. H. Huebel, Brooklyn, N. Y. Electric bell	494,278	Mar. 28	2459	619	62	1877
Manguine, Louis, Cottage Grove, Oreg. Lunch-bucket	504,358	Sept. 5	65	18	64	1223
Mangum, De Witt C. (See Tatem and Mangum.)						
Manhattan Brass Company. (See Hipwell, Thomas, assignor.)						
Manier, Benjamin F., Poquonock Bridge, Conn., assignor of one-half to B. F. Manier, Jr., Providence, R. I. Car-truck	510,277	Dec. 5	730	177	65	1543
Mankey, Carl F., Emporium, Pa. Caster	498,130	May 23	2797	699	63	1168
Mann, Bernard. (See Goodwyn, George W., assignor.)						
Mann, Charles L., Milwaukee, Wis. Cylindrical staved vessel	503,055	Aug. 8	1363	337	64	832
Mann, Edgar E., Manchester, N. H. Tent	499,240	June 13	820	195	63	1547
Mann, Ernest E., Detroit, Mich., assignor to American Radiator Company, of Illinois. Radiator-leg	498,131	May 23	2798	700	63	1168
Mann, F. W. (See Lillev, James L., assignor.)						
Mann, Frederic P., San Francisco, Cal. Baby-carriage	510,355	Dec. 5	841	203	65	1570
Mann, Frederick, London, England. Tea-pot, coffee-pot, &c.	508,828	Nov. 14	1354	335	65	1028
Mann, Frederick and R. A., Colchester, and T. Dawkins, London, England; said Frederick and R. A. Mann assignors to said Dawkins. Musical instrument	509,232	Nov. 21	2067	499	65	1178
Mann, Frederick C. (See Strong and Mann.)						
Mann, George, assignor to G. F. Burton, Toronto, Canada. Advertising device	501,015	July 4	753	197	64	137
Mann, George E., <i>et al.</i> (See Flohr, Otto, assignor.)						
Mann, George E., Buffalo, N. Y. Car-coupling	510,278	Dec. 5	731	178	65	1548
Mann, Hosea, Jr. (See Quimby, John R., assignor.)						
Mann, James, Dowagiac, Mich. Garbage or rubbish drier	509,177	Nov. 21	1961	478	65	1159

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Mann, Lee C. (See Brainerd and Mann.)						
Mann, Mortimer J., <i>et al.</i> (See De Neal, Jackson, assignor.)						
Mann, Robert A. (See Mann and Dawkins.)						
Mann, Thomas E. (See Brainerd and Mann.)						
Mann, Thomas G. (See Jones, William M., assignor.)						
Mann, Thomas J., Mixie, Tenn. Harrow	493,507	Mar. 14	1162	297	62	1599
Mann, William, and G. C. Johnson, Los Angeles, Cal. Butter-mold	489,566	Jan. 10	910	237	62	205
Mannaberg, Maximilian, assignor to Frodingham Iron and Steel Company, Frodingham, England. Steel-smelting furnace	492,670	May 30	3705	{ 915 916 }	{ 63 63 }	{ 1343 1343 }
Manne, Charles. (See Ripberger, Jacob, assignor.)						
Manning, Bowman & Co. (See Manning, Edward B., assignor.)						
Manning, David J., Chippewa Falls, Wis. Fertilizer or insecticide distributor	491,318	Feb. 7	429	111	62	829
Manning, Edward B., assignor to Manning, Bowman & Co., Meriden, Conn. Handle for culinary vessels	489,256	Jan. 3	428	119	62	95
Manning, Harry G., Watertown, N. Y. Fluid-pressure valve	492,372	Feb. 21	2073	519	62	1196
Manning, James, Water Valley, Tex. Animal-trap	496,164	Apr. 25	2603	655	63	530
Manning, John C., and A. C. Wilson, Marshfield, Oreg. Grapple	504,600	Sept. 5	471	120	64	1358
Manning, Lemuel S., Alessandro, Cal. Car-coupling	499,133	June 6	657	158	63	1505
Manning, Lincoln. (See Gilmer, William C., assignor.)						
Manning, Middleton J. (See Nagele, John, assignor.)						
Manning, William B., Chicago, Ill. Folding wardrobe	498,804	June 6	83	21	63	1404
Mansfield, Albert K., Salem, Ohio. Valve-gear for steam-engines	510,279	Dec. 5	732	178	65	1548
Mansfield, Eben B., assignor of one-half to F. G. Kincaid, Maplewood, Mass. Machine for making parts of pianoforte-actions	507,020	Oct. 17	2061	509	65	416
Mansfield, George W. (See Rohrer and Mansfield.)						
Mansfield, George W., and I. F. Baker, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Car-truck	508,956	Nov. 21	1603	{ 393 394 }	{ 65 65 }	{ 1089 1089 }
Mansfield, Samuel M., U. S. Army. Disappearing-gun carriage	502,569	Aug. 1	536	128	64	665
Mansfield, Walter F., <i>et al.</i> (See Maw, Thomas J., assignor.)						
Manson, George W., Menominee, Mich. Bolt	491,019	Jan. 31	3275	837	62	715
Mansur, John H., assignor of one-half to W. S. Essick, Royersford, Pa. Gas-meter	498,181	May 23	2871	717	63	1181
Manton, Joseph P., Providence, R. I. Vehicle-wheel	494,584	Apr. 4	88	21	63	18
Manton, Joseph P., Providence, R. I. Endless-chain elevator	504,044	Aug. 29	2968	742	64	1173
Manuel, David, assignor of one-half to B. E. Phillips, Hyde Park, Mass. Harrow	490,294	Jan. 24	2095	546	62	469
Manuel, Max, Vienna, Austria-Hungary. Station-indicator	498,280	May 30	3049	758	63	1227
Manufacturing Mechanical and Chemical Company. (See Emery, William P., assignor.)						
Manville, Robert C., Waterbury, Conn., assignor to Richardson & De Long Brothers, Philadelphia, Pa. Method of and machine for making garment-hooks	491,289	Feb. 7	367	{ 92 93 94 95 96 97 }	{ 62 62 62 62 62 62 }	{ 818 818 818 818 818 818 }
Manwaring, Charles D., C. C. and F. G. Nagley, Memphis, N. Y. Transplanter	491,290	Feb. 7	385	98	62	820
Mapel, Elijah T., Antioch, Cal. Paving-block	511,304	Dec. 19	2517	613	65	1904
Mara, Rhody. (See Nesdall, Colton, and Mara.)						
Marble, Albert D., Winfield, assignor of one-half to L. McKinlay, Udall, Kans. Cuff	493,830	Mar. 21	1709	435	62	1722
Marble, Edwin H. (See Marble, Edwin T. and E. H.)						
Marble, Edwin H. (See Marble and Greene.)						
Marble, Edwin T. and E. H., Worcester, Mass. Mechanism for shearing cords or twine	492,408	Feb. 28	2143	{ 535 536 }	{ 62 62 }	{ 1222 1222 }
Marble, Edwin T. and E. H., and F. H. Greene, Worcester, Mass. Machine for doubling webs of fabric longitudinally and stitching the edges	489,590	Jan. 10	944	{ 245 246 }	{ 62 62 }	{ 211 211 }
Marble, James E., assignor of one-half to J. W. Fuller, Albany, N. Y. Automatic coupling for steam and air pipes for railway-cars	491,291	Feb. 7	386	98	62	821
Marble, James E., assignor of one-half to J. W. Fuller, Albany, N. Y. Coupling for flexible steam-pipes	495,896	Apr. 18	2205	555	63	440
Marble, James E., assignor of one-half to J. W. Fuller, Albany, N. Y. Coupling for steam-pipes of railway-cars	498,520	May 30	3447	855	63	1298
Marble, Walter P. (See Huff, Orison, assignor.)						
March, Alfred. (See Crawford, Frank, assignor.)						
Marchand, Henry E., Bayonne, N. J., assignor, by mesne assignments, to T. P. Ryan, New York, N. Y. Valve	490,878	Jan. 31	3040	781	62	671
Marchand, Henry E., Bayonne, N. J., assignor, by mesne assignments, to T. P. Ryan, New York, N. Y. Adjustable crank	490,879	Jan. 31	3040	781	62	671
Marchant, Stuart F., <i>et al.</i> (See Gage, James L., assignor.)						
Marchwald, Willy, assignor to Chemische Fabrik auf Actien, vormals E. Schering, Berlin, Germany. Obtaining piperazin	500,665	July 4	220		64	42
Marcus & Bro., M. H. (See Seymour, William S., assignor.)						
Marcus, Edward H., <i>et al.</i> (See Schmitt, Wilhelm, assignor.)						
Marcus, Martin H., <i>et al.</i> (See Schmitt, Wilhelm, assignor.)						
Marcus, Siegfried, Vienna, Austria-Hungary. Carbureting apparatus	500,772	July 4	383	100	64	71
Marcus, Siegfried, Vienna, Austria-Hungary. Rotary engine	503,611	Aug. 22	2299	573	64	1028
Marcy, William L., Annapolis, Md. Suspensory bandage	502,229	Nov. 7	411	99	65	835
Marfori, Pio, Ferrara, Italy, and O. Schniedeberg, Strasburg, Alsace, assignors to C. F. Boehringer & Soehne, Waldhof, near Mannheim, Germany. Iron-albumen preparation and making same	505,986	Oct. 3	290		65	56
Margesson, Isabel A., London, England. Hanging pocket or bag	508,893	Nov. 14	1454	{ 360 361 }	{ 65 65 }	{ 1046 1046 }
Mariani, John, Boston, assignor of one-half to J. R. Silver, Somerville, Mass. Folding tub	510,356	Dec. 5	842	203	65	1570
Maring, Jacob S., Mason City, Ill. Horse-collar	501,684	July 18	1835	457	64	365
Marion Manufacturing Company. (See Johnson, Sidney N., assignor.)						
Maris, Jared, Cincinnati, Ohio. Dust and mud cap for vehicle-hubs	489,257	Jan. 3	429	119	62	95
Maritz, Edward F., Sr. (See Ritchie, William A., assignor.)						
Mark, Henry J., St. Louis, Mo. Veneer-cutting knife	507,713	Oct. 31	3279	802	65	667
Mark, Jacob. (See Jenkinson, James, assignor.)						
Mark, Thomas F., Fremont, Nebr. Cash-carrier	497,885	May 23	2423	604	63	1102
Markoe, Renel T., assignor to Schaum & Uhlinger, Philadelphia, Pa. Jacquard harness-evening mechanism for looms	492,038	Feb. 21	1565	390	62	1091
Markle, Charles N., assignor to Simmons Hardware Company, St. Louis, Mo. Gun-case	492,304	Feb. 21	1976	492	62	1177
Markley, David, Lexington, Ohio. Railway-rail brace	508,575	Nov. 14	987	242	65	957
Markley, Henry H., Marianna, Ark. Car-coupling	494,539	Mar. 28	2889	724	62	1957
Markley, John A., assignor of two-fifths to J. C. Carpenter, J. A. Roberts, and J. A. Capell, Clifton Forge, Va. Car-coupling	499,558	June 13	1369	327	63	1644
Marks, Alfred, San Francisco, Cal. Memorandum-tablet	510,810	Dec. 12	1639	408	65	1731

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Marks, George E., New York, N. Y. Artificial limb.....	489,258	Jan. 3	430	120	62	95
Marks, James, Bayonne, N. J. Bicycle-support.....	506,600	Oct. 10	1372	344	65	275
Marks, Louis B., New York, N. Y., assignor to Washington Carbon Company, Washing- ton, Pa. Apparatus for molding and pressing carbons.....	505,775	Sept. 26	2466	622	64	1773
Marks, Mary A., Toledo, Ohio. Washing-machine.....	506,055	Oct. 3	396	104	65	77
Marks, Robert G., Wakefield, England. Apparatus for locking railway-signals.....	496,165	Apr. 25	2603	655	63	531
Marlin & Co. (See Davidson, John M., assignor.)						
Marlin Fire Arms Company. (See Hepburn, Lewis L., assignor.)						
Marlin, Jesse M. (See Carlin, William P., assignor.)						
Marlow, Thomas F., assignor of one-half to R. Housworth, Carrollton, Ga. Gin-saw guard.....	492,500	Feb. 28	2306	572	62	1255
Marple, Thomas, Philadelphia, Pa. Bung.....	490,153	Jan. 17	1850	483	62	410
Marqua, George, assignor to A. Schoeninger, Chicago, Ill. Baby-carriage basket.....	511,537	Dec. 26	2919	710	65	1892
Marqua, William A., Cincinnati, Ohio. Baby-carriage.....	498,440	May 30	3315	825	63	1275
Marquardt, Julius E., Edgar, Wis. Brick or tile machine.....	506,230	Nov. 7	412	100	65	835
Marr, Charles K. (See Cook and Marr.)						
Marr, David C., et al. (See Knight and Steele, assignors.)						
Marr, John, et al. (See Campbell, Henry, assignor.)						
Marriott, Thomas E. (See Keen, Marriott, and Cooper.)						
Marriott, Yeamans S. (See Osterloh, Adolph, assignor.)						
Mars, Pascal L., Peoria, Ill. Steak-crusher.....	510,513	Dec. 12	1109	268	65	1634
Marsden, Thomas, Wigan, England. Suction-blower.....	509,321	Nov. 21	2217	535	65	1206
Marsh, Albion P. (See Coburn, John G., assignor.)						
Marsh, Calvin D. (See Overhiser and Marsh.)						
Marsh, Calvin D., assignor to Rowley & Hermance Company, Williamsport, Pa. Saw- table.....	501,521	July 18	1573	396	64	317
Marsh, Calvin D., Williamsport, Pa., assignor to Rowley & Hermance Company, of Pennsylv- vania. Slat-tenoning machine.....	501,892	July 18	2170	537 538	64	423
Marsh, Edward A., Newton, Mass. Belt starting and stopping mechanism.....	510,694	Dec. 12	1448	357 358	65	1695
Marsh, Edwin, Leeds, assignor to H. Leggott, Bradford, England. Connection with do- mestic fire-ranges or other ranges.....	490,573	Jan. 24	2528	651	62	555
Marsh, James B., Des Moines, Iowa. Bridge-post.....	498,559	May 30	3520	871	63	1310
Marsh, John W., Chicago, Ill. Adjustable book or music holder.....	506,825	Oct. 17	1749	440	65	357
Marsh, Joseph A., et al. (See Osborn, Francis C., assignor.)						
Marsh, Joseph W., Pittsburg, Pa. Electric conductor.....	504,397	Sept. 5	136	36	64	1296
Marsh, Joseph W., Pittsburg, Pa. Electric conductor.....	504,398	Sept. 5	137	36	64	1296
Marsh, Orlo J., Titusville, Pa. Shirt-stretcher.....	505,472	Sept. 26	1908	491	64	1669
Marsh, Riverius, New Brunswick, N. J. Valve and faucet.....	495,636	Apr. 18	1792	450	63	366
Marshall, Otto F., Jr., Bath, N. Y. Feed-rack.....	501,522	July 18	1574	396	64	317
Marshall, Charles B., Philadelphia, Pa. Water-gage.....	502,128	July 25	2543	638	64	509
Marshall, Charles S., Brockton, Mass. Machine for winding bobbins.....	491,434	Feb. 7	607	153 155	62	865
Marshall, Chauncey, et al. (See Hetzel, Peter, assignor.)						
Marshall, Dale. (See Gardner and Marshall.)						
Marshall, Edward R., Turner's Falls, Mass. Paper-making machine.....	507,744	Oct. 31	3315	812	65	674
Marshall, Elias, Boston, Mass. Electrically-operated hydraulic elevator.....	502,981	Aug. 8	1263	309	64	812
Marshall, Emily C., Philadelphia, Pa. Drainer for dishes.....	507,233	Oct. 24	2455	605	65	498
Marshall, George, Fremont, Nebr. Steam-engine.....	504,399	Sept. 5	139	36, 37	64	1296
Marshall, Godfrey, Indiana, Pa. Collar-fastener.....	507,021	Oct. 17	2063	510	65	416
Marshall, Henry T., assignor of one-half to W. Gates, Toledo, Ohio. Finger-moistener.....	500,339	June 27	2660	652	63	1895
Marshall, James, Fall River, Mass. Hat-brim-pressing machine.....	489,591	Jan. 10	946	246 247	62	212
Marshall, James, Fall River, Mass. Picking-roller.....	510,695	Dec. 12	1450	358	65	1696
Marshall, James, Toronto, Canada. Street-car.....	500,924	July 4	608	159	64	111
Marshall, James, Leeds, England. Quadruple-expansion engine.....	503,056	Aug. 8	1364	337	64	832
Marshall, James, Leeds, England. Triple-expansion engine.....	509,752	Nov. 28	2958	716	65	1358
Marshall, John, Mentone, Ind. Rake attachment for mowers.....	503,152	Aug. 15	1533	376 377	64	875
Marshall, John M. (See Key and Marshall.)						
Marshall, John W., Brooklyn, N. Y. Ore-stamping mill.....	493,384	Mar. 14	966	249	62	1564
Marshall, John W., Brooklyn, N. Y. Ore-stamp.....	493,385	Mar. 14	967	249	62	1565
Marshall, Le Grand. (See Walker and Marshall.)						
Marshall, Norman, Boston, Mass. Lighting attachment for gas-burners.....	504,735	Sept. 12	701	176	64	1415
Marshall, Waldo H., assignor to Consolidated Brake Adjuster Company, Chicago, Ill. Slack-adjuster for car-brakes.....	490,357	Jan. 24	2203	574	62	492
Marshall, William, New York, N. Y. Duplex telephony.....	505,628	Sept. 26	2211	560	64	1726
Marshall, William H., Everett, assignor of one-half to E. W. Anthony, Brookline, Mass. Water-heater.....	511,630	Dec. 26	3074	751	65	2019
Marshall, William M., assignor of three-fourths to S. Reiter, trustee, Philadelphia, Pa., and J. Torr, Atlantic City, N. J. Eraser-holder.....	501,893	July 18	2172	538	64	423
Marsteller, Edwin Y., et al. (See Burvill-Holmes, Ernest, assignor.)						
Marston, William G., Boston, Mass. Light-reflector.....	494,339	Mar. 28	2559	645	62	1897
Marten, Albert S., East Orange, N. J. Electric-lamp shade and holder.....	507,714	Oct. 31	3280	802	65	687
Marten, August H., San José, Cal. Braid-rack.....	503,488	Aug. 15	2073	517	64	972
Martens, Christian C. (See Woieski, Hyde, and Martens.)						
Martenson, Louis, Minneapolis, Minn. Saw-clamp.....	511,443	Dec. 26	2776	672	65	1964
Martignoni, Johann, assignor to C. Berle, Frankfort-on-the-Main, Germany. Cutter and cutter-holder.....	495,256	Apr. 11	1189	298	63	239
Martin, Abraham S., et al. (See Davidson, David J., assignor.)						
Martin, Alexander C. (See Barnum, Russell S., assignor.)						
Martin, Alexander C., Chicago, Ill. Car-coupling.....	502,735	Aug. 8	840	204	64	735
Martin, Archibald J., Philadelphia, Pa. Closed conduit for electric railways.....	497,585	May 16	1937	426	63	898
Martin, Bruno, Saginaw, Mich. Water-filter.....	493,633	Mar. 21	1388	352	62	1660
Martin, Charles C., assignor of one-half to A. J. Schläfer, West Franklin, Ind. Self-set- ting animal-trap.....	504,811	Sept. 12	831	211	64	1439
Martin, Charles C., West Franklin, assignor of one-half to R. S. Dixon, Mount Vernon, Ind. Thill-coupling.....	510,078	Dec. 5	400	88	65	1485
Martin, Charles C., and A. J. Schläfer, West Franklin, Ind. Animal-trap.....	501,953	July 25	2269	567	64	457
Martin, Edward P., Dowlais, and E. James, Cardiff, England. Machinery for breaking pig- iron and loading the same into wagons.....	498,805	June 6	85	21, 22	63	1404
Martin, Edwin L., Tulare, Cal. Circulating tubular boiler.....	498,441	May 30	3317	826	63	1276
Martin, Francis X. (See House and Martin.)						
Martin, George E., Brooklyn, N. Y. Inking apparatus for printing-presses.....	493,892	Mar. 21	1800	459	62	1740

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Martin, George W., Titusville, Fla. Wrench.....	489,822	Jan. 10	1282	335	62	281
Martin, Harrison S., Washington, D. C. Cork-extractor.....	505,920	Oct. 3	187	47	65	36
Martin, Harrison S., Brooklyn, assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine.....	491,714	Feb. 14	1062	269	62	977
Martin, Henry, <i>et al.</i> (See Cogley, Andrew J., assignor.)						
Martin, Henry, Lancaster, Pa. Brick-machine.....	510,077	Dec. 5	399	88	65	1485
Martin, Henry H., Campbellsville, Ky. Car-coupling.....	502,309	Aug. 1	8	20	64	582
Martin, Herbert J., Iowa Falls, Iowa. Safety watch-pocket.....	495,820	Apr. 18	2083	525	63	417
Martin, Horace B., Chino, Cal. Beet-harvester.....	504,423	Sept. 5	185	48	64	1305
Martin, Hugh H., <i>et al.</i> (See Brashear, Fred L., assignor.)						
Martin, Ira L., Amity, Oreg. Feed-box.....	493,832	Mar. 21	1711	436	62	1723
Martin, Isaac T. (See Martin, Thomas E., assignor.)						
Martin, Ivson B., Murray, Ky. Trace.....	501,252	July 11	1148	291	64	224
Martin, Jacob, Muscatine, Iowa. Fan attachment for rocking-chairs.....	494,213	Mar. 28	2360	597	62	1860
Martin, James J., Roberts, S. C. Siding-gage.....	494,214	Mar. 28	2361	597	62	1860
Martin, Jerome W., Kansas City, Mo. Wire-and-picket-fence machine.....	506,826	Oct. 17	1751	440	65	357
Martin, Johan, Galveston, Tex. Fire-escape.....	495,503	Apr. 18	1581	398	63	331
Martin, Johan, Galveston, Tex. Fire-escape.....	495,504	Apr. 18	1582	398	63	331
Martin, Johan, Galveston, Tex. Projectile for fire-escapes.....	495,505	Apr. 18	1584	398	63	331
Martin, John. (See Shorrock and Martin.)						
Martin, John, <i>et al.</i> (See Anderson, Lee, assignor.)						
Martin, John, St. Martin's, Guernsey Island. Collapsible perambulator.....	493,831	Mar. 21	1710	{ 435 436 }	{ 62 63 }	1722
Martin, John, Berkeley, Cal. Grate.....	494,989	Apr. 4	719	183	63	137
Martin, John H., Oroville, Cal. Rivet-feeding device.....	490,609	Jan. 24	2589	{ 667 668 }	{ 62 63 }	566
Martin, Lyman C., and J. G. Meredith, Kansas City, Mo. Ice-cream freezer.....	497,054	May 9	1063	272	63	828
Martin, Milton D., York, Pa. Carriage-top.....	500,925	July 4	609	159	64	112
Martin, Morris, Malden, Mass., assignor to United States Electric Fire Signal Company, of Maine. Circuit of electric signaling.....	494,279	Mar. 28	2461	620	62	1878
Martin, Morris, Malden, Mass., assignor to United States Electric Fire Signal Company, Portland, Me. Signal-transmitting apparatus.....	497,281	May 9	1429	363	63	892
Martin, Morris, Malden, Mass., assignor to United States Electric Fire Signal Company, Portland, Me. Thermostatic instrument.....	497,923	May 23	2482	620	63	1112
Martin, Morris, Malden, Mass., assignor to Automatic Time Stamp and Register Company, Portland, Me. Apparatus for recording the time of workmen.....	503,430	Aug. 15	1977	491	64	955
Martin, Myron R., Brooklyn, Wis. Windmill-tower.....	492,690	Feb. 28	2598	643	62	1314
Martin, Robert H., Brooklyn, N. Y. Non-conducting covering.....	497,382	May 16	1616	408	63	942
Martin, Samuel H. (See Johnston, William C., assignor.)						
Martin, Samuel W., assignor to Mast, Foss & Company, Springfield, Ohio. Wind-engine.....	500,340	June 27	2660	{ 652 653 }	{ 63 64 }	1895
Martin, Stephen G., <i>et al.</i> (See Davidson, David J., assignor.)						
Martin, Theodore, Wallaceburg, Canada. Nut-lock.....	505,365	Sept. 19	1735	449	64	1622
Martin, Thomas, <i>et al.</i> (See Williams, Samuel, assignor.)						
Martin, Thomas E., assignor of one-half to I. T. Martin, Des Moines, Iowa. Hot-air furnace.....	489,192	Jan. 3	323	89	62	73
Martin, Thompson, New York, N. Y. Ticket-safe and match-holder.....	503,974	Aug. 29	2854	717	64	1153
Martin, Willard E., and P. Walrad, Herkimer, N. Y. Reclining-chair.....	491,246	Feb. 7	297	75	62	805
Martin, William, Salem, Mass. Hanger for curtain-fixtures.....	502,823	Aug. 8	991	242	64	763
Martin, William F., Ambia, Tex. Churn.....	494,430	Mar. 28	2703	678	62	1923
Martin, William T., Nottingham, England. Cooking apparatus.....	495,821	Apr. 18	2084	526	63	418
Martindale, Warren B., Rochester, Ind. Automatic time-stamp.....	497,331	May 16	1538	387	63	927
Martinell, Olof O., Waltham, Mass. Music-leaf turner.....	496,166	Apr. 25	2605	656	63	531
Martini, Friedrich von, Frauenfeld, Switzerland. Embroidering-machine.....	494,744	Apr. 4	345	87	63	68
Martini, Henry. (See Cowperthwait, John W., assignor.)						
Martini, Henry, St. Louis, Mo. Pipe-wrench.....	510,182	Dec. 5	572	133	65	1518
Martino, Francis R. (See Martino, Frederick W. and F. R.)						
Martino, Frederick W., Sheffield, England. Manufacturing alloys of nickel with other metals.....	499,559	June 13	1372		63	1645
Martino, Frederick W., Sheffield, and F. R. Martino, Birmingham, England. Metallic alloy.....	499,314	Jan. 3	508		62	110
Martinot, Ferdinand, Sedan, France. Cloth-napping machine.....	494,152	Mar. 28	2261	575	62	1840
Marton, Stuard B. (See Knapper and Marton.)						
Marty, John, Jr., Cleveland, Ohio. Governor for electric motors.....	511,347	Dec. 26	2603	633	65	1933
Marty, Louis K. (See Brownfield, William H., assignor.)						
Martyn, Edward, Detroit, Mich. Electric-railway trolley.....	494,721	Apr. 4	304	77	63	61
Martyn, Leonard W., and H. Eldridge, Houston, Tex. Gas-governor.....	503,350	Aug. 15	1862	461	64	934
Martz, Randolph N., Frederick, Md. Check-hook.....	498,281	May 30	3050	759	63	1227
Marum, David P., Fort Supply, Indian Ter. Landmark.....	504,987	Sept. 12	1126	289	64	1496
Marvin, Harry N. (See Casler, Herman, assignor.)						
Marvin, John A., Lansing, Mich. Abdominal supporter.....	497,803	May 23	2281	574	63	1077
Marvin, Julius S., Providence, R. I. Twine-cutter.....	490,078	Jan. 17	1725	450	62	384
Marx, George B. (See O'Neill, Charles Z., assignor.)						
Marzynski, Morris A., Boston, Mass. Jacketed can.....	509,440	Nov. 28	2459	591	65	1264
Maschinenbau Gesellschaft. (See Brown, Charles, assignor.)						
Maschinenfabrik Riiti, formerly Kaspar Honegger. (See Hofmann, Friedrich, assignor.)						
Mascotte Invalid Lifting Chair Company. (See Tingley, John, assignor.)						
Mashinter, William P., assignor of two-thirds to H. M. Linnell and C. Morton, Montreal, Canada. Electric cut-out.....	498,560	May 30	3521	871	63	1311
Mason, Benjamin F., Wildwood, Fla. Box-making machine.....	508,032	Nov. 7	80	23	65	772
Mason, Casper H. (See Diedrick, William H., assignor.)						
Mason, Charles H. (See Staley, George, assignor.)						
Mason, David, Schenectady, N. Y., assignor to General Electric Company, of New York. Controlling and equalizing electric motors.....	496,522	May 2	205	55	63	656
Mason, Edmund T., New York, N. Y. Finger or toe nail cutter.....	504,601	Sept. 5	472	121	64	1358
Mason, Edward R., and A. O. Snow, Binghamton, N. Y. Alarm-clock.....	505,115	Sept. 19	1337	345	64	1550
Mason Electric Company. (See Mason, James H., assignor.)						
Mason, Ezra A., Taunton, Mass., assignor to Dighton Furnace Company, of Massachusetts. Oven-door for cooking stoves, ranges, &c.....	501,571	July 18	1646	412	64	332
Mason, Frank H., Akron, Ohio. Pneumatic tire.....	503,724	Aug. 22	2469	614	64	1061
Mason, George W., Eau Claire, Wis. Band-saw shingle or board sawing machine.....	495,353	Apr. 11	1334	{ 334 335 }	{ 63 64 }	265
Mason, George W., Sharon, Pa. Injector.....	504,068	Aug. 29	2998	749	64	1179
Mason, Harry R., Chicago, Ill. Quick-release valve for air-brakes.....	493,436	Mar. 14	1041	{ 268 269 }	{ 62 63 }	1579
Mason, Harry R., Chicago, Ill. Train signaling apparatus.....	493,437	Mar. 14	1043	{ 269 270 }	{ 62 63 }	1579

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Mason, Harry R., Chicago, Ill. Signal-valve for pneumatic signals	493,438	Mar. 14	1048	270	62	1580
Mason, Harry R., Chicago, Ill. Train signaling apparatus. (Reissue)	11,343	May 30	3867	953	63	1371
Mason, Henry, U. S. Navy. Garment-pocket	501,229	July 11	1109	281	64	217
Mason, James H., Brooklyn, N. Y., assignor, by mesne assignments, to Mason Electric Company, East Orange, N. J. Electric battery	501,151	July 11	992	252	64	195
Mason, James H., assignor of nine-tenths to A. Van Derwerken, Brooklyn, N. Y. Telephone-transmitter	507,715	Oct. 31	3281	802	65	667
Mason, John L., Brooklyn, N. Y. Grate-bar	506,922	Oct. 17	1916	474	65	388
Mason, May B. (See Tripp, John W., assignor.)						
Mason, Newton E. (See Van Duzer, Lewis S., assignor.)						
Mason, Orlando. (See Parker, Homer N., assignor.)						
Mason, Orris W., Buda, Ill. Attachment for vehicles	509,542	Nov. 28	2630	636	65	1296
Mason Regulator Company. (See Mason, William B., assignor.)						
Mason, Thomas E. B., Wichita, Kans. Book-cover	489,970	Jan. 17	1536	401	62	346
Mason, Volney W., Providence, R. I. Lock-brake	496,268	Apr. 25	2766	692	63	561
Mason, Volney W., Jr., Hyde Park, Mass. Vise for milling-machines or planers	508,732	Nov. 14	1211	301	65	1001
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably attaching gun-barrels to the stocks	498,983	June 6	413	96	63	1464
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably attaching gun-barrels to stocks	499,464	June 13	1216	290	63	1618
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading firearm	511,631	Dec. 26	3077	752	65	2020
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading gun	511,632	Dec. 26	3079	752	65	2020
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading firearm	511,633	Dec. 26	3080	752	65	2020
Mason, William B., assignor to Mason Regulator Company, Boston, Mass. Steam-pump	500,590	July 4	78	23	64	16
Mason, William H., Demarest, N. J. Shoe-lace fastener	502,422	Aug. 1	293	70	64	620
Masse, Bazile, assignor to W. A. Moreau, St. Hyacinthe, Canada. Display-stand	499,326	June 13	958	231	63	1571
Massey, Albert P., Watertown, N. Y. Air-brake	501,016	July 4	755	198	64	137
Massey, Albert P., Watertown, N. Y. Car-brake	501,917	July 4	757	198	64	138
Massey, Albert P., Watertown, N. Y. Governor for steam-pumps	501,018	July 4	757	199	64	138
Massey, Albert P., Watertown, N. Y. Triple valve for brake systems	503,095	Aug. 8	1429	352	64	843
Massey, Albert P., Watertown, N. Y. Quick-action triple valve	511,206	Dec. 19	2354	575	65	1875
Massey, George, Sydney, New South Wales. Combination-tool	510,981	Dec. 19	1996	493	65	1807
Mast, Foss & Company. (See Martin, Samuel W., assignor.)						
Mast, Foss & Company. (See Welsh, William S., assignor.)						
Mast, Peter, Toledo, Ohio. Wire fence and means for securing tension thereon	508,957	Nov. 21	1605	394	65	1089
Mast, William J. D., assignor to John C. Jewett Manufacturing Company, Buffalo, N. Y. Vapor-burner	506,243	Oct. 10	777	192	65	159
Masterman, William H., assignor of one-half to F. H. Myers, Oakland, Cal. Air-brake	504,227	Aug. 29	3267	815	64	1229
Masterman, William H., assignor of two-thirds to W. M. Rank and F. H. Meyers, Oakland, Cal. Frictional motion-transmitter	502,570	Aug. 1	538	128	64	665
Masters, William, Kansas City, Mo. Lamp-heater	495,559	Apr. 18	1668	421	63	346
Mather, Albert E., et al. (See Stevens, John C., assignor.)						
Mather, Allan G. (See Baxter and Mather.)						
Mather & Platt. (See Mather and Smith, assignors.)						
Mather, Richard H., Windsor, Conn. Governor for engines	500,019	June 20	2112	512	63	1787
Mather, William, Sebastopol, Cal. Horse-detacher	490,610	Jan. 24	2591	668	62	567
Mather, William, and D. P. Smith, assignors to Mather & Platt, Limited, Manchester, England. Apparatus for steaming, aging, and drying fabrics	504,602	Sept. 5	473	121	64	1358
Mather, William P., Providence, R. I. Cloth stretching and calendering machine	504,927	Sept. 12	1020	263	64	1477
Mathers, Chester E., Pushmataha, Ala. Gate-opening mechanism	490,974	Jan. 31	3204	818	62	701
Matheson & Co., William J. (See Austen, Peter T., assignor.)						
Matheson, Colin, Eureka, Cal. Self-tripping pulley-block	504,928	Sept. 12	1021	263	64	1477
Matheson, Richard T., Brooklyn, N. Y. Trousers-protector	491,845	Feb. 14	1266	314	62	1017
Matheson, William M., Waltham, Mass. Watch-regulator	493,508	Mar. 14	1163	297	62	1600
Mathews, George, et al. (See Schenck, John D. P., assignor.)						
Mathews, John S., Pendleton, Oreg. Rotary-sickle cutter-bar	493,103	Mar. 7	516	129	62	1461
Mathews, Joseph H., Canton, Ohio. Hydrocarbon vaporizer and burner	496,523	May 2	206	55	63	656
Mathews, Joseph H., Canton, Ohio. Tank for hydrocarbon-burners	496,661	May 2	433	116	63	697
Mathewson, Edward P., Pueblo, Colo. Furnace-tap	501,351	July 11	1315	328	64	252
Mathewson, Edward P., Pueblo, Colo. Furnace-tap	511,090	Dec. 19	2161	532	65	1839
Mathewson, Philip A., Fall River, Mass. Cloth inspecting and trimming machine	506,706	Oct. 17	1542	385	65	319
Mathiesen, Wilhelm, Leipsic, Germany. Electric-arc lamp	506,341	June 27	2664	653	63	1896
Mathieu, Victor, Inverness, Fla. Hoisting apparatus	490,574	Jan. 24	2529	651	62	555
Mathison, Albert C., Philadelphia, Pa. Thill-coupling	491,782	Feb. 14	1170	292	62	997
Mathison, Arthur, Springfield, Mass. Eyelet	501,288	July 11	1197	303	64	233
Mathison, James, et al. (See Cook, Theodore A., assignor.)						
Mathison, Joseph, Somerville, Mass. Button-setting machine	493,634	Mar. 21	1390	352	62	1660
Mathison, Joseph, Somerville, Mass. Button-setting tool	501,286	July 11	1195	302	64	232
Mathison, Joseph, Somerville, Mass. Bouquet-holder	501,287	July 11	1197	302	64	233
Mathison, Walter, et al. (See Cook, Theodore A., assignor.)						
Matlack, William H. (See Freeman, Claudius G., assignor.)						
Matson, Lewis B., Elmira, N. Y. Electrical cut-out	503,867	Aug. 22	2670	669	64	1100
Matsoo, Jumatsu, Philadelphia, Pa. Pencil-holder	498,442	May 30	3318	826	63	1276
Mattes, William F., West Superior, Wis., and J. F. Lewis, Scranton, Pa., assignors to said Mattes, trustee. Lubricator	499,434	June 13	1169	279	63	1809
Matteson, Job, South Hartford, assignor of one-half to F. E. Boynton, Hebron, N. Y. Hoof trimmer or parer	504,400	Sept. 5	140	37	64	1296
Matthew, William E., assignor of one-third to C. H. Noblet, Bucyrus, Ohio. Corn-planter	504,920	Sept. 12	1022	263	64	1477
Matthews, Adaline M. (See Matthews, Hannah E. and A. M.)						
Matthews, Edward, assignor of one-half to C. N. Brooks, Denver, Colo. Vehicle-coupling	489,437	Jan. 3	702	188	62	151
Matthews, Edwin S., assignor of one-half to J. L. Haven, Cincinnati, Ohio. Hydraulic-valve gear	503,975	Aug. 29	2855	717	64	1153
Matthews, Elem D., Cedar Rapids, Iowa, assignor of one-half to F. M. Sinclair, Bloomfield, Ind. Combined washing-machine and stand	494,706	Apr. 4	283	71	63	57
Matthews, George, et al. (See Schenck, John D. P., assignor.)						
Matthews, George E., Buffalo, N. Y. Calendar	498,069	May 23	2706	676	63	1151
Matthews, Hannah E. and A. M., Grand Rapids, Mich. Bosom-form	503,057	Aug. 8	1366	337	64	832
Matthews, Henry A., Southbury, Conn. Stove-knob	491,292	Feb. 7	388	99	62	821
Matthews, Henry B., Chicago, Ill. Pen or pencil guard	506,008	Oct. 3	323	85	65	63

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Matthews, James F., and F. Heley, Lidgerwood, N. D. Sausage-machine	497,127	May 9	1186	303	63	850
Matthews, James F., Lidgerwood, N. D., and W. E. Dinsmore, Minneapolis, Minn. Thill-coupling	497,924	May 23	2484	620	63	1119
Matthews, James M., Graham, Va. Key-ring	510,280	Dec. 5	737	179	65	1549
Matthews, Jeremiah H., South Bend, Ind. Transportable circular-saw mill	496,886	May 9	814	215	63	784
Matthews, Jeremiah H., South Bend, Ind. Door-securer	496,887	May 9	816	215	63	784
Matthews, Jonathan, Birmingham, Ala. Rotary engine	494,069	Mar. 21	2109	538	62	1798
Matthews, Rowland. (See Noad, James, assignor.)						
Matthews, William C., Denver, Colo. Fuse-lighter	504,603	Sept. 5	474	121	64	1358
Matthijez, Ernst. (See Symmank and Matthijez.)						
Matthis, C. W., et al. (See Graves, Cashious M., assignor.)						
Mattice, Edward V., and J. E. Dunwell, Chillicothe, Ill. Brake-piston indicator	506,787	Oct. 17	1683	424	65	345
Mattijetz, Andreas, Giddings, Tex. Cultivator	510,281	Dec. 5	738	179	65	1549
Mattison, James D., Saginaw, Mich. Axle-box	506,009	Oct. 3	324	85	65	63
Mattison, James O., and L. M. Phillips, Youngsville, Pa. Overshoe	499,241	June 13	823	195	63	1548
Mattison, Richard V., Ambler, Pa. Non-heat-conducting composition	492,092	Feb. 21	1642		62	1107
Mattison, Richard V., Ambler, Pa. Non-heat-conducting composition for covering boilers, &c.	492,093	Feb. 21	1642		62	1107
Mattison, Richard V., Ambler, Pa. Non-heat-conducting composition for coating boilers.	492,094	Feb. 21	1642		62	1107
Mattson, Frederick V., assignor to Camden Iron Works, Camden, N. J. Pressure device for retort-lids	507,917	Oct. 31	3608	890	65	728
Mattson, Frederick V., assignor to Camden Iron Works, Camden, N. J. Overflow device for telescoping gas-holders	511,444	Dec. 26	2777	672	65	1964
Mattress, Benjamin, Scribner, Cal. Stump-extractor	493,593	Mar. 14	1317	337	62	1631
Matta, Orville E., Paoli, Wis. Portable friction fire escape	506,707	Oct. 17	1544	366	65	319
Mattson, Erkes E., Siljansnas, Sweden. Coin sorter and ejector	510,982	Dec. 19	1998	494	65	1807
Mattson, John A., Dassel, Minn. Carriage-step	499,327	June 13	959	231	63	1571
Mattson, W. H. (See Miller, William P., assignor.)						
Mattullath, Hugo, Detroit, Mich., assignor to W. A. Nash and G. Amsinck, trustees, and M. Mattullath. Barrel-hoop	490,255	Jan. 17	2018	527	62	442
Mattullath, Meta, et al. (See Mattullath, Hugo, assignor.)						
Matzen, Herman, Cleveland, Ohio. Tricycle	498,750	May 30	3860	951	63	1370
Mauch, Lawrence, Sundance, Wyo. Key-ring	505,882	Oct. 3	129	33	65	26
Mauch, Meinrad, Cincinnati, Ohio. Dumping-wagon	494,377	Mar. 28	2626	659	62	1909
Mauchain, Armand, Geneva, Switzerland. School-desk	492,940	Mar. 7	264	67	62	1411
Maeremann, Gustav A., San Antonio, Tex. Pneumatic cotton-picker	498,133	May 23	2799	700	63	1168
Mauk, George W., Williamsburg, Pa. Gate	501,801	July 18	2932	500	64	398
Mauk, William G., Basil, Ohio. Holdback-hook	509,747	Nov. 28	2951	715	65	1357
Mauldin, James L., assignor of one-half to F. J. Lewis, Cleveland, Ohio. Trolley-base	511,634	Dec. 26	3082	753	65	2021
Maud, Robert D., Geneva, Ga. Fruit-gatherer's coat	494,875	Apr. 4	563	141	63	109
Maurer, Adam. (See Schwartz, Jacob, assignor.)						
Maurer, Joseph M., Washington, Pa. Obstetrical and examination stirrup	505,319	Sept. 19	1661	429	64	1608
Mauro, Philip, administrator. (See Rollet, Antoine P. G.)						
Manser, Alfons, Oberndorf-on-the-Neckar, Germany. Breech-bolt for bolt-guns	496,691	May 2	476	127	63	706
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Germany. Fixed magazine for breech-loading bolt-guns	490,029	Jan. 17	1651	429	62	369
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Germany. Shiftable magazine for bolt-guns	492,543	Feb. 28	2369	588	62	1269
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Germany. Coupling for firing-pins and pin-nuts in bolt-guns	499,328	June 13	961	232	63	1572
Maw, Thomas J., assignor of two-thirds to W. J. Maw and W. F. Mansfield, Boston, Mass. Heating apparatus	505,713	Sept. 26	2365	598	64	1754
Maw, Walter J., et al. (See Maw, Thomas J., assignor.)						
Maxfield, Leverett L., New York, and J. H. Darlington, Brooklyn, N. Y. Fire-alarm	505,987	Oct. 3	293	75	65	56
Maxfield, Samuel B., and W. Snyder, Angola, Ind. Motor	509,043	Nov. 21	1733	428	65	1115
Maxhimer, Leonard L., assignor of one-half to W. S. Lash, Justus, Ohio. Sack-scale	495,897	Apr. 18	2206	556	63	440
Maxim, Hiram S., London, England. Power mechanism for pointing and training guns	508,733	Nov. 14	1212	301	65	1002
Maxim, Hiram S., Bexley, and L. Silverman, Crayford, England. Car-wheel	505,572	Sept. 26	2123	538	64	1710
Maxim, Hosea F., and J. M. Price; said Price assignor to J. Hecht, Norfolk, Va. Thermometer	499,259	Jan. 3	432	120	62	95
Maxim, Hudson, Pittsfield, Mass. Cartridge with amorphous explosive shell and charge.	504,736	Sept. 12	703	176	64	1416
Maxim-Nordenfellt Guns and Ammunition Company. (See Holmström, Carl, assignor.)						
Maxon, Oscar, assignor of two-thirds to C. Fenzel and T. Maxon, Dayton, Ohio. Link belting	494,110	Mar. 21	2184	558	62	1813
Maxon, Thomas, et al. (See Maxon, Oscar, assignor.)						
Maxon, Thomas, Dayton, Ohio. Disk harrow	494,785	Apr. 4	418	104	63	81
Maxwell, David E. (See Beal, William C., assignor.)						
Maxwell, Gurden E. (See Johnson, William H., assignor.)						
Maxwell, Harley J., Cardington, Ohio. Incubator	511,153	Dec. 19	2268	556	65	1859
Maxwell, Harry B., Stromsburg, Nebr. Spark-arrester	491,367	Feb. 7	512	131	62	845
Maxwell, James R., Cincinnati, Ohio. Steam-engine	498,806	June 6	87	32	63	1404
Maxwell, Samuel E., Aspinwall, Pa. Chill-mold for casting teeth on gear-wheels	500,591	July 4	82	23	64	16
Maxwell, William K., Wakefield, Pa. Vehicle running-gear	508,894	Nov. 14	1455	361	65	1046
May, Edmund S. C. (See Dunbar and May.)						
May, Edmund S. C., Chicago, Ill., assignor, by mesne assignments, to American Bell Telephone Company, Boston, Mass. Trunk-line signal	509,477	Nov. 28	2532	611	65	1278
May, Edward S., Washington, D. C. Letter-scales	493,636	Mar. 21	1394	353	62	1661
May, H. (See Richardson, Daniel W., assignor.)						
May, Henry, et al. (See Newton, Oscar C., assignor.)						
May, James T. (See Hanneken and May.)						
May, John, London, England. Knife	492,409	Feb. 28	2147	536	62	1223
May, Lincoln S., West Hartford Conn. Burial apparatus	502,888	Aug. 8	1088	268	64	781
Maybach, Wilhelm, Cannstadt, Germany. Engaging or disengaging gear for machine-belts	492,872	Mar. 7	161	39	62	1390
Maybach, Wilhelm, Cannstadt, Germany. Motor-vehicle	494,641	Apr. 4	179	45	63	37
Maybach, Wilhelm, Cannstadt, Germany. Apparatus for cooling liquids employed in motors and compressors	499,302	June 13	919	222	63	1565
Maybaum, Henry W. (See Farrel, John H., assignor.) (Reissue.)						
Mayer, Anna, Oliver Springs, Tenn. Flour-chest	509,479	Nov. 28	2536	612	65	1278
Mayer, Benjamin, Northcote, and W. H. Mitchell, Meredith, Victoria. Car-coupling	500,342	June 27	2666	654	63	1896

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Mayer, Frederick, Baltimore, Md. Gas-holder tank.....	505,629	Sept. 26	2212	{ 560 561 510	{ 64 65	1726 416
Mayer, Frederick, Baltimore, Md. Gas-holder tank.....	507,022	Oct. 17	2064	510	65	416
Maÿer, Gottfried, Belleville, Wis. Combined fireplace and cooking-range for cheese-making, &c.....	496,524	May 2	208	55	63	656
Mayer, Henry. (See Schlegel and Mayer.)						
Mayer, Louis G. (See James and Mayer.)						
Mayer, Max, Denver, Colo. Rubber shoe.....	509,927	Dec. 5	131	31	65	1434
Mayer, Theodor, Feuerbach, Germany. Antimony compound and making same.....	509,478	Nov. 28	2535		65	1278
Mayer, William, Chicago, Ill. Banjo.....	493,635	Mar. 21	1393	353	62	1661
Mayers, John. (See Rhodes, Edward, assignor.)						
Mayes, Elmore D., et al. (See Tiner, John F., assignor.)						
Mayfield, James C. (See Gladney and Mayfield.)						
Mayhall, William A., Gloster, Miss. Trace-carrier.....	496,425	May 2	50	14	63	628
Mayhew, Charles L., Saratoga Springs, N. Y. Automatic circuit-controller.....	510,646	Dec. 12	1375	336	65	1682
Mayhew, Hebron. (See Swett, Nathaniel A., assignor.)						
Mayhew, Rubertus G., assignor of two-thirds to F. J. Sullivan, St. Louis, Mo., and S. P. McKelvey, Chicago, Ill. Method of and apparatus for forming joints in concrete walks, &c.....	499,173	June 6	725	172	63	1516
Mayloy, Edward C., Rochester, N. Y. Fountain-inkstand.....	500,690	July 4	252	68	64	48
Maynadier, James E. (See Voorhees, Gardner T., assignor.)						
Maynadier, James E., trustee. (See Voorhees, Gardner T., assignor.)						
Maynard, Edward, Brooklyn, N. Y. Cord for sashes, &c.....	492,582	Feb. 28	2429	605	62	1282
Mayne, Charles R., Toledo, Ohio. Combined wagon jack and wrench.....	496,692	May 2	478	128	63	706
Maynz, Emanuel, et al. (See Horn, Norbert, assignor.)						
Mayo, Edward D., assignor of one-half to Barnett-Record Company, Minneapolis, Minn. Carriage for grain-spouts.....	494,153	Mar. 28	2263	575	62	1841
Mayo, Samuel P., and G. A. Peple, assignors to Mayo Tobacco Drying and Ordering Company, Richmond, Va. Apparatus for drying, cooling, and ordering tobacco.....	497,586	May 16	1938	487	63	998
Mayo Tobacco Drying and Ordering Company. (See Mayo and Peple, assignors.)						
Mayo, Walter E., Gloucester, Mass. Sash-fastener.....	500,254	Oct. 27	2519	615	63	1870
Mayo, Walter E., Beverly, Mass. Notching lamp-chimneys.....	507,626	June 31	3138	767	65	640
Mayo, William P. (See Vaughan, Robert M., assignor.)						
Mayow, Daniel L., Mount Sylvan, Tex. Fastening for nailless horseshoes.....	492,691	Feb. 28	2599	643	62	1315
Mayr, George, Brooklyn, assignor of one-half to E. Farmer, New York, N. Y. Electric lamp for bicycles.....	508,482	Nov. 14	827	206	65	927
Mays, Thomas C., Paragould, Ark. Window-screen.....	503,766	Aug. 22	2537	631	64	1074
Mays, W. E. (See Watts, William H., Jr., assignor.)						
Mazza, Ralph, San Leandro, Cal. Pencil holder and sharpener.....	496,269	Apr. 25	2767	692	63	561
McAdam, Thomas, Ferndale, Pa. Snow-plow.....	505,366	Sept. 19	1736	{ 449 450	{ 64	1622
McAdams, John, Camden, N. J. Core-spindle.....	492,226	Feb. 21	1862	465	62	1152
McAdams, Newton, Columbus Grove, Ohio. Fence.....	511,309	Dec. 19	2527	615	65	1906
McAdams, Richard E. (See Crockett and McAdams.)						
McAfee, Henry P., Overton, Tex. Motor.....	494,343	Mar. 28	2566	646	62	1898
McAllister, Edwin J. (See Page and McAllister.)						
McAlister, George W., Jake's Prairie, Mo. Machine for boring fellies and tenoning spokes.....	491,582	Feb. 14	852	216	62	934
McAlister, James, assignor of one-half to A. C. Hubbell, South Manistique, Mich. Offsetting device for sawmill-carriages.....	510,042	Dec. 5	340	76	65	1473
McAlister, Wilson-Ella P., Richmond, Ky. Cake-cutter.....	492,417	Feb. 28	2156	539	62	1225
McAlpine, George H. (See McAlpine, James E. and G. H.)						
McAlpine, James E. and G. H., Concord, N. H. Fire or water proof paint.....	500,346	June 27	2573		63	1897
McAlpine, James G., Hartford, Conn. Chronometer-escapement.....	504,046	Aug. 29	2971	743	64	1173
McAlpine, James G., Hartford, Conn. Chuck.....	504,047	Aug. 29	2972	743	64	1174
McAnarney, John S., Chandler, assignor of one-half to T. C. Hough, Oklahoma, Okla. Ter. Sliding door.....	492,502	Feb. 28	2309	572	62	1255
McAneny, Michael, and F. Stansbury, assignors of one-third to J. Swank, Denver, Colo. Opera-chair.....	501,896	July 18	2176	{ 539 540	{ 64	424
McAninch, George W., Davenport, Iowa. Workman's time-recorder.....	510,811	Dec. 12	1641	408	65	1732
McAnulty, Samuel A., Glenn's Ferry, Idaho. Hay-elevator.....	503,352	Aug. 15	1865	461	64	935
McArthur, Andrew J., Gainesville, Fla. Signaling and registering device for ice-making plants.....	508,737	Nov. 14	1218	{ 303 304	{ 65	1003
McArthur, Peter, assignor to D. H. Nichols, Bessemer, Ala. Method of and apparatus for casting beads on spigot ends of iron pipes.....	511,247	Dec. 19	2420	589	65	1887
McArthur, Thomas J., assignor to L. Shave, New York, N. Y. Street-sweeping machine.....	498,402	May 30	3252	810	63	1263
McAusland, William, assignor to Reed & Barton Corporation, Taunton, Mass. Manufacture of oval or oblong shells for plated ware, &c.....	493,108	Mar. 7	526	131	62	1463
McBean, John C., G. J. McLaughlin, H. R. Corkhill, Jr., and G. Baxter, Rochester, N. Y. Labeling machine.....	502,311	Aug. 1	89	21, 22	64	582
McBean, Robert S., and J. W. McBurnett, Colorado, Tex. Whiffletree-hook.....	507,665	Oct. 31	3210	785	65	654
McBerty, Frank R., Downer's Grove, assignor to Western Electric Company, Chicago, Ill. Telephone-switchboard annunciator.....	498,808	June 6	91	23	63	1405
McBerty, Frank R., Downer's Grove, assignor to Western Electric Company, Chicago, Ill. Testing apparatus for multiple switchboards.....	509,932	Dec. 5	143	34	65	1436
McBride, Helen H., Grand Island, Nebr. Stair-rod.....	511,355	Dec. 26	2616	635	65	1937
McBride, Robert M., Harlensburg, Pa. Vehicle-spindle.....	504,499	Sept. 5	317	80	64	1329
McBryer, Charles W., Wellston, assignor of one-fourth to H. B. Schilling, St. Louis, Mo. Device for preventing railway-cars from leaving the rails.....	506,439	Oct. 10	1122	{ 279 280	{ 65	226
McBurnett, John W. (See McBean and McBurnett.)						
McBurnett, Milford J., Wedowee, Ala. Plow-standard.....	496,946	May 9	910	238	63	802
McCabe, George, Bushnell, Ill. Cash register and indicator.....	506,715	Oct. 17	1559	{ 390 391	{ 65	322
McCabe, Julia A. (See Campbell, John R., assignor.)						
McCahey, John, assignor to New England Butt Company, Providence, R. I. Braiding-machine.....	494,379	Mar. 28	2628	{ 659 660	{ 62	1909
McCahey, John, assignor to New England Butt Company, Providence, R. I. Braiding-machine carrier.....	494,380	Mar. 28	2629	660	62	1909
McCain, Benjamin H., assignor of two-thirds to J. M. Pierce and C. Coomer, Des Moines, Iowa. Signal attachment for locomotive-headlights.....	492,334	Feb. 21	2018	{ 502 503	{ 62	1185
McCall, Charles S. (See Culbreath, Walter W., assignor.)						
McCall, Edwin R., Rochester, N. Y. Heating pipe and radiator.....	495,358	Apr. 11	1343	336	63	266
McCall, Edwin R., Rochester, N. Y. Buzz.....	509,044	Nov. 21	1734	428	65	1115
McCall, Pennywell F. (See McCall, Wiley E., assignor.)						
McCall, Wiley E., Jasper, Fla. Roller cotton-gin.....	489,825	Jan. 10	1285	336	62	282

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McCall, Wiley E., assignor of one-half to P. F. McCall, Jasper, Fla. Stump-extractor.....	495,161	Apr. 11	1034	257	63	210
McCallen, Robert S., and M. M. Ross, Nashville, Tenn.; said McCallen assignor to said Ross. Envelope.....	505,718	Sept. 26	2374	600	64	1755
McCalmont, Robert, <i>et al.</i> (See Brashear, Fred L., assignor.)						
McCamant, John G., <i>et al.</i> (See Rush, John T., assignor.)						
McCammon, Joseph K. (See Ruggles, Charles H., assignor.)						
McCammon, William L. (See Millen and McCammon.)						
McCann, Henry F. (See Hazard, Thomas B. and W. E., assignors.)						
McCann, John. (See Widmer, Charles C., assignor.)						
McCargar, Joseph R., assignor to McCargar-Littlefield Company, Grand Rapids, Mich. Finishing wood veneers.....	506,601	Oct. 10	1373		65	275
McCargar-Littlefield Company. (See McCargar, Joseph R., assignor.)						
McCarroll, Charles T., Ottumwa, Iowa. Sheet-metal stove.....	496,947	May 9	911	238	63	802
McCarter, Joseph. (See Drozeski, Julius R., assignor.)						
McCarthy, Denis, Columbus, Ohio. Combined hay loader and carrier.....	490,158	Jan. 17	1856	{ 484 485 }	{ 62	411
McCarthy, Dennis W. (See McCarthy, John E., D. W., and S. J.)						
McCarthy, John, Syracuse, N. Y. Casket-handle.....	491,122	Feb. 7	91	25	62	766
McCarthy, John, Syracuse, N. Y. Casket-handle.....	494,822	Apr. 4	479	121	63	92
McCarthy, John, Syracuse, N. Y. Casket-handle.....	495,226	Apr. 11	1133	282	63	228
McCarthy, John E., D. W., and S. J., Laconia, N. H. Fabric-sample holder.....	503,802	Aug. 22	2554	644	64	1084
McCarthy, Lawrence A., Brooklyn, N. Y. Conduit electric railway.....	505,841	Oct. 3	60	15, 16	65	14
McCarthy, Louis, Boston, Mass. Strain-insulator.....	489,658	Jan. 10	1030	269	62	229
McCarthy, Louis, Boston, Mass. Insulator.....	490,302	Jan. 24	2106	548	62	472
McCarthy, Louis, Boston, Mass. Insulator.....	491,729	Feb. 14	1083	273	62	981
McCarthy, Louis, Boston, Mass. Insulating-coupling.....	501,021	July 4	761	200	64	139
McCarthy, Louis, Boston, Mass. Insulator.....	502,677	Aug. 1	733	176	64	700
McCarthy, Louis, Boston, Mass. Trolley-wire insulator.....	502,826	Aug. 8	996	242	64	764
McCarthy, Louis, Boston, Mass. Insulator.....	503,549	Aug. 15	2171	542	64	990
McCarthy, Louis, Boston, Mass. Section-insulator.....	503,749	Aug. 22	2514	{ 625 626 }	{ 64	1070
McCarthy, Stephen J. (See McCarthy, John E., D. W., and S. J.)						
McCartney, James, <i>et al.</i> (See Gambee, William Y., assignor.)						
McCartney, John F., assignor to H. A. Desper, Worcester, Mass. Double testing-plug for soil-pipes.....	491,184	Feb. 7	203	52	62	786
McCarty, Ella M., administratrix. (See McCarty, John E.)						
McCarty, John E., deceased, Elkins, W. Va.; E. M. McCarty, administratrix. Process of and apparatus for making extracts.....	491,370	Feb. 7	516	132	62	846
McCaskey, Alfred S., Chicago, Ill. Electrical signaling system.....	498,289	May 30	3059	{ 761 762 763 764 }	{ 63	1229
McCaskey, Alfred S., Chicago, Ill. Railway block-signaling system.....	498,290	May 30	3069	{ 765 766 }	{ 63	1230
McCaskey, Alfred S., Chicago, Ill. Automatic telephone-exchange system.....	498,291	May 30	3073	{ 765 766 }	{ 63	1231
McCaslin, George W., Hoboken, N. J. Endless-chain conveyer.....	503,870	Aug. 22	2675	670	64	1101
McCaslin, Irving A., assignor of one-half to J. A. Allen, Santa Clara, Cal. Horse-detacher.....	491,807	Feb. 14	1210	302	62	1006
McCauley, Frank L. (See Pentoney, William, assignor.)						
McCauley, Reuben A., Baltimore, Md. Gripping device for cable railways.....	491,439	Feb. 7	624	156	62	867
McCay, William S., Grand Rapids, Mich. Dust-pan.....	502,235	July 25	2723	687	64	543
McChesney, Alfred B. (See Douglass, Robert C., assignor.)						
McClaren, Alfred E., Joplin, Mo. Telephone-exchange.....	499,748	June 20	1672	{ 401 402 }	{ 63	1710
McClave, William, Scranton, Pa. Furnace for burning garbage, &c.....	490,582	Jan. 24	2538	{ 653 654 }	{ 62	557
McClave, William, Scranton, Pa. Steam-jet conveyer for ashes or other light substances.....	490,583	Jan. 24	2541	654	62	557
McClave, William, Scranton, Pa. Steam-jet conveyer for ashes or other light substances.....	490,584	Jan. 24	2543	{ 654 655 }	{ 62	558
McClave, William, Scranton, Pa. Conveyer for ashes or other light substances.....	495,359	Apr. 11	1344	337	63	266
McClave, William, Scranton, Pa. Furnace.....	496,384	Apr. 25	2975	{ 742 743 }	{ 63	601
McClave, William, Scranton, Pa. Furnace with air, steam, and hydrocarbon fuel feeding attachments.....	497,194	May 9	1278	325	63	867
McClave, William, Scranton, Pa. Carbonaceous and vapor-burning furnace.....	499,642	June 13	1498	{ 359 360 }	{ 63	1666
McClean, Thomas H., Washington, Iowa. Windmill.....	490,359	Jan. 24	2206	575	62	492
McCleave, Henry C., Trimble, Ill. Hoof-trimmer.....	494,013	Mar. 21	2022	515	62	1783
McClellan, Edward J., New York, N. Y. Feed-motion.....	502,131	July 25	2547	639	64	510
McClellan, John A., Walnut, Tex. Flour bin and sifter.....	493,640	Mar. 21	1400	355	62	1662
McClelland, David H., assignor of one-half to S. W. Curriden, Washington, D. C. Oil purifier.....	498,184	May 23	2877	718	63	1182
McClelland, Joseph, Chicago, Ill. Tugere.....	498,565	May 30	3526	872	63	1312
McClinchie, Uriah, Brooklyn, N. Y. Child's perambulator.....	506,329	Oct. 10	923	229	65	188
McClintock, Charles E., Ozark, assignor of one-half to H. G. and R. A. Sadler, Paris, Ark. Bed-bottom.....	489,229	Jan. 3	386	106	62	86
McClintock, Charles T., Oil City, Pa. Button.....	492,418	Feb. 28	2157	539	62	1225
McCloud, C. S., <i>et al.</i> (See Walker, Orlando O., assignor.)						
McClung, James S., Pueblo, Colo. Sponge-moistener.....	496,695	May 2	482	129	63	707
McClure, Albert E., assignor to McClure Manufacturing Company, Sedalia, Mo. Buckle.....	491,123	Feb. 7	92	25, 26	62	767
McClure, Charles E., St. Louis, Mo. Preserving eggs.....	504,535	Sept. 5	372	94	64	1339
McClure, George W., and C. Amsler, Pittsburg, Pa. Hot-blast stove.....	496,092	Apr. 25	2504	{ 631 632 }	{ 63	512
McClure, George W., and C. Amsler, Pittsburg, Pa. Hot-blast stove.....	509,547	Nov. 28	2636	637	65	1297
McClure, Harry, Hawarden, Iowa. Skate-sharpener.....	493,174	Mar. 7	626	157	62	1481
McClure, James P., assignor to H. L. Tatam and J. J. Bowen, San Francisco, Cal. Saw-mill-networks.....	495,250	Apr. 11	1192	299	63	239
McClure, Jerome B., Sedalia, Mo. Fence.....	497,410	May 16	1660	419	63	950
McClure, John, <i>et al.</i> (See Smith, George, assignor.)						
McClure Manufacturing Company. (See McClure, Albert E., assignor.)						
McClure, Samuel, and C. F. Phillips, Sharon, Pa. Automatic stock-indicator for blast-furnaces.....	498,676	May 30	3721	919	63	1345
McColloch, Simon L., Wheeling, W. Va. Mowing-machine.....	497,055	May 9	1065	{ 273 274 }	{ 63	828

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McCormick, William F. (See Beckwith and McCollum.)						
McComb, Charles R., Columbus Grove, Ohio. Cuspider	502,312	Aug. 1	96	22	64	583
McComish, John J., Providence, R. I. Tire for bicycle-wheels	489,975	Jan. 17	1545	404	62	348
McConnell, Asa W., Carnesville, Ga. Fertilizer pulverizer and distributor	509,933	Dec. 5	147	34	65	1437
McConnell, James, Anderson, Ind. Furnace for annealing wire	500,410	June 27	2765	681	63	1914
McConnell, James M., and M. L. Carlisle, Anderson, S. C. Automatic wagon-brake	495,993	Apr. 25	2344	593	63	482
McConnell, William H., Nelsonville, Ohio. Friction-clutch	504,110	Aug. 29	3076	770	64	1194
McConico, Walter L., et al. (See Aniello, John A., assignor.)						
McConway, William. (See Kelso, William, assignor.)						
McCook, Edward M., Riverside, Conn., and W. P. Seal, Chicago, Ill. Composition for roofing	505,531	Sept. 26	2036	—	64	1692
McCoole, Gabriel W., St. Louis, Mo. Clothes-pin. (Reissue)	11,358	Aug. 15	2200	549	64	996
McCord, Alvin C., Chicago, Ill. Car-coupling	489,492	Jan. 10	795	210	62	182
McCord, Alvin C., Chicago, Ill. Car-coupling	489,976	Jan. 17	1546	404	62	348
McCord, Alvin C., Chicago, Ill. Car-coupling	489,977	Jan. 17	1548	405	62	349
McCord, Alvin C., Chicago, Ill. Car-platform	489,978	Jan. 17	1550	405	62	349
McCord, Alvin C., Chicago, Ill. Car-coupling	494,219	Mar. 28	2371	599	62	1862
McCord, Alvin C., Chicago, Ill. Grain-door for cars	494,320	Mar. 28	2372	599	62	1862
McCord, Alvin C., Chicago, Ill. Car-axle-box lid	506,330	Oct. 10	925	229	65	188
McCord, James R., Jackson, Ga. Seed-planter and fertilizer-distributor	493,872	Mar. 21	1769	451	62	1735
McCord, John, et al. (See Green, John, assignor.)						
McCormack, John H., Wallingford, Conn. Hot-water heater	509,669	Nov. 28	2833	684 685	65	1335
McCormick, Arthur L., Port Huron, Mich. Illuminated sign	502,007	July 25	2345	587 588	64	471
McCormick, Charles W., Emporia, Kans. Nut-lock	490,585	Jan. 24	2545	655	62	558
McCormick, Charles W., Emporia, Kans. Store-service apparatus	495,902	Apr. 18	2212	557 558	63	441
McCormick, Ellen, St. Louis, Mo. Lady's hat-fastener	505,719	Sept. 26	2375	600	64	1755
McCormick, George E., et al. (See Langwith, Frank A., assignor.)						
McCormick Harvesting Machine Company. (See Baker, William R., assignor.)						
McCormick Harvesting Machine Company. (See Phelps, George L., assignor.)						
McCormick Harvesting Machine Company. (See Pridmore, Henry E., assignor.)						
McCormick, James, and J. R. Deisher, Pottsville, Pa. Car-coupling	501,527	July 18	1580	398	64	319
McCormick, John G., Louisville, Ky. Electric locomotive	511,448	Dec. 26	2785	674	65	1966
McCormick, Moses, Baltimore, Md. Sully	504,048	Aug. 29	2973	743	64	1174
McCormick, Robert S. (See Adams, Frederick U., assignor.)						
McCormick, Susan V. (See Roediger, Fredrick, assignor.)						
McCoslin, Henry B., Litchfield, Ill. Windmill	492,097	Feb. 21	1647	410	62	1108
McCoy, Dewitt C., et al. (See Cundiff, Middleton, assignor.)						
McCoy, Elijah, Detroit, Mich. Lubricator	498,809	June 6	93	23	63	1406
McCoy, G. P. (See Johnson, Robert W., assignor.)						
McCoy, John H., Ouray, Colo., assignor of one-half to W. B. Cunningham, New York, N. Y. Ore-concentrator	501,022	July 4	762	200	64	139
McCoy, Juan W., West Berkeley, Cal. Water-motor	497,185	May 9	1280	326	63	867
McCoy, William A., Beman, Kans. Weed-cutter, &c.	500,932	July 4	618	163	64	112
McCoy, William H., Muscatine, Iowa, assignor of one-half to J. Brewer, Morrison, Ill. Door-check	493,442	Mar. 14	1057	272	62	1581
McCracken, William, Kewanee, Ill. Tongs for drawing skelps	508,738	Nov. 14	1221	304	65	1004
McCrory, George W. (See Loveman, McCrory, and Livingston.)						
McCreedy, Elbridge H., Camden, Mich. Wire fence	491,440	Feb. 7	624	156	62	867
McCrory, Charles S. (See Buckingham and McCrory.)						
McCrory, Joseph C., and W. P. Houze, Nashville, Tenn. Carburetor	501,154	July 11	999	254	64	196
McCroskey, Henry M. (See Chambers, Thomas R., assignor.)						
McCrudden, James, assignor of one-half to A. R. Caldwell, Flint, Mich. Whiffletree-hook	490,672	Jan. 31	2722	700	62	607
McCulloch, Eppie J., Manchester, N. H. Bench-plane	505,119	Sept. 19	1344	346	64	1551
McCulloch, James, Minas Riotinto, Spain. Rock-drilling machine	493,175	Mar. 7	626	157 158 159	62	1481
McCulloch, Robert. (See Surtin, John H., assignor.)						
McCullough, John L., Brooklyn, N. Y. Magazine-gun and electrical devices therefor	509,091	Nov. 21	1829	448 449	65	1133
McCullough, John L., Brooklyn, N. Y. Magazine-gun	509,548	Nov. 28	2637	638	65	1297
McCully, Robert, Philadelphia, Pa. Crushing-machine	500,596	July 4	88	25	64	18
McCully, Robert, Philadelphia, Pa. Crushing-machine	500,597	July 4	90	25, 26	64	18
McCully, Robert, Philadelphia, Pa. Crushing-machine	500,598	July 4	92	26, 27	64	18
McCully, Robert, Philadelphia, Pa. Crushing-machine	501,843	July 18	2081	514 515	64	406
McCully, William F. (See Smith, Harper F., assignor.)						
McCully, William F., et al. (See Smith, Harper F., assignor.)						
McCumber, Charles. (See Long and McCumber.)						
McCune, George E., Harveysburg, Ohio. Marker for corn-planters	496,744	May 2	564	151	63	720
McCune, George H. (See Wertsbaugher and McCune.)						
McCurdy, John R., assignor of one-half to M. Eichhorn, Los Angeles, Cal. Stand attachment for bicycles	496,530	May 2	214	57	63	657
McCurdy, John W. C., Chartiers, Pa. Cradle	496,531	May 2	217	57	63	658
McCurry, James C., Texarkana, Tex. Gin-saw-filing machine	510,926	Dec. 10	1888	463	65	1788
McCutcheon, Joshua L., assignor of one-half to J. S. Price, Houston, Tex. Cotton-press	502,313	Aug. 1	97	23	64	583
McDade, James, Montgomery, Tex. Car-coupling	489,826	Jan. 10	1286	336	62	282
McDaniel, Charles W., Lakeport, N. H., assignor to Economy Feed Water Heater Company, of New Hampshire. Furnace-mouth feed-water heater	495,428	Apr. 11	1453	366 367	63	287
McDaniel, John C. (See Davis, Rice, and McDaniel.)						
McDaniel, John F., Syracuse, Kans. Wagon-jack	510,701	Dec. 12	1459	360	65	1697
McDermott, Ida L., Baird, Tex. Preparing fruit for canning and preserving	511,709	Dec. 26	3191	—	65	2040
McDermott, Andrew. (See Gardner, Levi S., assignor.)						
McDermott, Augustus S., Dubuque, Iowa. Device for attaching shovel-standards, &c.	501,955	July 25	2271	568	64	457
McDermott, Henry, Norwich, Conn. Stop-motion for carding-machines	501,573	July 18	1652	413	64	333
McDermott, Thomas B., Portland, Oreg. Car-coupling	501,805	July 18	2037	501	64	399
McDivitt, Edward L., Belvidere, Ill. Combined carpet stretcher and tacker	492,045	Feb. 21	1574	392	62	1093
McDonald, A. J., et al. (See Slocum, Orsillus W., assignor.)						
McDonald, Alexander. (See Wessell, Charles B., assignor.)						
McDonald, Alexander, Cambridge, Mass. Stone-cutting machine	503,156	Aug. 15	1542	379	64	877
McDonald, Alexander E., Brooklyn, assignor to E. B. Stimpson, New York, N. Y. Portable hat-iron	504,814	Sept. 12	839	215	64	1441

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McDonald, Angus. (See Cameron, Murdick, assignor.)						
McDonald, Augustine T. (See Hadley and McDonald.)						
McDonald, Charles B., assignor of one-half to J. O. Armour, Chicago, Ill. Can-testing machine	506,182	Oct. 3	619	159	65	120
McDonald, Charles B., assignor of one-half to J. O. Armour, Chicago, Ill. Fluxing device for square-end cans	506,183	Oct. 3	624	160	65	121
McDonald, Charles B., assignor of one-half to J. O. Armour, Chicago, Ill. Machine for fluxing cans	506,184	Oct. 3	626	160	65	121
McDonald, Edward, <i>et al.</i> (See Slocum, Orsillus W., assignor.)						
McDonald, Henry. (See Lange, Hinrich, assignor.)						
McDonald, Hugh, Williamsport, Pa. Bicycle-saddle	498,136	May 23	2903	701	63	1169
McDonald, Hugh, Williamsport, Pa. Wrench	498,137	May 23	2905	702	63	1169
McDonald, James M., Lake Charles, La. Shaft-tug	490,036	Jan. 17	1661	432	62	371
McDonald, James R., Chicago, Ill. Printing-press	499,749	June 20	1683	403 404 405	63	1712
McDonald, James S., Chicago, Ill. Manifold sales-book	493,894	Mar. 21	1803	459	62	1740
McDonald, John, Tokio, Japan. Pinch-bar	498,677	May 30	3721	919	63	1346
McDonald, John I., St. Joseph, Mo. Folding guide for sewing-machines	508,233	Nov. 7	417	101	65	836
McDonald, Lewis B. (See Rice, McDonald, and McDowell.)						
McDonald, Patrick, Brookline, Mass. Thrill-support for vehicles	497,284	May 9	1442	364	63	894
McDonnell, William, Lindsay, Canada. Letter-envelope	499,563	June 13	1379	329	63	1646
McDonnell, William S., Boston, Mass. Display-stand	489,027	Jan. 3	72	20	62	18
McDonnell, Patrick E., assignor to J. F. Waite and A. M. Clarke, Chicago, Ill. Toy	493,895	Mar. 21	1805	460	62	1741
McDonogh, James, San Francisco, Cal. Car-coupling	506,528	Oct. 10	1271	318	65	255
McDonough, Alexander J., assignor of one-fourth to J. V. Baird, San Francisco, Cal. Potato separating and grading machine	495,945	Apr. 18	2272	572 573	63	453
McDonough, James T. (See Michel, McDonough, and Bowers.)						
McDonough, James T., T. and J. Michel, St. Paul, Minn. Flush-tank	493,281	Mar. 14	806	207	62	1533
McDougall, Alexander. (See Dyer, Frank L. and L. H., assignors.)						
McDougall, Alexander, Duluth, Minn. Rudder	492,873	Mar. 7	163	39	62	1391
McDougall, Alexander, Duluth, Minn. Device for moving hatch-plates	493,282	Mar. 14	807	208	62	1533
McDougall, Alexander, Duluth, Minn. Means for handling and firing guns on ships	498,678	May 30	3722	920	63	1346
McDougall, Alexander, Duluth, Minn. War-boat	498,679	May 30	3724	920	63	1346
McDougall, Alexander, Duluth, Minn. Boat for transporting railway-cars	498,680	May 30	3726	920 921	63	1346
McDougall, Alexander, Duluth, Minn. Vessel	498,681	May 30	3728	921	63	1347
McDougall, Alexander, Duluth, Minn. War-vessel	498,682	May 30	3730	922	63	1347
McDougall, Alexander, Duluth, Minn. Steam passenger-boat	500,411	June 27	2766	682	63	1914
McDougall, Daniel J., Dewdney, Canada. Potato-digger	509,760	Nov. 28	2969	719	65	1361
McDougall, Ruth, Chicago, Ill. Feed-water heater and purifier	494,302	Mar. 28	2497	630	62	1885
McDowell, Anthony B., Edna, Tex. Snap-hook	491,852	Feb. 14	1277	316	62	1019
McDowell, Bartley D., Milwaukee, Wis. Egg beater	511,637	Dec. 26	3085	753	65	2021
McDowell, Charles, Philadelphia, Pa. Device for sprinkling traveling bands	498,917	June 6	299	69	63	1445
McDowell, Ernest L., Arkansas City, Kans. Eyeglass-frame	511,638	Dec. 26	3086	754	65	2022
McDowell, Henry F. (See Reiff, William H., assignor.)						
McDowell, James D. (See Rice, McDonald, and McDowell.)						
McDowell, William H. (See Fillingier, John C., assignor.)						
McDuffie, Rees E., Cincinnati, Ohio. Artificial-leg attachment	492,583	Feb. 28	2430	605	62	1282
McDunn, Michael, Barnesville, Minn. Draft-equalizer	507,632	Oct. 31	3154	772	65	644
McEachren, Benjamin D., San Francisco, Cal. Window-hanger	495,750	Apr. 18	1976	499	63	398
McEachren, John D., Galt, Canada. Steam-boiler cleaner	507,030	Oct. 17	2074	512	65	418
McElfatrick, John E., Toledo, Ohio. Portable heating apparatus	493,780	Mar. 21	1628	414	62	1708
McElfatrick, Samuel, Princeton, Ky. Railway-tie	490,586	Jan. 24	2545	655	62	558
McElfatrick, Samuel, Princeton, Ky. Railway-tie	497,678	May 16	2083	520	63	1025
McElhiney, Harrison H., assignor to McElhiney Manufacturing Company, Nebraska City, Nebr. Caster-socket	498,444	May 30	3320	826	63	1276
McElhiney Manufacturing Company. (See McElhiney, Harrison H., assignor.)						
McElroy, David W., Keokuk, Iowa. Pile	506,856	Oct. 17	1795	451	65	365
McElroy, James E. (See Taylor and McElroy.)						
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Railway-car heating apparatus	490,673	Jan. 31	2723	701	62	608
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Car-heating apparatus	493,443	Mar. 14	1058	272	62	1581
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Rotary engine	510,482	Dec. 12	1057	254	65	1625
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Rotary engine	510,483	Dec. 12	1059	254 255	65	1625
McElroy, James F., Albany, N. Y., assignor to Consolidated Car-Heating Company, Wheeling, W. Va. Apparatus for heating street-cars	497,385	May 16	1621	409	63	943
McElroy, James F., Albany, N. Y., assignor to Consolidated Car-Heating Company, Wheeling, W. Va. Electric switch	499,363	June 13	1036	251	63	1586
McElroy, James F., Albany, N. Y., assignor to Consolidated Car-Heating Company, Wheeling, W. Va. Electrical heater	500,288	June 27	2567	627	63	1879
McElroy, James F., Albany, N. Y., assignor to Consolidated Car-Heating Company, Wheeling, W. Va. Rotary engine	503,550	Aug. 15	2172	542	64	990
McElroy, James F., Albany, N. Y., assignor to Consolidated Car-Heating Company, Wheeling, W. Va. Rotary engine	504,536	Sept. 5	374	94	64	1339
McElroy, Patrick J., Cambridge, Mass. Atomizer	493,512	Mar. 14	1167	298	62	1600
McElroy, Stephen C. (See Preston, Leonard Z., assignor.)						
McElvain, George H., <i>et al.</i> (See Rawles, John, assignor.)						
McElwain, George, Englewood, Ill. Penholder	492,555	Feb. 28	2391	593	62	1274
McEntee, Patrick, Montgomery, Minn. Car-coupling	505,803	Sept. 26	2511	633 634	64	1781
McEvilly, Walter A. (See David, Joseph M., assignor.)						
McEvoy, Edward J., New York, N. Y., assignor of one-half to William Cramp & Sons, Ship and Engine Building Company, Philadelphia, Pa. Junction-box	502,083	July 25	2474	621 622 623	64	195
McEvoy, Joseph H., Waterbury, Conn. Electric switch	502,983	Aug. 8	1268	310	64	813
McEvoy, Joseph H., Waterbury, Conn. Electric car-brake	507,589	Oct. 31	3076	752	65	628
McEwan, Jessie L. (See McEwan, Robert B., J. L., and R. W.)						
McEwan, Richard W. (See McEwan, Robert B., J. L., and R. W.)						
McEwan, Robert B., J. L., and R. W., Whippany, N. J. Paper-board	492,927	Mar. 7	248		62	1408
McEwan, Robert B., J. L., and R. W., Whippany, N. J. Pulp-saving device for paper-machines	495,260	Apr. 11	1194	299	63	240

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McEwan, William. (See Murray, Thomas E., assignor.)						
McEwan, William W., Belvidere, N. J. Machine for forming hollow articles from pulp	490,037	Jan. 17	1662	432	62	371
McEwen, James H. (See Begtrup, Julius, assignor.)						
McEwen, Joseph C., Lochloosa, Fla. Car-coupling	491,185	Feb. 7	204	52	62	787
McFadden, Cornelius A., Jr., Wheeling, W. Va. Puzzle	509,934	Dec. 5	148	34	65	1437
McFarland, Thomas A., Portland, Oreg. Sketching device	490,159	Jan. 17	1860	485	62	412
McFarland, W. M., et al. (See Brower, Asher A., assignor.)						
McFarland, William. (See Stanton, Ephraim W., assignor.)						
McFarlane, Robert, assignor of one-half to W. E. Holmes, Minneapolis, Minn. Recording-weighing-scale	495,751	Apr. 18	1977	490 500	63	398
McFarlane, Robert, assignor of one-half to W. E. Holmes, Minneapolis, Minn. Recording-scale	495,752	Apr. 18	1979	500	63	399
McFarlane, William, Toronto, assignor of one-half to J. Wright, Stratford, Canada. Ventilator	493,873	Mar. 21	1771	452	62	1735
McFarlin, John L., Quincy, Fla. Plant-transplanter	496,745	May 2	565	152	63	721
McFerson, Robert H., Turner, Ill. Device for burning and ejecting cinders	509,624	Nov. 28	2758	665	65	1321
McGaffey, Otis, Jr. (See Gebhardt, William C., assignor.)						
McGahan, Annie L. (See McGahan, Frederick L. and A. L.)						
McGahan, Fred L., Indianapolis, Ind. Apparatus for condensing exhaust-steam	493,733	Mar. 21	1555	396	62	1693
McGahan, Frederick L., Indianapolis, Ind. Oil-burner	501,356	July 11	1322	330 331	64	254
McGahan, Frederick L., Indianapolis, Ind. Oil stove and burner	501,357	July 11	1323	331 332	64	254
McGahan, Frederick L., Indianapolis, Ind. Portable oil-stove	505,631	Sept. 26	2224	563 564	64	1728
McGahan, Frederick L., Indianapolis, Ind. Oil-burner	506,331	Oct. 10	926	230	65	188
McGahan, Frederick L. and A. L., St. Louis, Mo. Safety attachment for oil-burners	508,039	Nov. 7	89	26	65	775
McGahey, Calvert R., assignor of one-half to J. B. McGahey, Elkton, Va. Balanced slide-valve	508,964	Nov. 21	1612	396	65	1091
McGahey, James B. (See McGahey, Calvert R., assignor.)						
McGall, William J., West Orange, and A. W. Hilsinger, Orange, N. J. Hat-brim-curling machine	510,359	Dec. 5	845	204	65	1570
McGary, Daniel, Pittsburg, Pa. Machine for shearing metal	496,167	Apr. 25	2606	656	63	531
McGee, Bernard J., Cambridge, Mass., assignor to Boston Woven Cordage Company, Portland, Me. Machine for making cordage	505,632	Sept. 26	2226	564 565	64	1728
McGee, James, Houston, Tex. Car-brake	510,702	Dec. 12	1460	360 361	65	1697
McGee, Robert D., assignor of one-fourth to J. T. Griffith, Owensborough, Ky. Car-coupling	508,699	Nov. 14	1464	362	65	1048
McGee, Thomas F. (See Cassidy and McGee.)						
McGehee, Abner J., Jackson, Tenn. Water-cooler	506,529	Oct. 10	1272	319	65	256
McGeorge, George W., Breckenridge, and W. C. Banks, Elbert, Colo. Playing-card	506,648	Oct. 10	1443	362	65	289
McGervey, James L. (See Rossiter, Ednor, assignor.)						
McGiffert, James B., Elizabeth, N. J. Electric-lighting system	509,443	Nov. 28	2464	592 593	65	1265
McGill, George W., Riverdale, N. Y. Metallic fastener	498,138	May 23	2806	702	63	1169
McGill, James H., Washington, D. C. Indicator for elevators	497,431	May 16	1696	428	63	956
McGillyra, Lucius A., Baraboo, Wis. Draft-elevator	489,753	Jan. 10	1185	310	62	261
McGinis, Johnson, Emlenton, Pa. Tongue-support for vehicles	492,822	Mar. 7	80	19	62	1373
McGinnis, Arthur J., Pittsburg, Pa. Towel-supporter	507,833	Oct. 31	3482	856	65	705
McGlasson, Robert, Selhurst, England. Screw-propeller	494,014	Mar. 21	2022	515 516	62	1783
McGlew Ore Concentrator Company. (See McGlew, Thomas, assignor.)						
McGlew, Thomas, San Francisco, Cal. Ore-concentrator	505,412	Sept. 19	1811	467 568	64	1637
McGlew, Thomas, San Francisco, Cal., assignor to McGlew Ore Concentrator Company, of California. Ore-concentrator	505,169	Sept. 19	1421	366	64	1564
McGlinchy, John A., Boston, Mass. Salt-box	509,135	Nov. 21	1899	464	65	1146
McGovern, S. D., et al. (See Krogh, Emil C. C., assignor.)						
McGovern, Thomas B., et al. (See Krogh, Emil C. C., assignor.)						
McGowan, Edward O. (See Phelps, Smith P., assignor.)						
McGowan, George, et al. (See Smith, Harper F., assignor.)						
McGowan, John H., Cincinnati, Ohio. System and apparatus for raising water	506,927	Oct. 17	1921	476	65	389
McGowan, Thomson, Cleveland, Ohio. Still-lining	492,419	Feb. 28	2158	539	62	1225
McGowan, Thomson, Cleveland, Ohio. Sheet-packing	492,420	Feb. 28	2159	540	62	1225
McGowan, Thomson, Cleveland, Ohio. Still for the distillation and purification of hydrocarbons	492,421	Feb. 28	2160	540	62	1226
McGowen, Edmund W., Bentonville, Ark. Apparatus for evaporating fruit	508,040	Nov. 7	90	26	65	775
McGowen, John J., Forest Home, N. Y. Spraying-nozzle	502,742	Aug. 8	849	207	64	737
McGrady, John H., Boston, Mass. Checking device	497,594	May 16	1956	490	63	1001
McGrady, John H., Boston, Mass. Game apparatus	506,530	Oct. 10	1273	319	65	256
McGrath, Catharine A., et al., executors. (See Meyers, William H., assignor.)						
McGrath, John, assignor of three-fifths to G. N. Lyman, Sr., Minneapolis, Minn. Combined flax thrasher and card	489,493	Jan. 10	797	210 211	62	183
McGrath, Louis J., et al., executors. (See Meyers, William H., assignor.)						
McGrath, Timothy W., Brooklyn, N. Y. Combination-lock	505,120	Sept. 19	1346	347	64	1551
McGraw, Edwin C., G. W., and H. L., Pittsburg, Pa. Brick-mold	490,160	Jan. 17	1861	485	62	412
McGraw, George W. (See McGraw, Edwin C., G. W., and H. L.)						
McGraw, Henry L. (See McGraw, Edwin C., G. W., and H. L.)						
McGraw, William T. (See Seymour, Frederick H., assignor.)						
McGraw, William T., Plymouth, Mich. Cash register, indicator, and recorder	510,083	Dec. 5	411	91	65	1487
McGregor, David C., East Oakland, Cal. Brake mechanism	507,834	Oct. 31	3484	857	65	705
McGregor, James. (See Edgar, Malcolm W., assignor.)						
McGregor, James R., New York, N. Y. Lamp-support	497,196	May 9	1281	328	63	867
McGregor, James R. and G. O. Perry, Centralia, Wash. Nautical signal	493,283	Mar. 14	808	208	62	1533
McGregor, John A. K., assignor of one-fourth to H. R. Powers, Chicago, Ill. Inclosed conductor for electric railways	500,506	June 27	2901	713 714	63	1937
McGregor, Louis J., and C. M. Carpenter, Hyndman, Pa. Paint-brush	495,702	Apr. 18	1900	477	63	384
McGregor, Peter B., Hillburn, N. Y. Foundry-flask	503,290	Aug. 15	1759	434	64	919
McGregory, Fred S., Revere, assignor to J. M. Orford, Boston, Mass. Push-button switch	497,411	May 16	1661	419	63	950
McGrew, Baldwin, et al. (See Grant, Arthur W., assignor.)						
McGriff, Thomas K. S., Chicago, Ill. Attachment for bicycles	503,058	Aug. 8	1367	337	64	832
McGuire, Bernard C. J., Summer Hill, Pa. Keyed-spike cast-iron railway cross-tie	509,387	Nov. 28	2338	566	65	1240
McGuire, John S., and J. B. Beemer, assignors of one-third to W. P. Taft, East Tawas, Mich. Drying attachment for scrubbing-brushes	503,668	Aug. 22	2379	593	64	1043

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McGuire, Michael A., <i>et al.</i> (See Ricke, George H., assignor.)						
McHardy, Francis P., Chicago, Ill. Velocipede	490,587	Jan. 24	2546	655	62	558
McHarrie, James, Stranraer, assignor of one-half to A. Murdoch, Ballantrae, Scotland.						
Horseshoe	500,150	June 27	2354	569	63	1841
McHugh, Aloysius, McKee's Rocks, Pa. Railway-rail splice	508,900	Nov. 14	1465	362	65	1048
McHugh, James H. (See Campbell and McHugh.)						
McIlhenny, George A. (See Steedley, Robert T., assignor.)						
McIlvoy, Robert. (See Sutton, William, assignor.)						
McIlvried, James R., Kansas City, Mo., assignor to American Silican Company, Omaha, Nebr. Manufacturing retarders for plaster	511,740	Dec. 26	3246		65	2051
McIlwain, John D., assignor to Harvey Steel Car and Repair Works, Chicago, Ill. Oil-tank car	493,940	Mar. 21	1886	480 481	62	1756
McIndoe, George F., assignor of one-half to J. W. McIndoe, Boston, Mass. Mechanism for operating intermittently-revolving cylinders	498,445	May 30	3321	827	63	1276
McIndoe, George F., assignor of one-half to J. W. McIndoe, Boston, Mass. Ink-distributing apparatus for printing-presses	502,575	Aug. 1	544	129 130	64	666
McIndoe, James W. (See McIndoe, George F., assignor.)						
McInerney, George. (See Veronee and McInerney.)						
McIntire, Bartlett, and C. J. Keeford, assignors to Vulcan Iron Works, San Francisco, Cal. Gang-edger	504,231	Aug. 29	3275	818	64	1231
McIntosh, Colin. (See Vogel and McIntosh.)						
McIntosh, George, Stonington, Conn. Signal apparatus	509,545	Nov. 28	2634	637	65	1296
McIntosh, Harry A. and T. W., Brownsville, Ind. Track-sulky	502,984	Aug. 8	1269	310	64	813
McIntosh, John S. (See Stroh and McIntosh.)						
McIntosh, Milton J. (See Stroh and McIntosh.)						
McIntosh, Theodore W. (See McIntosh, Harry A. and T. W.)						
McIntosh, William H., Culbertson, Nebr. Washing-machine	492,823	Mar. 7	80	19	62	1373
McIntyre, Archibald. (See Kelly and McIntyre.)						
McIntyre, Byron F., assignor to J. A. Riley, East Orange, N. J. Bottle-stopper	492,098	Feb. 21	1648	410	62	1108
McIntyre, Duncan T., Mattoon, Ill. Safety self-closing railway-switch	506,662	Oct. 10	1373	344	65	275
McIntyre, John, Jersey City, N. J. Refrigerating-ship	497,595	May 16	1957	490	63	1001
McIntyre, John, Jersey City, N. J. Pipe-fitting	500,412	June 27	2767	682	63	1914
McIntyre, John, Jersey City, N. J. Pipe-fitting	503,432	Aug. 15	1981	491	64	956
McIntyre, John, Jersey City, N. J. Pipe-fitting	503,433	Aug. 15	1983	492	64	956
McIntyre, Malcolm. (See Hay and McIntyre.)						
McIntyre, William M., Wilkesburg, Pa. Speed-pulley	510,283	Dec. 5	741	179	65	1550
McIver, James M., Winchester, Tenn., assignor of one-half to J. Van Wordragen, Cincinnati, Ohio. Rotary steam-engine	490,813	Jan. 31	2940	754 755	62	650
McKaig, Fddy T., Chicago, Ill. Lock	511,738	Dec. 26	3239	795	65	2050
McKay, George F., <i>et al.</i> (See Murray, Jasper, assignor.)						
McKay, Henry S., Boston, Mass. Means for giving reciprocating or other motions	498,721	May 30	3812	939 940	63	1361
McKay, Henry S., Boston, Mass. Electrical reciprocating motor	503,213	Aug. 15	1632	401 402	64	894
McKay, Herdman, <i>et al.</i> (See Huestis, Thomas B., assignor.)						
McKay, John L., assignor of one-half to W. H. Lynn, Minneapolis, Minn. Device for removing dust from store-service	510,872	Dec. 12	1800	443 444	65	1759
McKay, Neil, Paterson, N. J., assignor to C. H. Otis, Brooklyn, N. Y. Snow-plow attachment	505,950	Oct. 3	226	59	65	44
McKee, Albert J. (See Pilling and McKee.)						
McKee, Alexander, Stuart, Iowa. Draft-equalizer	495,994	Apr. 25	2345	593	63	482
McKee, Alfred. (See Fitz Henry, Bolles, and McKee.)						
McKee, David. (See McKee, William and D.)						
McKee, George A. (See Hartmann and McKee.)						
McKee & Harrington. (See Harrington, Charles F., assignor.)						
McKee, Henry H. (See Tinsley, Wyatt H., assignor.)						
McKee, James D., Wooster, Ohio. Wire-stretcher	503,613	Aug. 22	2301	574	64	1028
McKee, Joseph P. (See Dudgeon and McKee.)						
McKee, Martin E. (See Vaughan and McKee.)						
McKee, Martin E., St. Paul, Minn. Automatic brake-adjuster	489,494	Jan. 10	800	211	62	184
McKee, William, Petersville, Canada, and D. McKee, Barron, Wis. Running-gear for wagons	495,903	Apr. 18	2213	558	63	441
McKeen, Thomas L., assignor to I. G. Johnson & Co., New York, N. Y. Buffer for rail-way-cars	490,977	Jan. 31	3213	820	62	703
McKeen, Thomas L., assignor to I. G. Johnson & Co., New York, N. Y. Buffer for cars	491,371	Feb. 7	518	133	62	847
McKeen, Thomas L., assignor to I. G. Johnson & Co., New York, N. Y. Coupling for locomotives	491,903	Feb. 14	1356	337 338	62	1035
McKeen, Thomas L., assignor to I. G. Johnson & Co., New York, N. Y. Car-coupling	492,610	Feb. 28	2476	615	62	1291
McKeen, Thomas L., assignor to I. G. Johnson & Co., New York, N. Y. Vestibule for rail-way-cars	500,413	June 27	2769	683	63	1914
McKeen, Thomas L., assignor to I. G. Johnson & Co., New York, N. Y. Buffer for cars	500,414	June 27	2771	683	63	1915
McKeen, Thomas L., New York, N. Y., assignor to Thurmond Car Coupling Company, of West Virginia. Car-coupling						
McKeever, Marcia, Promise City, Iowa. Washing-machine	493,833	Mar. 21	1713	436	62	1723
McKeggie, James H. (See Bunker, Harman, assignor.)	502,314	Aug. 1	98	23	64	584
McKelvey, James H., Lawrenceville, Ga. Fumigator	501,528	July 18	1581	398	64	319
McKelvey, Samuel F., <i>et al.</i> (See Mayhew, Rubertus G., assignor.)						
McKenna, Michael H. (See Campbell, John N., assignor.)						
McKenna, Thomas F., Syracuse, N. Y. Antirattler for whiffletrees	508,901	Nov. 14	1466	363	65	1048
McKenna, William H., Allegheny, Pa. Lathe	490,918	Jan. 31	3116	799	62	685
McKenney, Franklin S., Detroit, Mich. Drapery hook and pin	500,744	July 4	339	90	64	63
McKenney, Nathan P., Dixon, Ill. Eaves-trough cleaner	510,515	Dec. 12	1111	268	65	1634
McKenney, Richard. (See Dobbins and McKenney.)						
McKenzie, Bernard W., San Diego, Cal. Hose-strap fastener	500,029	June 20	2125	515	63	1790
McKeon, Harry J., Le Roy, Minn. Belt-clamp	511,710	Dec. 26	3192	782	65	2041
McKercher, George, Jonesville, Mich. Wrench	504,232	Aug. 29	3277	819	64	1231
McKesson & Robbins. (See Evans, William J., assignor.)						
McKiernan, Samuel G. (See Wood, Warren, assignor.)						
McKillip, Frank L., Menasha, Wis. Clutch-pulley	500,289	June 27	2569	627 628	63	1879
McKinlay, Daniel S., Albany, N. Y. Bag	489,165	Jan. 3	275	77	62	63
McKinlay, Lincoln. (See Marble, Albert D., assignor.)						
McKinley, Franklin W., assignor of one-half to G. E. Philbrick, Manchester, N. H. Drink-mixer	489,028	Jan. 3	72	20	62	18
McKiane, Haywood W., Mount Olive, N. C. Display-rack	511,639	Dec. 26	3087	754	65	2022

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McKinney, Andrew C., Chatham Run, Pa. Clothes-pounder	491,685	Feb. 14	1016	257	62	969
McKinney, John W., Groesbeck, Tex. Wire-stretcher	499,307	June 13	925	224	63	1566
McKinnie, Frank H. (See Allgire, James R., assignor.)						
McKinnis, Charles. (See Cutler, Richard H., assignor.)						
McKinnon, Angus W., Blanchard Springs, Ark. Saw-gummer	496,948	May 9	912	239	63	802
McKinnon, James W., assignor of two-thirds to S. B. McLeod and A. M. Downs, New York, N. Y. Car-fender	511,640	Dec. 26	3088	754	65	2022
McKinnon, John, Colfax, Wash. Clothes-drier. (Reissue)	11,310	Feb. 28	2730	670	62	1341
McKinnon, John, assignor to W. J. Morden, Chicago, Ill. Railway-frog	489,979	Jan. 17	1552	406	62	349
McKinnon, M. M. (See Poole, James K., assignor.)						
McKnight, Henry F. (See McKnight, Joseph L., assignor.)						
McKnight, John, Fredericton, Canada. Plane-guide	507,378	Oct. 24	2702	664	65	545
McKnight, John B., and J. L. Garland, Otwell, Ind. Wire-fence machine	494,589	Apr. 4	103	24	63	32
McKnight, Joseph L., assignor of one-half to H. F. McKnight, Inghram, Ill. Hen's nest	492,046	Feb. 21	1575	392	62	1093
McKnight, Thomas K., Aurora, Ill. Wheel	491,662	Feb. 14	981	247	62	960
McLachlan, Duncan, <i>et al.</i> (See Avery, Oliver, assignor.)						
McLain, William R., Des Moines, Iowa. Apparatus for removing obstructions	489,541	Jan. 10	873	228	62	198
McLane, Labazure O., Linessville, Pa. Transfer for evaporating-pans	490,858	Jan. 31	3002	770	62	663
McLaren, Hugh A. (See Burdin, William, assignor.)						
McLaren, James, <i>et al.</i> (See Stark, James M., assignor.)						
McLaren, John. (See Mott, Frank M., assignor.)						
McLaren, Nathaniel, New Perth, Canada. Spinning top	494,431	Mar. 28	2704	679	62	1923
McLaren, Raynes L., London, England. Axle-bearing	493,176	Mar. 7	629	159	62	1482
McLaren, William. (See Nisbet and McLaren.)						
McLarty, James P. (See Hackett and McLarty.)						
McLaughlin, William D. (See Phillips and McLaughlin.)						
McLaughlin, William D., and A. Phillips, Corunna, Mich. Low-water alarm	505,720	Sept. 26	2376	600	64	1755
McLaughlin, Charles I., New York, N. Y. Separable spout for metallic vessels	500,933	July 4	619	163	64	113
McLaughlin, Daniel P., Chicago, Ill. Paper-folding machine	490,881	Jan. 31	3043	782	62	671
McLaughlin, George J. (See McBean, McLaughlin, Corkhill, and Baxter.)						
McLaughlin, James, Chicago, Ill. Arc-light carbon	491,124	Feb. 7	94	26	62	767
McLaughlin, James F., Philadelphia, Pa. Commutator-brush and holder	490,081	Jan. 17	1728	451	62	385
McLaughlin, James F., Philadelphia, Pa. Electric heater	490,082	Jan. 17	1730	451	62	385
McLaughlin, James F., Philadelphia, Pa. Battery-jar	492,432	Feb. 28	2162	540	62	1236
McLaughlin, James F., Philadelphia, Pa. Incandescent-lamp socket	493,109	Mar. 7	526	132	62	1463
McLaughlin, James F., Philadelphia, Pa. Armature for electric motors or generators	497,887	May 23	2426	605	63	1103
McLaughlin, James F., Philadelphia, Pa. Electric motor or generator	497,888	May 23	2428	605	63	1103
McLaughlin, James F., Philadelphia, Pa. Electric time-switch	501,291	July 11	1200	{ 303 } 304	64	233
McLaughlin, Joseph, Elmira, Ohio. Casket-carrier	508,179	Nov. 7	323	80	65	818
McLaughlin, Josiah C., Bronson, Kans. Railway-switch	510,144	Dec. 5	509	116	65	1506
McLaughlin, Patrick. (See Dixon and McLaughlin.)						
McLaughlin, William, Spring Valley, Ill. Handle for shovels, forks, &c	499,141	June 6	667	160	63	1507
McLaughlin, William B. (See Keers and McLaughlin.)						
McLaurin, Albert G., Burns, Miss. Bed-rail holder	507,326	Oct. 24	2615	643	65	529
McLauthlin, George T., and J. Naylor, Jr., Boston, Mass. Recording speed-indicator and alarm	506,406	Oct. 10	1066	264	65	214
McLean, Aaron R., assignor to C. L. Yates, Rochester, N. Y. Fruit-gatherer	492,824	Mar. 7	82	19	62	1374
McLean, Thomas N. (See Hammore and McLean.)						
McLean, William S., Saginaw, Mich. Apparatus for administering heated and medicated air	489,029	Jan. 3	73	21	62	19
McLellan, John T., Truro, Canada, assignor of one-half to H. W. Chalfant, Minneapolis, Minn. Locomotive-boiler	493,232	Mar. 7	713	183	62	1498
McLellan, Robert A., assignor of one-half to F. I. Fuller, Portland, Oreg. Cable-grip	501,467	July 11	1485	{ 373 } 374	64	286
McLennan, Charles J., Toronto, Canada. Agitator for mixed paints	500,073	June 20	2198	536	63	1802
McLennan, Charles J., Toronto, Canada. Agitator for mixed paints	510,543	Dec. 12	1191	286	65	1648
McLennan, Charles J., Toronto, Canada. Agitator for mixed paints	510,544	Dec. 12	1192	287	65	1649
McLennan, Charles J., Toronto, Canada. Agitator for mixed paints	510,545	Dec. 12	1193	287	65	1649
McLennan, Charles J., Toronto, Canada. Strainer for mixed paints	510,546	Dec. 12	1195	287	65	1649
McLeod Electric Manufacturing Company. (See McLeod, Joseph N., assignor.)						
McLeod, Joseph N., Brooklyn, assignor to McLeod Electric Manufacturing Company, New York, N. Y. Magneto-electric machine	495,138	Apr. 11	992	249	63	202
McLeod, Joseph N., Brooklyn, assignor to McLeod Electric Manufacturing Company, New York, N. Y. Magneto-electric generator	495,139	Apr. 11	995	249	63	203
McLeod, Sarah B., <i>et al.</i> (See McKinnon, James W., assignor.)						
McLeran, Alvord M., assignor of one-half to O. J. Hogue, Chicago, Ill. Clothes-drier	493,596	Mar. 14	1322	338	62	1632
McLish, Frank. (See Nessel and McLish.)						
McLoon, Patrick, Sulphur Springs, Mo. Lime-kiln	503,059	Aug. 8	1367	338	64	833
McLoughlin, Thomas F., Leavenworth, Kans. Tool-driver	492,693	Feb. 28	2601	644	62	1315
McMackin, Thomas I. (See Bustin and McMackin.)						
McMahan, John M., assignor to H. R. Haxton, Paris, France. Velocipede-wheel	509,549	Nov. 28	2641	{ 638 } 639	65	1298
McMahon, William H., assignor of one-half to S. D. Seymour, South Norwalk, Conn. Tool for shaving hats	504,275	Aug. 29	3346	836	64	1244
McManigal, Frank H., St. Paul, Minn. Letter-box	493,177	Mar. 7	630	159	62	1482
McManis, Dollie O., Hamilton, Ill. Heating-stove	496,790	May 2	636	170	63	732
McManis, James, Blandinsville, Ill. Wire-cloth holder	505,532	Sept. 26	2037	520	64	1692
McManus, Terrence, Sexton, Ind. Shipping-case for honey	495,597	Apr. 18	1730	436	63	356
McManus, Robert, Brooklyn, N. Y. Carbon for electric-arc lamps	504,815	Sept. 12	841	215	64	1441
McManus, Robert, New York, assignor to W. A. Powell, Brooklyn, N. Y. Carbon for electric-arc lamps	504,845	Sept. 12	891	229	64	1452
McManus, Thomas. (See Boudrie and McManus.)						
McManus, William S., and J. A. Hock, South Chester, Pa. Method of and means for screwing sockets upon pipes	502,691	Aug. 1	756	182	64	705
McManus, William S., and J. A. Hock, South Chester, Pa. Screwing sockets upon pipes	506,531	Oct. 10	1274	319	65	256
McMaster, Joseph M., Rochester, N. Y. Car-coupling	502,375	Aug. 1	211	50	64	604
McMaster, Merritt, Batavia, Ill. Bending-machine	505,475	Sept. 26	1912	492	64	1670
McMeen, John D., Mount Vernon, Ill. Device for assisting penmanship	499,029	June 6	504	118	63	1479
McMenamin, Peter, Jersey City, N. J. Pencil-sharpener	502,008	July 25	2346	588	64	471
McMichael, Abner, and F. B. Wildman, Norristown, Pa. Stop-motion for knitting-machines	498,076	May 23	2714	679	63	1152
McMichael, Abner, and F. B. Wildman, Norristown, Pa. Automatic rib-knitting machine	500,151	June 27	2354	{ 569 } 570	63	1841

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McMichael, Abner, and F. B. Wildman, Norristown, Pa. Circular-knitting machine	508,965	Nov. 21	1613	397	65	1091
McMichael, William, Woonsocket, R. I. Loose-reed motion for power-looms	508,041	Nov. 7	92	26	65	776
McMillan, Alfred F., and T. Gormley, Benicia, Cal. Gang-plow	490,210	Jan. 17	1947	510 511	62	428
McMillan, Frederick R., Jacksonville, Ill. Tube-valve	509,670	Nov. 28	2825	685	65	1336
McMillan, Hugh. (See Wilkes, Gilbert, assignor.)						
McMillan, Moses C., Gurneyville, Ohio. Check-row attachment	495,429	Apr. 11	1455	367 368	63	247
McMillan, Moses C., Gurneyville, Ohio. Check-row attachment	498,292	May 30	3079	766	63	1232
McMillen, Charles W. and H. F., assignors of one-half to C. S. Wallace, New Castle, Pa. Car-coupling	502,631	Aug. 1	640	153	64	685
McMillen, Howard F. (See McMillen, Charles W. and H. F.)						
McMonagle, Bernard, Philadelphia, Pa. Car-coupling	495,508	Apr. 18	1587	399	63	332
McMullen, John, H. Krusi, and H. S. Wood, San Francisco, Cal. Canal-digger	494,112	Mar. 21	2188	559	62	1813
McMullen, Peter, assignor of one-half to R. B. Fitzgerald, Buffalo, N. Y. Car-coupling	509,388	Nov. 28	2339	566 567	65	1240
McMurray, Thomas J., Marion, Ohio. Sully	497,596	May 16	1958	490	63	1001
McMurrin, Joseph, Shoshone, Idaho. Track-jack	504,935	Sept. 12	1031	265	64	1479
McMurry, John, Jr., assignor of one-fourth to C. S. Hirst, Philadelphia, Pa. Electric alarm for hotels	492,694	Feb. 28	2603	644	62	1316
McMurtry, George G., Allegheny, Pa. Sheet-metal package	509,136	Nov. 21	1900	465	65	1146
McNab, John H. (See Linscott, John M., assignor.)						
McNair, Herbert D. (See Hawes and McNair.)						
McNalley, Michael, St. Louis, Mo. Forceps	509,671	Nov. 28	2836	625	65	1336
McNally, John J., California, Mo. Telephone system	511,739	Dec. 26	3343	796	65	2051
McNamara, Patrick J., and J. L. Andrews, Sumner, Mo. Hay-stacker	495,171	Apr. 11	1053	262	63	213
McNaney, John, Elmira, N. Y. Attachment for bar-room counters	498,388	Jan. 8	621	168	62	134
McNary, John A. (See Tyler, George, assignor.)						
McNaughton, James, Waukesha, Wis. Fluid-distribution apparatus	495,904	Apr. 18	2214	558	63	442
McNaughton, James, Waukesha, Wis., assignor to J. S. Leslie, Paterson, N. J. Locomotive fire-kindling apparatus	508,739	Nov. 14	1222	304	65	1004
McNeal, Charles E., East Springfield, Pa. Grain-separator	499,468	June 13	1220	291	63	1618
McNear, George W., Oakland, Cal. Car construction	495,261	Apr. 11	1195	299	63	240
McNear, George W., Oakland, Cal. Closed conduit for electric railways	505,605	Sept. 26	2176	550	64	1719
McNeil, Alexander J. (See Planthaber, Newton J., assignor.)						
McNeil, Archibald B., Sioux City, Iowa. Vehicle-brake	505,903	Oct. 3	163	42	65	32
McNeil, Chester, assignor to Union Special Sewing Machine Company, Chicago, Ill. Feeding mechanism for sewing-machines	506,532	Oct. 10	1275	319	65	256
McNeill, Charles D., and F. E. Huck, Victoria, Tex.; said McNeill assignor to said Huck. Hay-press	495,826	Apr. 18	2089	527	63	419
McNeill, Samuel C., Montreal, assignor of one-half to P. Clark, Richmond, Canada. Cut-off valve for hydrants and water-pipes	496,580	May 2	294	79	63	673
McNeill, Thomas E., New York, N. Y. Steam-boiler	489,712	Jan. 10	1115	287 288	62	247
McNeill-Tinder Electric Company. (See McNeill and Tinder, assignors.)						
McNeill, William, and J. H. Tinder, assignors to McNeill-Tinder Electric Company, Winchester, Ky. Switch for electric circuits	503,157	Aug. 15	1544	379	64	877
McNeir, George, <i>et al.</i> (See Toucey, Ferris D., assignor.)						
McNellis, Charles, Chicago, Ill. Clutch for carbon rods	506,716	Oct. 17	1565	391	65	323
McNiece, Thomas B. (See Rex and McNiece.)						
McNorton, John T. (See Bailey and McNorton.)						
McNulty, William B. (See Seitz and McNulty.)						
McNutt, John C., <i>et al.</i> (See Dobbins and McKenney, assignors.)						
McOwen, Anthony, <i>et al.</i> (See Gambee, William Y., assignor.)						
McPhail, James H., <i>et al.</i> (See Hynes, Julius W., assignor.)						
McPhail, John D. (See Jones and McPhail.)						
McPhee, Eugene, Lead City, S. D. Two-wheeled vehicle	491,125	Feb. 7	95	26	62	767
McPherson, Horace, Crete, Ill. Hay rake and loader	492,825	Mar. 7	83	19, 20	62	1374
McPherson, William. (See Peck and McPherson.)						
McPheters, Octavia, Denver, Colo. Douche-pan	499,643	June 13	1501	360	63	1667
McPike, William C., <i>et al.</i> (See Hume, Thomas J., assignor.)						
McQuarrie, James L., assignor to American Bell Telephone Company, Boston, Mass. Telephone central-station circuit	492,484	Feb. 28	2267	565	62	1247
McQuarrie, James L., assignor to American Bell Telephone Company, Boston, Mass. Telephone circuit and apparatus	502,466	Aug. 1	361	87	64	632
McQuarrie, William L., Boston, Mass. Car-coupling	489,195	Jan. 3	329	90	62	74
McQueen, Daniel, assignor to G. Miller, Jr., Toledo, Ohio. Time stock-feeder	493,219	Mar. 7	690	177	62	1494
McQueen, Daniel P., Schenectady, N. Y. Steam-boiler	490,303	Jan. 24	2108	549	62	472
McQuillen, Owen, assignor of one-half to W. A. Verner, Toronto, Canada. Calked horse-shoe	502,985	Aug. 8	1271	311	64	813
McQuillen, William, Woodland, Pa. Foot-rest for rocking-chairs	503,246	Aug. 15	1685	414	64	903
McRae, Alexander. (See Harmon and McRae.)						
McRae, Donald. (See Harmon and McRae.)						
McRae, John H., Chicago, Ill. Iron-pipe-heating device	494,484	Mar. 28	2782	698	62	1937
McRanolds, John A., assignor of one-half to E. Bradley, Nashville, Tenn. Saw-dressing device	495,946	Apr. 18	2273	573	63	453
McRee, Charles S., Philadelphia, Pa. Hook for cots or hammocks	499,644	June 13	1502	361	63	1667
McRoberts, James G., St. Louis, Mo. Steel-founding	504,361	Sept. 5	69	19	64	1284
McSherry Manufacturing Company. (See Nugent and Gilbert, assignors.)						
McTammany, John, Spencer, Mass. Balloting device	502,743	Aug. 8	850	207	64	737
McTammany, John, Spencer, Mass. Note-recording machine	502,744	Aug. 8	853	208	64	738
McTammany, John, Spencer, Mass. Voting-machine	502,745	Aug. 8	857	208 209	64	738
McVay, Charles E., <i>et al.</i> (See Garrigus, Charles H., assignor.)						
McVeigh, Thomas, Grosvenor Dale, Conn., assignor of one-half to G. Draper & Sons, Hope-dale, Mass. Knot-tying device	498,185	May 23	2878	718	63	1182
McVey, John J., and A. Rigling, Philadelphia, Pa. Book-support	504,233	Aug. 29	3279	819	64	1231
McVey, John M., Lima, Ohio. Basin-clamp	493,178	Mar. 7	632	160	62	1482
McWade, John, Chicago, Ill. Grate-basket	507,075	Oct. 17	2150	533	65	430
McWhorter, Francis S., Norfolk, Va. Seeder	504,500	Sept. 5	318	81, 82	64	1329
McWilliams, Anderson W., Kossé, Tex. Animal-poke	505,603	Oct. 10	1375	345	65	276
McWilliam, James E., Hubbardston, Mass. Condensing-roll for wool-carding machines	511,641	Dec. 26	3090	754	65	2022
Mead, Albert G., assignor to W. B. H. Dowse, trustee, Boston, Mass. Glove-fastener stud	490,411	Jan. 24	2278	591	62	506

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Mead, Edwin D., Phelps, N. Y., assignor to Crown Manufacturing Company, of New York. } Seeder.....	492,358	Feb. 21	2058	{ 513 514 }	62	1192
Mead, Erastus F., New York, N. Y. Drying apparatus.....	505,116	Sept. 19	1338	345	64	1550
Mead, Frank H., assignor of one-half to D. D. Rogers, Onawa, Iowa. Weather-strip.....	500,503	June 27	2898	712	63	1937
Mead, John A. (See Johnson, Charles, assignor.)						
Mead, John A., and C. Johnson, Rutland, Vt. Quick-return lifting-jack.....	493,336	Mar. 14	895	229	62	1548
Mead, Theodore H., et al. (See Crowell, Luther C., assignor.)						
Mead, Theodore H., et al. (See Shattuck, Edwin L., assignor.)						
Mead, Theodore H., et al. (See Sheldon, Edward P., assignor.)						
Meade, Alfred N., et al. (See Hobbs, Davis D., assignor.)						
Meade, Robert A. P., Sayre, Pa. Coat-sleeve protector.....	489,567	Jan. 10	911	238	62	205
Meadowcroft, William H., New York, N. Y. Rocket-stand.....	499,790	June 30	1746	422	63	1723
Meadows, Jesse A., assignor to W. H. Ayres, Sackett's Harbor, N. Y. Rack for firearms.....	505,320	Sept. 19	1662	429	64	1609
Meady, Albert C., Somerville, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Safety-valve.....	499,843	June 20	1838	447	63	1738
Meaher, Joseph A., Cleveland, Ohio. Toy base-ball game.....	491,247	Feb. 7	298	76	62	806
Mealer, James A., Lampasas, Tex. Baling-press.....	510,434	Dec. 12	980	234	65	1610
Mealy, John J., assignor of one-half to M. M. Hart, Iola, Kans. Corn-harvester.....	490,790	Jan. 31	2907	747	62	643
Means, William G., et al. (See Tripp, Thomas, assignor.)						
Mears, Frank D. (See Rivenburgh, Alvin, assignor.)						
Mease, George R., Upper Sandusky, Ohio. Grave border and protector.....	510,696	Dec. 12	1451	358	65	1696
Mebane, James A., Wytheville, Va. Lathe for dressing commutators.....	505,838	Oct. 3	55	14, 15	65	13
Meckersheimer, Henry C. (See Sittler, Edwin J., assignor.)						
Mecky, August, Philadelphia, Pa. Bicycle-saddle.....	501,230	July 11	1110	282	64	217
Medart, Frederick, St. Louis, Mo. Striking-bag drum.....	489,750	Jan. 10	1181	309	62	260
Medart, Philip, assignor of one-half to W. Medart, St. Louis, Mo. Machine for grinding } pulley-shafts and their couplings.....	492,035	Feb. 21	1643	{ 408 409 }	62	1107
Medart, William. (See Medart, Philip, assignor.)						
Meddins, Charles H., Omaha, Nebr. Biotoscope.....	495,822	Apr. 18	2085	526	63	418
Medina, Frank P., San Francisco, Cal. Telegraph-relay.....	511,244	Dec. 19	2417	589	65	1887
Medina-Santurio, Bonifacio, Sevrans, France. Filter.....	509,441	Nov. 28	2460	592	65	1264
Medley, John A., assignor of one-half to R. H. C. Henderson, Comanche, Tex. Wash- boiler.....	490,575	Jan. 24	2530	651	62	555
Medlin, Logan M., Latham, Mo. Traction-engine.....	491,846	Feb. 14	1267	{ 314 315 }	62	1017
Meech, Alfred H., Chatham, N. Y. Bottle package or packing-box.....	492,305	Feb. 21	1976	492	62	1177
Meech, Alfred H., Chatham, N. Y. Bottle-wrapper.....	492,306	Feb. 21	1978	492	62	1177
Meech, Alfred H., Chatham, N. Y. Fruit-box.....	493,779	Mar. 21	1627	414	62	1707
Meech, Alfred H., Chatham, N. Y. Fruit-box.....	495,421	Apr. 11	1438	363	63	284
Meech, Alfred H., Chatham, N. Y. Bottle-wrapper.....	495,422	Apr. 11	1440	363	63	284
Meeker, George, Newark, N. J. Apparatus for curing diseases of the skin, blood, &c.....	508,231	Nov. 7	413	100	65	835
Meeker, Walter C., Jersey City, N. J. Switch-stand.....	490,576	Jan. 24	2531	652	62	555
Meeks, S. J., et al. (See Bond, Nathan O., assignor.)						
Meem, James C., Buena Vista, Va. Knockdown box or crate.....	494,215	Mar. 28	2363	597	62	1861
Meer, Peter, München-Gladbach, Germany. Valve-gear.....	506,438	Oct. 10	1120	279	65	226
Meernoth, Gustav, Brooklyn, assignor to Campbell & Bayly, New York, N. Y. Last.....	498,478	May 30	3373	843	63	1286
Meerthof, Charles, Philadelphia, Pa. Corkscrew.....	509,819	Nov. 28	3073	741	65	1381
Megill, Edward L., Brooklyn, N. Y. Feed-gage for printing-presses.....	511,154	Dec. 19	2270	556	65	1860
Megquier, George H., Anacortes, Wash. Shingle-package.....	495,423	Apr. 11	1442	364	63	285
Megquier, George H., Anacortes, Wash. Packing shingles and machine therefor.....	495,424	Apr. 11	1443	364	63	285
Mehling, John A., assignor of one-half to S. D. Dodge, Cleveland, Ohio. Street-car. (Re- issue).....	11,346	June 20	2251	548	63	1811
Mehren, Jacob F., Chicago, Ill. Means for protecting the carbon-holders of electric-arc lamps.....	502,465	Aug. 1	359	87	64	632
Mehren, Jacob F., Chicago, Ill. assignor to Gamewell Fire-Alarm Telegraph Company, New York, N. Y., and Chicago, Ill. Automatic cut-out for electric signaling-boxes.....	494,786	Apr. 4	420	105	63	82
Mehren, Jacob F., Chicago, Ill. assignor to Gamewell Fire-Alarm Telegraph Company, New York, N. Y., and Chicago, Ill. Automatic cut-out for electric signaling mechan- isms.....	494,787	Apr. 4	421	105	63	82
Mehring, Theodore H., Yankton, S. D. Beer-faucet attachment.....	498,357	May 30	3191	794	63	1251
Mehring, Theodore H., Yankton, S. D. Trace-buckle.....	505,473	Sept. 26	1910	492	64	1669
Mehrten, George. (See Rickert, Anton, assignor.)						
Meier, John W., Shullsburg, Wis. Concentrating and separating ores.....	497,804	May 23	2282	.....	63	1077
Meigs, Church, et al. (See James, Homer, assignor.)						
Meigs, Edgar L., Durham, Conn. Car-coupling.....	507,376	Oct. 24	2701	663	65	545
Meigs, Montgomery C., Lafayette, Ind. Excavator.....	491,577	Feb. 14	847	{ 214 215 }	62	933
Meily, Ringgold W., and G. W. Buchanan, Lima, Ohio. Cane.....	489,385	Jan. 3	617	{ 166 167 }	62	133
Meinhold, Theodore, Klingenthal, Germany. Zither attachment.....	498,561	May 30	3523	871	63	1311
Meinke, Franz, Cörlin, Germany. Padlock.....	494,340	Mar. 28	2560	645	62	1897
Meisch, Michael F., Rochester, N. Y. Vehicle-wheel.....	498,479	May 30	3374	841	63	1286
Meisel, Francis, Boston, Mass. Machine for cutting into strips and reeling or winding pa- per.....	492,964	Mar. 7	304	77, 78	62	1419
Meissner, Moritz P., Chemnitz, Germany. Cloth stretching and drying machine.....	505,117	Sept. 19	1339	345	64	1550
Meissner, Waldemar, Königsberg, assignor to Siemens & Halske, Berlin, Germany. Sys- tem of electrical distribution.....	497,755	May 16	2207	{ 553 554 }	63	1048
Meister, Herman, New York, N. Y. Chuck and drill.....	492,733	Feb. 28	2660	659	62	1328
Meitzler, George R., Cincinnati, Ohio. Silver cleaning and polishing compound.....	503,612	Aug. 22	2300	.....	64	1028
Meitzler, George R., Cincinnati, Ohio, assignor of one-half to W. H. Osborne, Prince's Bay, N. Y. Electrically-heated soldering-iron.....	490,256	Jan. 17	2020	528	62	442
Meitzler, George R., Cincinnati, Ohio, assignor of one-half to W. H. Osborne, Prince's Bay, N. Y. Electrically-heated soldering-iron. (Reissue).....	11,364	Sept. 5	635	161	64	1390
Mela, Ferdinand H., New York, N. Y. Fireproof partition.....	497,383	May 16	1617	409	63	942
Melan, Joseph, Brünn, Austria-Hungary. Vault for ceilings, bridges, &c.....	505,054	Sept. 12	1226	316	64	1515
Melber, Frederick, Ross, Pa. Roadway.....	511,023	Dec. 19	2053	509	65	1817
Melchior, Alfred, Sydney, New South Wales. Animal-shears.....	492,818	Mar. 7	72	17	62	1372
Meldrum, William H., and H. R. Shaw, Peterborough, Canada. Rotary scalper.....	494,683	Apr. 4	241	61	63	49
Melfi, Domenico, New York, N. Y. Padlock.....	489,022	Jan. 3	65	19	62	17
Melin, August. (See Pedersen and Melin.)						
Mellen, Luther E., Middlebury, Vt. Pliers.....	499,638	June 13	1493	358	63	1666
Melling, John W., Wigan, England. Reversing-gear for engines.....	489,130	Jan. 3	226	61	62	52
Melling, Jacob, Waverly, Md. Unhairing hides.....	490,791	Jan. 31	2910	.....	62	643
Mellinger, Jacob, Baltimore, Md. Soap for removing hair from the skin.....	499,134	June 6	659	63	1505

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Mellinger, Jacob, Baltimore, Md. Manufacturing artificial wood	504,988	Sept. 12	1127	-----	64	1496
Mellor, Benjamin, Ellicott City, Md. Pump	510,983	Dec. 19	1999	494	65	1807
Mellor, Hiram L., Lawrence, Mass. Rotary paper-cutter	508,576	Nov. 14	989	242	65	958
Mellor, William W., Seacombe, and J. Shaw, Huddersfield, England. Vessel for the conveyance of milk	502,005	July 25	2343	587	64	471
Melvin, David N., Linoleumville, N. Y. Apparatus for the manufacture of linoleum	509,088	Nov. 21	1825	447	65	1132
Melvin, Charles H., assignor, by mesne assignments, of two-thirds to himself and G. E. Gee, Minneapolis, Minn. Stove	493,594	Mar. 14	1318	337	62	1631
Melzer, Manuel S., Philadelphia, Pa. Shoe-rest	490,915	Jan. 31	3113	798	62	684
Meminger, Herman. (See Hirsch and Meminger.)						
Memminger, Christopher G., Charleston, S. C. Pot-scraper	490,577	Jan. 24	2532	652	62	556
Mendelson, David, New York, N. Y. Watchmaker's staking-tool	506,010	Oct. 3	326	86	65	64
Mendheim, Georg. (See Bauer and Mendheim.)						
Menefee, Charles M., and G. Ertel, Fort Wayne, Ind. Cistern-cover	505,055	Sept. 12	1227	316	64	1515
Ménégal, Napoléon D., assignor of one-half to A. Henderson and H. Williams, Leadville, Colo. Non-conducting and waterproof cement	507,662	Oct. 31	3206	-----	65	653
Menehan, William H., Kingston, N. Y. Combination-tool	502,525	Aug. 1	471	113	64	653
Menge, Bernard J. M., Cincinnati, Ohio. Lamp	489,488	Jan. 10	788	209	62	181
Menge, Joseph, New Orleans, La. Polishing rice	493,509	Mar. 14	1164	297	62	1600
Mengel, Clarence R., Louisville, Ky. Packing-box	503,976	Aug. 29	2859	717	64	1153
Mengelbier, Oscar, Penco, Chile. Apparatus for refining sugar in molds	505,118	Sept. 19	1342	346	64	1551
Mengeringhausen, William H. von, York, Pa. Speed-governor	499,242	June 13	823	196	63	1548
Menier, Henri, Paris, France. Heel	502,571	Aug. 1	539	128	64	665
Menking, Ernest A., Pittsburg, Pa. Steam actuated valve	500,407	June 27	2760	680	63	1913
Mentzer, Alonzo M., assignor of one-half to J. B. Haller, Andrews, Ind. Horse-detacher	505,056	Sept. 12	1230	316	64	1515
Menze, Louis, assignor of one-half to P. Krebs, Berlin, Germany. Spirit-level	506,855	Oct. 17	1794	451	65	365
Menzie, Thomas. (See Menzie, William and T.)						
Menzie, William and T., Westmoreland, Pa. Potato-digger	511,348	Dec. 26	2604	633	65	1934
Mercer, Andrew, Brooklyn, N. Y. Apparatus for regulating the temperature of hot-water-heating systems	510,183	Dec. 5	573	133	65	1518
Mercer Bros. & Co. (See Mercer and Greatrex, assignors.)						
Mercer, Edward and W. Greeley, Colo. Potato-digger	498,885	June 6	242	56	63	1435
Mercer, John S., and W. Greatrex, assignors to Mercer Bros. & Co., Alliston, Canada. Har- vester-binder	503,798	Aug. 22	2580	{ 642 643 }	{ 64 64 }	{ 1083 1083 }
Mercer, William. (See Mercer, Edward and W.)						
Mercer, William H. (See Butts, Henry E., assignor.)						
Mercer, William R., Terre Haute, Ind. Tilting seat for bicycles	491,578	Feb. 14	849	215	62	933
Meredith, James G. (See Martin and Meredith.)						
Meredith, Jaquelin M., Jr., Norfolk, Va. Cloth-measuring machine	492,734	Feb. 28	2662	{ 659 660 }	{ 62 62 }	{ 1328 1328 }
Mergaert, Edouard R. (See Croes, Mergaert, and Lapin.)						
Mergenthaler, Jacob, et al. (See Moehn, John N., assignor.)						
Mergenthaler Linotype Company. (See Mergenthaler, Ottmar, assignor.) (Reissue.)						
Mergenthaler, Ottmar, Baltimore, Md., assignor, by mesne assignments, to Mergenthaler Linotype Company, of New Jersey. Machine for producing type-bars and matrices there- for. (Reissue)	11,393	Nov. 28	3140	{ 759 760 761 }	{ 65 65 65 }	{ 1393 1393 1393 }
Mergenthaim, Alexander. (See Rosenthal, Emanuel M., assignor.)						
Meriden Bronze Company. (See Johnson, Nis, assignor.)						
Meriden Curtain Fixture Company. (See Arnold, Benjamin, assignor.)						
Meriden Curtain Fixture Company. (See Dennis, Alexander E., assignor.)						
Meriden Machine Tool Company. (See Cheney, Walter L., assignor.)						
Mériteus, Auguste L. de, Paris, France. Element for galvanic batteries	496,743	May 2	561	151	63	720
Merkel, Valentin, Wood Haven, N. Y. Coffee mill and box	506,369	Oct. 10	991	246	65	200
Merker, Herman C., assignor of one-half to Salter Brothers, Rochester, N. Y. Umbrella- stand	492,359	Feb. 21	2061	514	62	1193
Merle, Apollonie. (See Merle, Emilie and A.)						
Merle, Emilie and A., Paris, France. Bust-form	500,926	July 4	610	159	64	112
Merralls, William A., San Francisco, Cal. Crushing or grinding mill	501,433	July 11	1437	360	64	290
Merrell, Isaac L. (See Savage, Richard, assignor.)						
Merriam, Henry C., Fort Logan, Colo. Knap-sack	494,216	Mar. 28	2364	598	62	1861
Merriam, Iram Z., Whitewater, Wis. Damper-regulator	499,435	June 13	1172	280	63	1609
Merriam, Iram Z., Whitewater, Wis. Bridle-bit	506,244	Oct. 10	779	192	65	159
Merrick, Frank W., Boston, Mass. Feed mechanism for sewing-machines	490,854	Jan. 31	2996	{ 767 768 }	{ 62 62 }	{ 661 661 }
Merrick, Frank W., Boston, Mass. Work-support for sewing-machines	490,855	Jan. 31	2998	{ 768 769 }	{ 62 62 }	{ 662 662 }
Merrick, Frank W., Boston, Mass. Thread-carrier mechanism for sewing-machines	490,856	Jan. 31	2999	769	62	662
Merrick, Frank W., Boston, Mass. Sewing-machine	490,857	Jan. 31	3000	770	62	662
Merrick, George H., San Francisco, Cal. Bushing and fancet	502,572	Aug. 1	540	129	64	665
Merrick, George H., San Francisco, Cal. Bushing and fancet for barrels	503,767	Aug. 22	2538	631	64	1074
Merrick Sewing Machine Company. (See Woodward and Hatch, assignors.)						
Merrifield, Leonard L., Franklin, Mass., J. T. Westcott, Cramer's Hill, N. J., and W. H. Pearson, Jr., Toronto, Canada. Apparatus for manufacturing gas	505,714	Sept. 26	2367	598	64	1754
Merrill, Alfred K. (See Goldsmith and Merrill.)						
Merrill, Anson P., assignor to himself, C. A. Hicks, Fall River, W. J. and E. L. Harrison, Boston, Mass. Alarm-bell	492,410	Feb. 28	2147	536	62	1233
Merrill, Bela G., Oak Park, Ill. Leveling apparatus	494,876	Apr. 4	563	142	63	109
Merrill, Charles C., Riverside, Cal. Joint	499,135	June 6	660	158	63	1506
Merrill, Edward C., Farmington, Me. Artificial tooth	495,898	Apr. 18	2207	556	63	440
Merrill, Ferdinand B., and G. H. Lovell, Yarmouth, Me. Means for cooking canned goods	498,358	May 30	3190	795	63	1251
Merrill, Ferdinand B., and G. H. Lovell, Yarmouth, Me. Soldering-iron for cans	498,359	May 30	3192	795	63	1251
Merrill, Frank W., Deering, Me. Ice-cream cooler and freezer	501,894	July 18	2173	539	64	423
Merrill, Hattie, Westphalia, Kans. Clothes-pin	505,407	Sept. 19	1801	465	64	1635
Merrill, Henry. (See Harris, John C. F., assignor.)						
Merrill, Joseph P. (See David and Rath, assignors.)						
Merrill, Thomas L., Oakland, Cal. Automatic car-ventilator	496,270	Apr. 25	2768	693	63	561
Merrill, William, East Saginaw, Mich. Stave-finishing machine	496,271	Apr. 25	2769	693	63	562
Merriman, Edward A., Madison, Me. Automatic brake	502,526	Aug. 1	471	113	64	653
Merrithew, Levi A., Brockton, assignor of one-half to E. L. Drew, Boston, Mass. Rand- turning machine	494,378	Mar. 28	2627	659	62	1909
Merritt, Charles B., Gouverneur, N. Y. Pipe-wrench	511,155	Dec. 19	2271	556	65	1860
Merritt, Frank W. (See Fitzgerald, Edward E., assignor.)						
Merritt, Frank W., assignor to Electric Motor Company, Duluth, Minn. Electric pump ..	510,921	Dec. 19	1880	461	65	1786

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Merritt, Henry W. (See Merritt, Mortimer G. and H. W.)						
Merritt, Henry W., assignor to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	489,871	Jan. 10	1345	351	62	294
Merritt, Henry W., assignor to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	505,057	Sept. 12	1231	317	64	1516
Merritt, Henry W., assignor to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	505,058	Sept. 12	1233	317	64	1516
Merritt, John W. (See Rideout and Merritt.)						
Merritt, Louis G., Lockport, N. Y. Polygonal lathe	504,812	Sept. 12	832	<div style="display: inline-block; vertical-align: middle;">211 212 213 214</div>	<div style="display: inline-block; vertical-align: middle;">64</div>	<div style="display: inline-block; vertical-align: middle;">1439</div>
Merritt Manufacturing Company. (See Merritt, Henry W., assignor.)						
Merritt Manufacturing Company. (See Merritt, Mortimer G., assignor.)						
Merritt Manufacturing Company. (See Merritt, Mortimer G. and H. W., assignors.)						
Merritt Manufacturing Company. (See Merritt and Burnett, assignors.)						
Merritt, Mortimer G., Springfield, Mass., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	496,320	Apr. 25	2858	713	63	578
Merritt, Mortimer G., Springfield, Mass., assignor to Yost Writing Machine Company, New York, N. Y. Type	502,736	Aug. 8	841	204	64	735
Merritt, Mortimer G., assignor to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	510,984	Dec. 19	2001	494	65	1808
Merritt, Mortimer G., assignor to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	510,985	Dec. 19	2002	495	65	1808
Merritt, Mortimer G., and W. E. Burnett, assignors to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	505,059	Sept. 12	1235	318	64	1517
Merritt, Mortimer G. and H. W., assignors to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	511,305	Dec. 19	2519	613	65	1905
Merritt, William H. (See Chapman, George T., assignor.)						
Morrow, Joseph M., Merrow, Conn. Tension device for sewing-machines	493,871	Mar. 21	1769	451	62	1734
Morrow, Joseph M., Merrow, Conn. Border or edging for fabrics	507,234	Oct. 24	2455	605	65	498
Morrow, Joseph M., Merrow, Conn. Edging for fabrics and forming same	507,235	Oct. 24	2457	606	65	498
Morrow, Joseph M., Merrow, Conn. Edging or border	507,236	Oct. 24	2459	606	65	499
Morrow, Joseph M., Merrow, and W. H. Stedman, Norwich, Conn.; said Stedman assignor to said Merrow. Needle-carrier for sewing-machines and guiding device therefor	497,006	May 9	998	257	63	816
Morrow, Joseph M., Merrow, and W. H. Stedman, Norwich, Conn.; said Stedman assignor to said Merrow. Crocheting-machine	505,275	Sept. 19	1582	<div style="display: inline-block; vertical-align: middle;">412 413</div>	<div style="display: inline-block; vertical-align: middle;">64</div>	<div style="display: inline-block; vertical-align: middle;">1594</div>
Morrow, Joseph M., Merrow, and J. T. Collins, Norwich, Conn.; said Collins assignor to said Merrow. Overseaming sewing-machine	497,587	May 16	1940	<div style="display: inline-block; vertical-align: middle;">487 488</div>	<div style="display: inline-block; vertical-align: middle;">63</div>	<div style="display: inline-block; vertical-align: middle;">999</div>
Merry, Elwin J., Magog, Canada. Cyclometer	491,739	Feb. 14	1099	278	62	964
Merry, Elwin J., Magog, Canada, assignor of one-half to H. R. Merry. Thill-coupling	503,910	Aug. 22	2739	687	64	1114
Merry, Horace R. (See Merry, Elwin J., assignor.)						
Merry, Thomas, Chicago, Ill. Bag-holder	490,578	Jan. 24	2533	652	62	556
Merry, Thomas, Chicago, Ill. Soldering-iron	506,011	Oct. 3	327	86	65	64
Mersereau, Edgar W., Brooklyn, N. Y. Spring-cover	496,979	May 9	951	249	63	809
Mershon, Edward C., Saginaw, Mich. Band sawing-machine	503,768	Aug. 22	2540	<div style="display: inline-block; vertical-align: middle;">631 632 633</div>	<div style="display: inline-block; vertical-align: middle;">64</div>	<div style="display: inline-block; vertical-align: middle;">1075</div>
Mershon, Edward C., Saginaw, Mich. Band sawing-machine	505,080	Sept. 12	1281	<div style="display: inline-block; vertical-align: middle;">330 331</div>	<div style="display: inline-block; vertical-align: middle;">64</div>	<div style="display: inline-block; vertical-align: middle;">1525</div>
Mershon, George B., Jr., Secane, assignor to G. B. Mershon, Philadelphia, Pa. Garment-hook	491,435	Feb. 7	619	155	62	866
Mersick, Charles S. (See Alden, David A., assignor.)						
Mersmann, Benjamin F., Moberly, Mo. Washboiler	491,436	Feb. 7	620	155	62	866
Mertes, August, assignor to A. Mertes Manufacturing Company, Allegheny, Pa. Gear-cutting machine	498,720	May 30	3807	<div style="display: inline-block; vertical-align: middle;">938 939</div>	<div style="display: inline-block; vertical-align: middle;">63</div>	<div style="display: inline-block; vertical-align: middle;">1360</div>
Mertsheimer, Frederick, Cheyenne, Wyo. Exhaust-nozzle	493,510	Mar. 14	1165	298	62	1600
Mertsheimer, Frederick, Cheyenne, Wyo. Car-mover	498,521	May 30	3450	856	63	1298
Merunka, August. (See Schmidt, Merunka, and Werner.)						
Merz, Frank J., Seattle, Wash. Milk-cooler	503,868	Aug. 22	2672	669	64	1101
Merz, Henry, Pollasky, Cal. Plane	511,349	Dec. 26	2605	633	65	1934
Merz, Theodore C., Detroit, Mich. Gelatine-circulating device	489,539	Jan. 10	871	228	62	197
Merz Universal Extractor and Construction Company. (See Preston, Charles W., assignor.)						
Meserve, John W., and W. Morse, assignors to Yale & Towne Manufacturing Company, Stamford, Conn. Clutch	495,425	Apr. 11	1447	<div style="display: inline-block; vertical-align: middle;">364 365</div>	<div style="display: inline-block; vertical-align: middle;">63</div>	<div style="display: inline-block; vertical-align: middle;">285</div>
Messenger, Clarence E. (See Poor, Messenger, and Dallas.)						
Messer, Ellis A., and F. J. Cox, Riverside, Cal. Ladder	499,887	June 20	1917	465	63	1753
Messer, Louis, New York, N. Y. Frame for pocket-books	490,154	Jan. 17	1852	483	62	410
Messer, Walter L., et al., trustees. (See Messer, Walter L., assignor.)						
Messer, Walter L., Syracuse, N. Y., assignor to W. L. Messer and H. Page, trustees, Philadelphia, Pa. Grinding or polishing wheel	496,836	May 2	708	187	63	745
Messer, Walter L., Syracuse, N. Y., assignor to W. L. Messer and H. Page, trustees, Philadelphia, Pa. Wheel-center	496,837	May 2	709	188	63	746
Messier, Joseph H., Worcester, Mass. Water-heater	489,971	Jan. 17	1538	402	62	347
Messina, John A. (See Moffatt and Messina.)						
Messinger, Josef, and G. Vortmann, Aix-la-Chapelle, and H. Janssen, assignors to Farben-fabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Compound of cresol, &c	495,204	Apr. 11	1099		63	222
Messler, Basil H., Canton, Ill. Strainer for spouts of pumps	504,438	Sept. 5	206	53	64	1309
Messmer, Alexander L. H., assignor to Heywood Bros. & Co., Gardner, Mass. Vehicle-wheel	502,006	July 25	2344	587	64	471
Mesta, George, Pittsburg, Pa. Doubling and shearing machine	494,819	Apr. 4	476	<div style="display: inline-block; vertical-align: middle;">119 120</div>	<div style="display: inline-block; vertical-align: middle;">63</div>	<div style="display: inline-block; vertical-align: middle;">92</div>
Mesta, George, Pittsburg, Pa. Apparatus for dressing rolls	497,500	May 16	1818	<div style="display: inline-block; vertical-align: middle;">457 458 459</div>	<div style="display: inline-block; vertical-align: middle;">63</div>	<div style="display: inline-block; vertical-align: middle;">976</div>
Mesta, George, Pittsburg, Pa. Apparatus for pickling metal	510,697	Dec. 12	1452	<div style="display: inline-block; vertical-align: middle;">358 359</div>	<div style="display: inline-block; vertical-align: middle;">65</div>	<div style="display: inline-block; vertical-align: middle;">1696</div>
Mestern, Max, Turin, Italy, assignor to Thermo-Electric Company, of West Virginia. Thermo-electric element	511,245	Dec. 19	2418	589	65	1887
Meston, Alexander W. (See Parker and Meston.)						
Meston, Alexander W., St. Louis, Mo. Electric motor	491,970	Feb. 14	1457	363	62	1055
Meston, Alexander W., St. Louis, Mo. Trolley-wire hanger	501,481	July 11	1506	379	64	290
Meston, Alexander W., St. Louis, Mo., assignor to Emerson Electric Manufacturing Company, of Missouri. Commutator for dynamo-electric machines and constructing same	493,439	Mar. 14	1051	271	62	1580
Metal Goods Manufacturing Company. (See Field, Albert D., assignor.)						
Metcalf, David H., and W. S. Doy, Battle Creek, Mich. Refrigerator	500,147	June 27	2347	568	63	1840

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Metcalf, John S. (See Macdonald and Metcalf.)						
Metcalf-Macdonald Company. (See Macdonald and Metcalf, assignors.)						
Metcalf, Warren T. (See Walling and Metcalf.)						
Methven, James R. (See Shaw, Methven, and Sharp.)						
Metric Metal Company. (See Wallace, Jacob B., assignor.)						
Metropolitan Rubber Company. (See Dodge, Cheever K., assignor.)						
Metropolitan Telephone and Telegraph Company of New York City. (See Carty, John J., assignor.)						
Metz, Henry C., Cleveland, Ohio. Smoke-consuming furnace	498,959	June 6	370	89	63	1457
Metzger, Amandus. (See Ball and Metzger.)						
Metzger, Amandus, Schenectady, assignor to Edison General Electric Company, New York, N. Y. Lamp-socket	489,682	Jan. 10	1067	278	62	238
Metzger, Hermann, Chicago, Ill. Reed for musical instruments	500,287	June 27	2567	627	63	1878
Metzger, Isbon, near Winfield, Iowa. Journal and boxing and bearing therefor	509,178	Nov. 21	1962	478	65	1159
Metzger, Isbon, Winfield, Iowa. Journal-box	511,445	Dec. 26	2778	672	65	1964
Metzler, Benjamin F. and C. O., Holden, Mo. Steam-cooker	509,543	Nov. 28	2631	636	65	1296
Metzler, Charles O. (See Metzler, Benjamin F. and C. O.)						
Meurer, Eugene, Palmer Falls, N. Y. Pulp-screen	492,039	Feb. 21	1567	390	62	1091
Meurer, Ferdinand. (See Neeley, George S., assignor.)						
Mexican Machine Company. (See Keene, William A., assignor.)						
Meyer, Abraham L., Chicago, Ill. Indicator for elevators	499,390	June 13	1079	262	63	1593
Meyer, Albert, Aussersihl, Switzerland. Multiple punching or perforating apparatus	509,134	Nov. 21	1898	464	65	1146
Meyer, Albert W., Terre Haute, Ind. Water-cooler	504,439	Sept. 5	207	54	64	1309
Meyer, Benjamin F. (See Knowlton and Meyer.)						
Meyer Brothers Drug Company. (See Meyer, Gustave J., assignor.)						
Meyer, Carl G., Frohnau, Germany. Garment-loop	491,661	Feb. 14	980	247	62	960
Meyer, Emil, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue dye	499,243	June 13	825	63	1548	
Meyer, Frederick, Buffalo, N. Y. Convertible carriage	509,385	Nov. 28	2333	565	65	1239
Meyer, Frederick, J. S. Kiehl, and A. Grant, assignors to Duplex Rotary Engine Company, Chicago, Ill. Rotary engine	492,360	Feb. 21	2062	514	62	1193
Meyer, George, Hartwell, Ohio. Tether	498,282	May 30	3051	759	63	1227
Meyer, George J., Buffalo, N. Y. Maltng apparatus	504,478	Sept. 5	271	70	64	1320
Meyer, Gustave J., assignor to Meyer Brothers Drug Company, St. Louis, Mo. Show-case	509,748	Nov. 28	2952	715	65	1357
Meyer, Henry. (See Herb and Meyer.)						
Meyer, Henry, Chicago, Ill. Bridge-gate	501,523	July 13	1576	396	64	318
Meyer, Henry, Philadelphia, Pa. Pocket book or case	504,884	Sept. 12	946	244	64	1462
Meyer, Henry W. (See Brown, Meyer, and Schiewetz.)						
Meyer, Hermann H. B. (See Parish and Meyer.)						
Meyer, Johannes, Hamburg, assignor to M. Günzenhäuser & Co., Frankfort-on-the-Main, Germany. Puzzle-lock for pocket-books, &c	506,325	Oct. 10	920	228	65	187
Meyer, Julius, New York, N. Y., and G. F. Starkweather, assignors to Paige Iron Works, Chicago, Ill. Tramway-switch	502,982	Aug. 8	1267	309	64	812
Meyer, Julius C., New York, N. Y. Window-guard	498,916	June 6	298	68	63	1445
Meyer-Kreis, Alfred. (See Hardegger, Arnold, assignor.)						
Meyer, Martin T., California, Mo. Counting-register	507,023	Oct. 17	2065	510	65	417
Meyer, Moritz. (See Kelly, Thomas, assignor.)						
Meyer, Oluf E., Milwaukee, Wis. Apparatus for treating sewage	505,166	Sept. 19	1414	364	64	1562
Meyer-Sniffen Company. (See Bunting, William, Jr., assignor.)						
Meyer-Sniffen Company. (See Eyanson, George T., assignor.)						
Meyer, Theodor, Amöneburg, assignor to H. & E. Albert, Biebrich-on-the-Rhine, Germany. Making alkaline phosphate	504,453	Sept. 5	325	64	1313	
Meyer, William, New York, N. Y. Blotter	489,823	Jan. 10	1283	335	62	281
Meyer, William C. (See French and Meyer.)						
Meyerhoff, Adolph, New York, N. Y. Thill-support	508,330	Nov. 7	571	140	65	864
Meyers, Charles E. (See Meyers, Frederick S. and C. E.)						
Meyers, Ernest, Norfolk, Va., assignor of one-half to J. A. Rosenfield, Chicago, Ill. Safe	508,895	Nov. 14	1457	361	65	1047
Meyers, F. H., et al. (See Masterman, William H., assignor.)						
Meyers, Frederick S. and C. E., Falls City, Nebr. Farm-gate	497,384	May 16	1620	409	63	943
Meyers, William H., assignor to T. Devlin, L. J. McGrath, W. K. Brown, and C. A. McGrath, executors of W. V. McGrath, deceased, Philadelphia, Pa. Register for heater-flues	501,019	July 4	758	199	64	138
Meylan, Auguste. (See Grasset and Meylan.)						
Meylert, Asa P., et al. (See Harper, Thomas, assignor.)						
Meyrick, Joseph, et al. (See Jenne and Willey, assignors.)						
Meyrose, Ferdinand, et al. (See Bradley, Jay L., assignor.)						
Meyrowitz, Emil B. (See Roth, August W. O., assignor.)						
Meyrowitz, Emil B., Ridgefield, N. J. Perimeter	495,506	Apr. 18	1585	398	63	331
Michaelis, Ernest R., Bucyrus, Ohio. Lamp-lighting device	496,662	May 2	434	116	63	698
Michaelis, Leroy J., and W. E. Green, Tiffin, Ohio. Drilling-machine	510,039	Dec. 5	336	75	65	1472
Michand, Onesime E., St. Louis, Mo. Street-car register	505,167	Sept. 19	1417	364	64	1563
Michel, Auguste M., Paris, France. Secondary-battery electrode	489,315	Jan. 3	509	139	62	110
Michel, Auguste M., Paris, France. Manufacture of accumulator plates	489,316	Jan. 3	510	140	62	111
Michel, Charles, New York, N. Y. Egg-cutter	503,431	Aug. 15	1980	491	64	955
Michel, Charles, Lyons, France. Filtering or purifying apparatus	507,024	Oct. 17	2066	510	65	417
Michel, Herman. (See Kuersten, Hugo, assignor.)						
Michel, Joseph. (See McDonough and Michel.)						
Michel, Joseph, J. T. McDonough, and W. L. Bowers, St. Paul, Minn. Flushing-tank for closets	507,149	Oct. 24	2308	567	65	472
Michel, Theodore. (See McDonough and Michel.)						
Michelin & Co. (See Michelin, Edouard, assignor.)						
Michelin, Edouard, assignor to Michelin & Co., Clermont-Ferrand, France. Wheel for velocipedes	495,982	Apr. 25	2330	589	63	479
Michelin, Edouard, assignor to Michelin & Co., Clermont-Ferrand, France. Pneumatic tire	497,453	May 16	1730	436	63	962
Michieli, John P., San Francisco, Cal. Conduit electric railway	510,647	Dec. 12	1376	336	65	1682
Michigan Elevator and Engine Company et al. (See Hultgren, William H., assignor.)						
Michigan Fire Ladder and Engine Company. (See Brayton, Richard, assignor.)						
Michigan Lubricator Company. (See Essex, George B., assignor.)						
Michigan Sand Brick Company. (See Pierce, Theodore S., assignor.)						
Mickel, Charles H. (See Tomlin, William H. T., assignor.)						
Mickle, George W., Cincinnati, Ohio. Washboard	511,246	Dec. 19	2419	589	65	1887

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Middaugh, Henry C. (See Fish, Samuel H., assignor.)						
Middlebrooke, Hobart C., Rock Rapids, Iowa. Banjo.	495,823	Apr. 18	2086	526	63	418
Middlekauff, Ellsworth D. (See Berry, Charles M., assignor.)						
Middlekauff, Ellsworth D. (See Dunham and Middlekauff.)						
Middleswart, E. J. (See Taylor, George W., assignor.)						
Middleton, Albert G., and C. S. Minchin, Allegheny, Pa. Umbrella-holder.	491,058	Jan. 31	3347	854	62	731
Middleton, Lee, Clarksville, Mo. Plant-sprinkler.	506,708	Oct. 17	1546	386	65	319
Middleton, Lee, Clarksville, Mo. Cider-mill.	508,958	Nov. 21	1606	394	65	1089
Middleton, Lee, Clarksville, Mo. Corn-planter and fertilizer-distributor.	510,698	Dec. 12	1454	359	65	1696
Middleton, William C., et al. (See Veon, Andrew E., assignor.)						
Midgley, Henry. (See Shepherd and Midgley.)						
Miebach, August, Erfurt, Germany. Apparatus for automatically measuring the diameter of articles being turned.	496,272	Apr. 25	2773	694	63	562
Mihelitch, John G., St. Cloud, Minn. Box-stay.	509,753	Nov. 28	2959	716	65	1358
Mikesell, Jacob R., assignor of one-half to J. Mikesell, Charlotte, Mich. Thill-coupling.	508,896	Nov. 14	1460	362	65	1047
Mikesell, Jerric. (See Mikesell, Jacob R., assignor.)						
Miks, Ambrose. (See Scott and Miks.)						
Milbrath, Ferdinand G., Brown Deer, Wis. Hitching device.	498,562	May 30	3524	872	63	1311
Milburn, Charles F., Toledo, Ohio. Wagon-axle.	493,039	Mar. 7	421	106	62	1442
Milburn, Charles F., and G. E. Byrkit, Toledo, and J. C. Crabbs, Auburndale, Ohio. Machine for turning wooden axles.	493,038	Mar. 7	419	105	62	1441
Milburn, Gustave D., assignor to Photo Materials Company, Rochester, N. Y. Photographic magazine-camera.	497,525	May 16	1847	466 467	63	983
Mild, William, assignor of one-half to S. Crane, Hamilton, Ohio. Process of and compound for coating metals.	491,220	Feb. 7	259		62	797
Miles, Arthur W., Livingston, Mont. Making nut-lock washers.	506,923	Oct. 17	1917	474	65	388
Miles, Arthur W., and E. A. Commander, Livingston, Mont. Nut-lock.	493,732	Mar. 21	1554	396	62	1693
Miles, Arthur W., and E. A. Commander, Livingston, Mont. Nut-lock.	509,602	Nov. 28	2729	659	65	1316
Miles, Bradford S., Gray's Summit, Mo. Barrel-heading press.	491,847	Feb. 14	1270	315	62	1018
Miles, Bradford S., Gray's Summit, Mo. Lock.	497,588	May 16	1943	488	63	999
Miles, Casper W. (See Miles, Stephen S. and C. W.)						
Miles, Edward J., Newton, Iowa. Pneumatic tire.	511,207	Dec. 19	2356	575	65	1875
Miles, George, Wellesley, Mass. Pneumatic elevator.	494,217	Mar. 28	2365	598	62	1861
Miles, George B., assignor to E. F. Hort and L. A. Crandell, Washington, D. C. Type-case.	494,760	Apr. 4	367	92	63	73
Miles, Overton R. (See Waters, Samuel A. L., assignor.)						
Miles, Stephen S. and C. W., assignors of one-third to L. Wood, Cincinnati, Ohio. Compression-pump for refrigerating apparatus.	507,025	Oct. 17	2067	511	65	417
Miles, William B., Holyoke, Mass. Fender for street-cars.	510,922	Dec. 19	1882	461	65	1787
Milford Manufacturing Company. (See Newbigging and Worz, assignors.)						
Mill, Anton, Cincinnati, Ohio. Tapping attachment for drills.	489,317	Jan. 3	511	140	62	111
Mill, Anton, Cincinnati, Ohio. Radial drill.	496,273	Apr. 25	2775	694 695	63	563
Mill, Arthur J. F., Aurora, Ind. Drill-press.	503,153	Aug. 15	1536	377 378	64	876
Millar, George G. J., assignor of one-half to L. R. Young, Columbus, Ohio. Bedstead.	506,056	Oct. 3	397	104	65	77
Millar, William P., Morrisburg, Canada. Disk harrow.	495,051	Apr. 11	816	206	63	171
Millard, Walter W., Fenton, Mich. Electric-arc lamp.	503,799	Aug. 22	2552	643	64	1023
Millea, Francis J. (See Stannard, John E., assignor.)						
Millen, Lincoln H., and W. L. McCammon, Beatrice, Nebr. Harness-tool.	497,674	May 16	2075	518	63	1023
Miller, A. B. (See Sandel, Sam D., assignor.)						
Miller, Abraham, Newark, Ohio. Clover-hulling machine.	491,740	Feb. 14	1100	278	62	984
Miller, Adam, London, England. Feed-water heater.	492,411	Feb. 28	2148	537	62	1223
Miller, Alexander C. (See Miller, Henry V. and A. C.)						
Miller, Alexander C. (See Miller, Samuel W., A. C., and H. V.)						
Miller, Alonzo R., assignor of one-half to S. Nesbitt, Washington, D. C. Pug-mill.	490,611	Jan. 24	2593	668	62	567
Miller, Alonzo R., assignor of one-half to S. Nesbitt, Washington, D. C. Lime-slaking machine.	490,612	Jan. 24	2594	669	62	568
Miller, Amos E., Palmyra, N. J. Lawn-mower.	492,941	Mar. 7	265	68	62	1411
Miller, Andrew C., Auburn, N. Y. Electric-car brake.	499,972	Jan. 17	1539	402	62	347
Miller, Annie J., New York, N. Y. Underwaist.	494,300	Mar. 28	2495	630	62	1885
Miller, Anthony, Cape Girardeau, Mo. Wagon-bolster standard.	489,824	Jan. 10	1283	336	62	282
Miller, Arnold, Medford, Wis. Car-brake.	489,023	Jan. 3	66	19	62	17
Miller, Arnold, Medford, Wis. Car-brake.	490,079	Jan. 17	1726	450	62	384
Miller, August, Burlington, Iowa. Washboiler.	490,208	Jan. 17	1945	510	62	427
Miller, August, Burlington, Iowa. Hot-air pipe.	490,579	Jan. 24	2534	652	62	556
Miller, Basil, West Lafayette, Ohio. Gate.	491,579	Feb. 14	850	215	62	934
Miller, Basil, West Lafayette, Ohio. Folding chicken-coop.	508,331	Nov. 7	572	140	65	864
Miller, Cassius M., Canton, Ohio. Duplex steam-pump.	502,737	Aug. 8	843	204 205	64	735
Miller, Cassius M., Canton, Ohio. Duplex steam-engine.	510,184	Dec. 5	575	134	65	1518
Miller, Charles A., Utica, N. Y. Adding device.	508,435	Nov. 14	745	184	65	911
Miller, Charles A., assignor to Wilcox Silver Plate Company, Meriden, Conn. Letter-scale.	504,534	Sept. 5	371	94	64	1339
Miller, Charles C., New York, N. Y. Weighing-scale.	504,930	Sept. 12	1023	264	64	1478
Miller, Charles E., and P. M. Haas; said Haas assignor of three-eighths to said Miller and J. Miller, Youngstown, Ohio. Car-coupling.	499,639	June 13	1495	358 359	63	1666
Miller, Charles J. (See Prunty, John R., assignor.)						
Miller, Charles M. (See Cohen, Emanuel G., assignor.)						
Miller, Christopher J., Marion, Ohio. Corn-planter.	505,168	Sept. 19	1419	365 366	64	1564
Miller, Daniel F., assignor of one-half to G. V. Frazier, Somerset, Ky. Machine for finishing twisted staves.	509,233	Nov. 21	2068	499	65	1178
Miller, Daniel F., Leroy, assignor of one-half to G. V. Frazier and W. Elrod, Somerset, Ky. Stave-dressing machine.	500,666	July 4	222	58	64	42
Miller, David, Livingston, N. Y. Vehicle-brake.	497,805	May 23	2283	574	63	1077
Miller, David C., Newburg, N. Y. Stone-saw.	500,592	July 4	83	23	64	16
Miller, David M., Fairfield, Cal. Field or lawn mower.	495,825	Apr. 18	2088	527	63	418
Miller, Edgar, Terre Haute, Ind. Street vending-cabinet.	496,663	May 2	435	116	63	698
Miller, Eli, Morgan Park, Ill. Disk cultivator.	499,244	June 20	1838	448	63	1739
Miller, Elisha G., Chicago, Ill. Folding bed.	489,489	Jan. 10	792	209	62	182
Miller, Elmer E., Canton, Ohio. Currycomb.	502,233	July 25	2721	686	64	542
Miller, F. W. (See Bryan, John C., assignor.)						
Miller, Frank, Belleville, Mich. Milk-cooler.	506,057	Oct. 3	398	104	65	78
Miller, Frank A., Joliet, Ill. Cut-off for steam-engines.	497,332	May 16	1539	388	63	928

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Miller, Frank H., Stanwood, Iowa. Multiple-boring device.....	495,050	Apr. 11	815	206	63	171
Miller, Fred, Corning, Ohio. Flight for endless conveyers.....	501,289	July 11	1198	303	64	233
Miller, Frederick. (See Clabby, James, assignor.)						
Miller, Frederick O., assignor of one-fourth to J. B. Stuart, Toledo, Ohio. Gravity-latch ..	495,824	Apr. 18	2087	526	63	418
Miller, Fredrick C., Newport, Ky. Cigar-bunching machine.....	494,938	Apr. 4	632	161	63	122
Miller, Fredrick C., Newport, Ky. Cigar-bunching machine.....	494,929	Apr. 4	633	162	63	122
Miller, Fredrick C., Newport, Ky. Cigar-bunching machine.....	494,930	Apr. 4	634	162	63	122
Miller, Fredrick C., Newport, Ky. Cigar-bunching machine.....	494,931	Apr. 4	635	162	63	122
Miller, Fredrick C., Newport, Ky. Cigar-bunching machine.....	494,932	Apr. 4	636	163	63	123
Miller, Fredrick C., Newport, Ky. Cigar-rolling apron.....	498,134	May 23	2800	700	63	1168
Miller, Fredrick C., Newport, Ky. Cigar-bunching machine.....	500,020	June 20	2115	512	63	1787
Miller, Fredrick W., Muskegon, Mich. Fifth-wheel.....	499,791	June 20	1746	422	63	1723
Miller, George, Jr. (See McQueen, Daniel, assignor.)						
Miller, George, Baltimore, Md. Caramel-holder.....	502,676	Aug. 1	731	175	64	700
Miller, George A., Colfax, Wash. Apparatus for excavating wells, &c.....	494,877	Apr. 4	565	142	63	109
Miller, George E., Pawtucket, R. I. Roof-bracket.....	496,483	May 2	140	39	63	644
Miller, George E., Peru, Ind. Necktie.....	498,807	June 6	90	23	63	1405
Miller, George E., Saugus, Mass., assignor to American Electric Train and Switch Signal Company, Portland, Me. Electric train and switch signal device.....	507,918	Oct. 31	3610	891	65	728
Miller, George E., assignor of two-thirds to F. G. Kneeland and J. R. Knight, St. Louis, Mich. Spring-bed.....	506,246	Oct. 10	782	193	65	160
Miller, George M., York, Pa. Washing-machine.....	499,136	June 6	660	159	63	1506
Miller, George N. (See Wearn, Walter R., assignor.)						
Miller, George S. (See Green, Henry, assignor.)						
Miller, George S., Council Bluffs, Iowa. Brace.....	504,604	Sept. 5	475	122	64	1358
Miller, George W., Kalamazoo, Mich. Car-wheel.....	509,579	Nov. 28	2689	650	65	1308
Miller Grate Company. (See Miller, Peter L., assignor.)						
Miller, Guyon, Downingtown, Pa. Pulping-engine.....	508,734	Nov. 14	1215	303	65	1002
Miller, Henry C., Fort Wayne, Ind. Engine.....	503,154	Aug. 15	1538	378	64	876
Miller, Henry D., Brookville, Ohio. Wire fence.....	510,040	Dec. 5	337	75	65	1473
Miller, Henry O., assignor of one-half to A. J. Eaton and E. F. Hurdle, Eaton, Colo. Car-coupling.....	490,811	Jan. 31	2937	753	62	649
Miller, Henry O., assignor of one-half to A. J. Eaton and E. F. Hurdle, Eaton, Colo. Car-coupling.....	502,260	July 25	2778	701	64	553
Miller, Henry V. (See Miller, Samuel W., A. C., and H. V.)						
Miller, Henry V., Bloomington, and A. C. Miller, Aurora, Ill. Electric railway-signal.....	493,935	Mar. 21	1877	478	62	1754
Miller, Herman, New York, N. Y. Soldering apparatus.....	492,986	Mar. 7	338	85, 86	62	1426
Miller, Horace E., Newark, N. J. Apparatus for drying substances.....	508,112	Nov. 7	220	57	65	799
Miller, Jacob. (See Weaver, Oscar, assignor.)						
Miller, James U. (See Van Matre, Benjamin F. and G. H., assignors.)						
Miller, James W. (See Beall, John N., assignor.)						
Miller, Jefferson, Vancouver, Wash. Cattle-dehorner.....	508,178	Nov. 7	321	80	65	818
Miller, John. (See Miller and Haas, assignors.)						
Miller, John, Manningham, England. Machine for pressing and finishing textile fabrics.....	504,228	Aug. 29	3269	816	64	1230
Miller, John, Sr., and John, Jr., Bradford, England. Waterproofing fabrics.....	511,707	Dec. 26	3188	781	65	2040
Miller, John D., Riverdale, Md. Fruit or vegetable cutter.....	497,675	May 16	2076	518	63	1024
Miller, John F. (See Olsen and Miller.)						
Miller, John H. (See Burnham and Miller.)						
Miller, John H., Jr., Galion, Ohio. Gas-generator.....	494,012	Mar. 21	2020	515	62	1782
Miller, John H., assignor to United States Wind Engine and Pump Company, Batavia, Ill. Pitman-bearing.....	490,296	Jan. 24	2098	547	62	470
Miller, John H., assignor to United States Wind Engine and Pump Company, Batavia, Ill. Transmitting mechanism for windmills.....	508,144	Nov. 7	275	68	65	809
Miller, John H., assignor to United States Wind Engine and Pump Company, Batavia, Ill. Windmill-vane.....	510,435	Dec. 12	981	234	65	1610
Miller, John H., and W. H. Burnham, assignors to United States Wind Engine and Pump Company, Batavia, Ill. Windmill-brake.....	490,295	Jan. 24	2097	546	62	470
Miller, John J., Howell, Mich. Belt-tightener.....	491,728	Feb. 14	1082	273	62	981
Miller, John M., Westwood, Ohio. Vehicle-brake.....	489,024	Jan. 3	67	19	62	17
Miller, John M., Riverside, Cal. Fumigating apparatus.....	510,079	Dec. 5	401	88	65	1485
Miller, John W., Penfield, Pa. Saw-handle.....	506,245	Oct. 10	781	193	65	160
Miller, Josiah M. (See Shaw and Miller.)						
Miller, Junius G. (See Griffiths and Miller.)						
Miller, Lee A., Milwaukee, assignor to S. B. Fuller, Watertown, Wis. Sewing-machine shuttle.....	503,269	Aug. 15	1721	424	64	910
Miller, Lee A., Milwaukee, assignor of one-half to S. B. Fuller, Watertown, Wis. Rail-fastening.....	507,824	Oct. 31	3463	852	65	702
Miller, Lewis, Akron, Ohio. Grain-binding harvester.....	493,731	Mar. 21	1549	395	62	1692
Miller Lock Company. (See Jackson, Milton, assignor.)						
Miller, Louis L., Newport, Ky., assignor to Ross Moyer Manufacturing Company, Cincinnati, Ohio. Sewing-machine.....	493,217	Mar. 7	686	176	62	1493
Miller, Louis L., Newport, Ky., assignor to Ross Moyer Manufacturing Company, Cincinnati, Ohio. Sewing-machine.....	507,825	Oct. 31	3464	852	65	702
Miller, Louis P., et al. (See Tyler, Harry L., assignor.)						
Miller, Louis W., Rochester, N. Y. Cut-out.....	507,150	Oct. 24	2310	568	65	472
Miller, Newton C., French Corral, Cal. Hydraulic mining apparatus.....	489,751	Jan. 10	1182	309	62	260
Miller, Niles M., Philadelphia, Pa. Apparatus for rolling glass.....	510,080	Dec. 5	403	89, 90	65	1485
Miller, O. A. (See Gordon, William, assignor.)						
Miller, Peter L., assignor to Miller Grate Company, Cleveland, Ohio. Gas-burner for heating stoves or grates.....	503,705	Aug. 22	2437	607	64	1054
Miller, Peter J., assignor of one-half to L. Goldsmith, Chicago, Ill. Snap-hook for harness.....	494,820	Apr. 4	477	120	63	92
Miller, Roy, Alma Centre, Wis. Filing-cabinet.....	498,283	May 30	3052	759	63	1227
Miller, Ruben, Sergeant Bluffs, Iowa. Cultivator.....	492,692	Feb. 28	2600	643	62	1315
Miller, Samuel B., Cairo, Ill. Game-counter.....	494,011	Mar. 21	2018	514	62	1782
Miller, Samuel W., and A. C., Aurora, and H. V. Miller, Bloomington, Ill., said Samuel W. Miller assignor to said A. C. and H. V. Miller. Electrical railway-signal.....	494,111	Mar. 21	2185	559	62	1813

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Miller, Sherman R., Detroit, Mich. Shipping and display box for seeds.....	490,156	Jan. 17	1853	{ 483 484 }	62	411
Miller, Simon. (See String and Miller.)						
Miller, Theresa J., Wichita, Kans. Broiling apparatus.....	495,507	Apr. 18	1586	399	63	331
Miller, Thomas A., Stockton, Cal. Bean or grain thrashing machine.....	504,359	Sept. 5	67	18	64	1284
Miller, Thomas S., New York, N. Y. Conveying apparatus.....	496,203	Apr. 25	2659	668	63	541
Miller, Thomas S., South Orange, N. J. Conveying apparatus.....	503,381	Aug. 15	1913	474	64	944
Miller, Thomas S., South Orange, N. J. Conveying apparatus.....	503,800	Aug. 22	2583	644	64	1083
Miller, Thomas W., Cleveland, Ohio. Water-gage.....	504,694	Sept. 5	629	160	64	1388
Miller, William D., Sanford, Fla. Fire-hose spanner.....	506,326	Oct. 10	920	228	65	187
Miller, William H., and B. W. Lally, Columbus, Ohio. Means for welding flue-pipes.....	494,642	Apr. 4	180	45	63	37
Miller, William J., Colorado City, Tex. Axle-lubricator.....	509,928	Dec. 5	132	31	65	1434
Miller, William L., New York, N. Y. Hydrocarbon-burner.....	493,555	Mar. 14	1255	322	62	1618
Miller, William P., Redding, Cal. Recovering precious metals.....	492,040	Feb. 21	1567	390	62	1091
Miller, William P., Redding, Cal. Ore-separator.....	497,474	May 16	1762	{ 443 444 }	63	967
Miller, William P., assignor of one-half to W. H. Mattson, Philadelphia, Pa. Fastening device for draperies.....	508,735	Nov. 14	1216	303	65	1003
Miller, William S., Meyersdale, Pa. Split pulley.....	502,310	Aug. 1	88	20	64	582
Miller, William T., McKeesport, Pa. Ash-shovel.....	507,826	Oct. 31	3469	853	65	703
Miller's Falls Company. (See Lanfair, Herbert D., assignor.)						
Miller's Falls Company. (See Pratt, Henry L., assignor.)						
Millet, John W., Dolgeville, N. Y. Felting-machine.....	491,901	Feb. 14	1354	{ 336 337 }	62	1034
Millett, William H., Beverly, Mass. Portable folding fire-escape.....	499,792	June 20	1748	423	63	1723
Milligan, Charles J., Chicago, Ill. Escaping-gas alarm.....	491,580	Feb. 14	851	215	62	934
Milliken, Lemuel W., Franklin, Mass. Picker-strap holder for looms.....	508,550	Nov. 14	941	232	65	948
Millins, Charles H. (See Gardiner and Millins.)						
Millman, John M., et al. (See Wanner, Martin, assignor.)						
Mills, Arthur L., Toledo, Ohio, assignor to Toledo Nut Lock Company, of Ohio. Nut-lock washer.....	505,839	Oct. 3	57	15	65	14
Mills, Chauncey W., Rochester, N. Y. Smoke-consuming furnace.....	498,182	May 23	2871	717	63	1181
Mills, George W., Elizabeth, N. J. Paper-file.....	490,255	Jan. 17	1853	483	62	411
Mills Improved Pneumatic Brake Company. (See Mills, Mortimer B., assignor.)						
Mills, James, and A. S. Smith, Cincinnati, Ohio. Metal-shaping machine.....	490,670	Jan. 31	2720	700	62	607
Mills, Johan E., Chicago, Ill. Composition of matter for tempering.....	503,801	Aug. 22	2583	.....	64	1084
Mills, John, Newark, N. J. Railway-gate.....	489,131	Jan. 3	228	61	62	52
Mills, John F. (See Moore, Rue, Smith, Roebuck, Mills, and Kirk.)						
Mills, Melvin A. (See Collins and Mills.)						
Mills, Mortimer B. (See Mills, Stephen G., assignor.)						
Mills, Mortimer B., assignor to Mills Improved Pneumatic Brake Company, Chicago, Ill. Air-pressure apparatus for car-brakes.....	497,475	May 16	1763	444	63	967
Mills, Norman T., Boston, Mass. Portable electric-lamp support.....	505,060	Sept. 12	1237	318	64	1517
Mills, Stephen G., assignor to M. B. Mills, Chicago, Ill. Pneumatic-power apparatus.....	489,193	Jan. 3	326	89	62	74
Mills, William, Elizabeth, N. J. Battery element.....	508,897	Nov. 14	1461	.....	65	1047
Mills, William, Elizabeth, N. J. assignor to New York Carbon Works, New York, N. Y., and Newark, N. J. Battery element.....	508,551	Nov. 14	942	232	65	948
Mills, William K., Kokomo, Ind. Gate.....	500,593	July 4	84	24	64	17
Milne, Charles D. (See Pritchard, Albert R., assignor.)						
Milne, Charles D., assignor of one-half to A. R. Pritchard, Rochester, N. Y. Handle for vessels.....	499,341	June 13	985	239	63	1576
Milne, Charles D., and A. R. Pritchard, Rochester, N. Y. Joining spouts to metallic kettles.....	502,046	July 25	2415	608	64	484
Milnes, A. A. (See Kearney, James, assignor.)						
Milnes, John C., Cedar Rapids, Iowa. Veterinary operating-table.....	492,819	Mar. 7	74	18	62	1372
Milsted, William N., New York, N. Y. Gas-meter casing.....	505,715	Sept. 26	2369	598	64	1754
Milton Bradley Company. (See Hastings, Cornelius C., assignor.)						
Milton, John, Alexandria, Va. Locomotive-boiler furnace.....	503,155	Aug. 15	1540	378	64	877
Milton, John, Alexandria, Va., assignor of three-fifths to A. F. Kingsley, Washington, D. C. Smoke-consuming furnace.....	506,128	Oct. 3	514	133	65	100
Milton, John, Alexandria, Va., assignor to Milton Smoke-Burner Company, of Virginia. Locomotive-boiler furnace. (Reissue).....	11,370	Oct. 3	680	172	65	128
Milton Smoke-Burner Company. (See Milton, John, assignor.) (Reissue.)						
Milwaukee Harvester Company. (See Graham and Birkett, assignors.)						
Milwaukee Harvester Company. (See Latimer, John W., assignor.)						
Milwaukee Office Specialty Company. (See Rider, Ebenezer W., assignor.)						
Minchin, Charles S. (See Middleton and Minchin.)						
Minchin, John J. (See Smith and Minchin.)						
Miner, Howard A., New York, N. Y. Electric-railway conductor.....	490,297	Jan. 24	2099	547	62	470
Miner, John C., Smyrna, assignor of one-half to H. Fox, Jr., Nelson, Nebr. Check-rower for corn-planters.....	500,408	June 27	2762	680	63	1913
Miner, John J., assignor of one-half to W. R. Teeters, Fort Wayne, Ind. Automatic boiler-cleaner.....	498,854	June 6	185	45	63	1425
Miner, Marvel D., Leyden, Mass. Saw-clamp.....	498,360	May 30	3194	795	63	1251
Miner, William W., Torrington, Conn. Hoop for boxes, &c.....	510,436	Dec. 12	982	234	65	1610
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Making horseshoe-nails.....	490,392	Jan. 24	2252	586	62	502
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Making horseshoe-nails.....	490,393	Jan. 24	2254	586	62	502
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Manufacturing horseshoe-nails.....	490,394	Jan. 24	2255	586	62	502
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Die for the manufacture of horseshoe-nails.....	490,395	Jan. 24	2257	586	62	502
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Making horseshoe-nails.....	490,396	Jan. 24	2258	587	62	502
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Feeding mechanism for horseshoe-nail machines.....	490,397	Jan. 24	2259	587	62	502
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Horseshoe-nail.....	490,613	Jan. 24	2596	669	62	568
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Manufacturing horseshoe-nails.....	491,368	Feb. 7	514	132	62	846
Minerley, Lewis, Kingston, N. Y. Rowlock.....	501,802	July 18	2034	500	64	398
Mingo, Cirilo, New Orleans, La. Aging coffee.....	505,883	Oct. 3	130	65	26
Mings, George W., New Castle, Colo. Camp-stove.....	506,058	Oct. 3	399	{ 104 105 }	65	78

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Mining and Dredging Power Company. (See Hussey and Harsen, assignors.)						
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Watchcase fastener	492,629	Feb. 28	2508	621	62	1297
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-bow fastener	496,943	May 9	905	237	63	801
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Watchcase-pendant	501,210	July 11	1079	274	64	212
Mink, Fritz, Philadelphia, Pa., assignor to Keystone Watch Case Company, of Pennsylvania. Watchcase	505,474	Sept. 26	1911	492	64	1669
Mink, Fritz, Philadelphia, Pa., assignor to Keystone Watch Case Company, of Pennsylvania. Watchcase	511,055	Dec. 19	2099	519	65	1826
Minneapolis Electro Matrix Company. (See Travis, Charles L., assignor.)						
Minneapolis Plow Works. (See Johnson, Nils J., assignor.)						
Minnemeyer, Edward G., Peoria, Ill. Washtub	489,082	Jan. 3	150	42	62	36
Minnemeyer, Edward G., Peoria, Ill. Pipe-hanger for water-conductors	489,083	Jan. 3	151	42	62	36
Minnemeyer, Edward G., Peoria, Ill. Washing-machine. (Reissue)	11,320	Apr. 4	747	189	63	143
Minnemeyer, Edward G., Chicago, Ill. Washing-machine	504,989	Sept. 12	1128	289	64	1496
Minnesota Harvester Company. (See Dewey, John J., assignor.)						
Minnis, Frank, Ann Arbor, Mich. Composition of matter for leather for razor-strops	490,030	Jan. 17	1653		62	369
Minogue, Martin T., assignor of two-thirds to T. Reynolds and P. Shonolin, Springfield, Ohio. Band-cutter and feeder	504,990	Sept. 12	1130	289	64	1497
Minor, M. P. (See Burt, John J., assignor.)						
Minor, Mary E., Colfax, Ind. Dust-pan	492,373	Feb. 21	2079	520	62	1197
Minor, Peter W., Springville, N. Y. Machine for hammering leather	494,259	Mar. 28	2433	613	62	1872
Minot, Homer S., Minneapolis, Minn. Extension-ladder	506,709	Oct. 17	1547	386	65	320
Minshall, George S., Greenleaf, Kans. Snap-hook	499,304	June 13	922	223	63	1565
Minteer, William A., Peachville, Pa. Hydrocarbon-burner	498,671	May 30	3706	916	63	1343
Minter, Frank, Corning, Kans. Incubator	490,298	Jan. 24	2101	547	62	470
Minter, Frank, Corning, Kans. Heat-regulator for incubators	505,604	Sept. 26	2174	550	64	1719
Minto, Harry M., Mobile, Ala. Ventilated car-floor	499,303	June 13	921	223	63	1565
Minzesheimer, Ferdinand. (See Levy, Isaac M., assignor.)						
Minzey, William L., Bellevue, assignor of one-half to H. Schenck, Perkins, Ohio. Artificial arm and hand	493,440	Mar. 14	1054	271	62	1581
Miracle, John, Caledonia, assignor of one-half to J. C. Dowling, Mount Gilead, Ohio. Box-fastener	506,370	Oct. 10	993	247	65	201
Miracle, Virginia S., Janesville, Wis. Fuel-feeding device	496,944	May 9	906	238	63	801
Miranda, Abraham R., Boston, Mass. Garbage-bucket	499,137	June 6	662	159	63	1506
Miranda, Abraham R., Boston, assignor to F. M. Ferrin, Natick, Mass. Vaporizer	491,902	Feb. 14	1355	337	62	1035
Mishler, Melvin S., Chicago, Ill. Harvester	492,412	Feb. 28	2149	537	62	1223
Misic, Michael, assignor to Foster Pump Works, Brooklyn, N. Y. Valve for direct-acting steam-pumps	504,844	Sept. 12	889	228 229 394 395	64	1452
Miskovsky, Wenzel, Liblic, Austria-Hungary. Beet-root cultivator	508,959	Nov. 21	1607	394 395	65	1090
Misner, Ira. (See Loveall, Frank W., assignor.)						
Missildine, Thomas J., assignor of one-half to S. U. Turnipseed, Ramer, Ala. Churn	500,021	June 20	2120	513	63	1788
Missouri Lamp and Manufacturing Co., et al. (See Stempel, Omar A., assignor.)						
Mitchell, Adolph L., et al. (See Baines, Edward, assignor.)						
Mitchell, Albion L. F., assignor to J. Mitchell, Lynn, Mass. Burnishing-machine	495,746	Apr. 18	1970	497 498	63	397
Mitchell, Alexander. (See Cushing and Mitchell.)						
Mitchell, Andrew J., Washington Court-House, Ohio. Quilting-machine	504,229	Aug. 29	3271	817	64	1230
Mitchell, Ardon M., Brooklyn, N. Y. Air-distributing fan	506,059	Oct. 3	401	105	65	78
Mitchell, Cornelius S. (See Bowles, John, assignor.)						
Mitchell, David A., Nashville, Tenn. Nut-lock	497,589	May 16	1946	488	63	999
Mitchell, Edward J., et al. (See Baines, Edward, assignor.)						
Mitchell, Edward W., Covington, Ky., assignor to Mitchell-Thompson Underground Electric Conductor Company, of West Virginia. Electric railway	490,975	Jan. 31	3205	819	62	701
Mitchell, Elma M. (See Mitchell, John E. and E. M.)						
Mitchell, Enos, Weldon, Iowa. Combined screen and weather door	507,827	Oct. 31	3470	854	65	703
Mitchell, Frank, St. Louis, Mo. Dish-drainer	510,185	Dec. 5	576	134	65	1519
Mitchell, Frank G. (See Fay, William H., assignor.)						
Mitchell, J. Henry. (See Hunter and Clark, assignors.)						
Mitchell, James A., Martinsburg, W. Va. Wire-fence machine	504,991	Sept. 12	1131	290	64	1497
Mitchell, James C., Lancaster, N. H., assignor of one-half to A. L. Batley, St. Johnsbury, Vt. Pipe-coupling	510,437	Dec. 12	983	235	69	1610
Mitchell, James D., Marine City, Mich. Gage-cock	490,157	Jan. 17	1855	484	62	411
Mitchell, James H., Philadelphia, Pa. Dough-machine	480,973	Jan. 17	1540	402 403	62	347
Mitchell, James H., Philadelphia, Pa. Cake-machine	492,220	Feb. 21	1850	463	62	1150
Mitchell, John E. and E. M., Salem, Iowa. Plow	506,710	Oct. 17	1548	387	65	320
Mitchell, John J., Detroit, Mich. Machine for making tablets for medicinal purposes	500,594	July 4	86	24	64	17
Mitchell, John W. (See Schermerhorn, Charles, assignor.)						
Mitchell, Josiah. (See Mitchell, Albion L. F., assignor.)						
Mitchell, Josie M., et al. (See Mitchell, William H., assignor.)						
Mitchell, Kerr M., St. Joseph, Mo. Center-seal	501,572	July 18	1648	412 413	64	332
Mitchell Manufacturing Company. (See Johnson, Albert W., assignor.)						
Mitchell, Oliver L., Orland, Ill. Letter-box	499,465	June 13	1217	290	63	1618
Mitchell, Orson C., North Granville, N. Y. Book rest and holder	493,936	Mar. 21	1879	478	62	1755
Mitchell, Porter D., East Lynne, Mo. Device for adjusting flooring, &c	506,327	Oct. 10	921	228	65	187
Mitchell, Ransom Y., Findlay, Ohio. Recovering lost coal from mines, &c	508,523	Nov. 14	901	222	65	940
Mitchell, Roger T. (See Pennybacker, Morgan, assignor.)						
Mitchell, Sidney Z. (See Roehl, Mitchell, and Wetmore.)						
Mitchell, Sidney Z. (See Wetmore, Earl P., assignor.)						
Mitchell, Thomas J., Vinita, Ind. Ter. Sickle-head for mowers	502,129	July 25	2544	638	64	509
Mitchell-Thompson Underground Electric Conductor Company. (See Mitchell, Edward W., assignor.)						
Mitchell, Walter H. (See Mayer and Mitchell.)						
Mitchell, Wilfred E. (See Swift and Mitchell.)						
Mitchell, William B. and F. Benberger, Galion, Ohio. Foot-guard for railways	490,580	Jan. 24	2535	653	62	556
Mitchell, William E., Merton, Wis. Runner attachment for vehicle-wheels	505,668	Sept. 26	2282	579	64	1740
Mitchell, William E., Merton, Wis. Horse-power motor	506,924	Oct. 17	1918	474 475	65	388
Mitchell, William E., Merton, Wis. Door-closer	506,925	Oct. 17	1919	475	65	389
Mitchell, William H., Bar Harbor, assignor to J. M. Mitchell, J. H. Prescott, and A. B. Higgins, Eden, Me. Trunk-strap fastener	495,701	Apr. 18	1899	477	63	384

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Mitchell, William L., New York, N. Y. Gas-burner.....	492,041	Feb. 21	1570	391	62	1092
Mitchell, Willis, Malden, Mass. Sad-iron.....	510,081	Dec. 5	409	90	65	1487
Mitchell, Willis, Malden, assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electro-magnetically-heated receptacle.....	489,318	Jan. 3	512	140	62	111
Mitchell, Willis, Malden, assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Hat-brim-softening device.....	491,319	Feb. 7	432	111	62	830
Mitchell, Willis, Malden, assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electric water-heater.....	491,320	Feb. 7	433	111	62	830
Mitchell, Willis, Malden, assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electrically-heated vessel.....	491,321	Feb. 7	434	112	62	830
Mitchell, Willis, Malden, assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electrically-heated gridiron.....	491,322	Feb. 7	435	112	62	831
Mitchell, Willis, Malden, assignor to American Electric Heating Company, Boston, Mass. Electric metal-heating device.....	491,437	Feb. 7	621	156	62	866
Mitchell, Willis, Malden, assignor to American Electric Heating Company, Boston, Mass. Electrically-heated muffle.....	491,438	Feb. 7	623	156	62	867
Mitchell, Willis, Malden, assignor to American Electric Heating Company, Boston, Mass. Means for electrically heating crucibles.....	494,585	Apr. 4	89	21	63	19
Mitchell, Willis, Malden, assignor to American Electric Heating Company, Boston, Mass. Apparatus for electrically heating crucibles.....	494,586	Apr. 4	90	22	63	19
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrically-heated radiator.....	494,301	Mar. 28	2496	630	62	1885
Mittelstaedt, Albert. (See New and Mittelstaedt.)						
Moakler, John W., Denver, Colo., assignor of one-half to H. E. Henwood, Kansas City, Mo. Electric road-vehicle.....	500,022	June 20	2121	513	63	1788
Mochove, Simon. (See Andreu, Francis, assignor.)						
Mock, Cullen D., Pink Hill, Mo. Wire-stretcher.....	496,577	May 2	291	78	63	672
Mock, George S., Lebanon, Ky. Napkin-holder.....	502,739	Aug. 8	846	206	64	736
Mock, Henry, New York, N. Y. Conveyer.....	503,326	Aug. 15	1826	452	64	928
Mock, Henry, New York, N. Y. Apparatus for removing cakes of ice from freezing-cans.....	508,145	Nov. 7	276	68, 69	65	809
Mock, James F., assignor of one-half to J. D. Mock, Muncie, Ind. Brick-truck.....	502,738	Aug. 8	844	205, 206	64	736
Mock, John D. (See Mock, James F., assignor.)						
Möckel, Gotthilf L., Doberan, Germany. Arch for ceilings or vaults.....	489,654	Jan. 10	1026	267	62	229
Mockler, Frederick J., Wotton-under-Edge, England. Removable spring-cover for cups, jugs, &c.....	511,538	Dec. 26	2920	710	65	1993
Mockridge, Joseph B., New York, N. Y. Means for securing railways and shippers against loss of freight.....	493,595	Mar. 14	1320	338	62	1632
Modes, William F., Streator, Ill. Glass-tank furnace.....	492,820	Mar. 7	76	18	62	1372
Modes, William F., Streator, Ill. Glass-annealing kiln.....	505,716	Sept. 26	2371	599	64	1754
Moe, George T., Philadelphia, Pa. Furnace.....	489,490	Jan. 10	793	209	62	182
Moe, George T., assignor of one-half to R. Pierce, Jr., and M. M. Riter, Jr., Philadelphia, Pa. Damper.....	499,747	June 20	1671	401	63	1710
Moe, Hiram G. (See Trumble, Chauncey B., assignor.)						
Moe, Leonidas L., Denver, Colo. Hay-press.....	505,224	Sept. 19	1503	392	64	1579
Moebus, Henry E., Woodstock, Ontario, Canada. Vehicle-hub.....	502,406	Aug. 1	261	61, 62	64	613
Moehn, John N., assignor of one-half to T. Pidd, Milwaukee, Wis. Thill-coupling.....	504,230	Aug. 29	3273	818	64	1230
Moehn, John N., Druecker, assignor of two-thirds to E. A. Weidner and J. Mergenthaler, Milwaukee, Wis. Lift-pump.....	505,276	Sept. 19	1587	413	64	1595
Moellenhoff, Carl, Hamm, Germany. Brick-kiln.....	508,960	Nov. 21	1608	395	65	1090
Moeller, Herman, Brooklyn, N. Y. Cap for chimneys, flues, &c.....	491,848	Feb. 14	1272	315	62	1018
Moeller, Max. (See Diehl and Moeller.)						
Moeller, Max, assignor to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Blue azo dye.....	509,929	Dec. 5	133		65	1435
Moeller, Max, assignor to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Production of amido-naphthol disulfonic acid.....	511,708	Dec. 26	3190		65	2040
Moen, Hans J. (See Week and Moen.)						
Moerath, John N., Vienna, Austria-Hungary. Composition of matter for coal-briquets.....	495,679	Apr. 18	1862		63	378
Moffatt, Charles S. B., and J. A. Messina, Key West, Fla. Cigar-maker's gage.....	489,025	Jan. 3	70	20	62	18
Moffat, John, and W. W. Virtue, Sydney, New South Wales. Animal-shears.....	494,070	Mar. 21	2111	538, 539	62	1798
Moffat, John, and W. W. Virtue, Sydney, New South Wales. Animal-shears.....	494,071	Mar. 21	2114	539, 540	62	1799
Moffat, John, and W. W. Virtue, Sydney, New South Wales. Machine for grinding and sharpening shearing-combs and cutters, &c.....	494,072	Mar. 21	2117	540	62	1799
Moffat, John, and W. W. Virtue, Sydney, New South Wales. Flexible shafting and coupling attachment therefor.....	497,590	May 16	1947	488, 489	63	999
Moffatt, William E., Chester, S. C. Sawing-machine.....	497,676	May 16	2077	519	63	1024
Moffett, Charles J. (See Davis, John T., assignor.)						
Moffett, George F., Portland, Oreg. Conduit electric railway.....	498,135	May 23	2801	701	63	1168
Moffitt, William M. (See Parker and Moffitt.)						
Moginie, John C., Wellington, New Zealand. Blotting-pad.....	500,774	July 4	385	101	64	72
Mohaupt, Herman. (See Monaghan and Mohaupt.)						
Mohlberg, John, New York, N. Y. Brick.....	491,248	Feb. 7	299	76	62	806
Möble, Aloys, Malstatt, near Saarbrücken, Germany. Compound for artificial stone.....	508,033	Nov. 7	82		65	713
Mohler, Johannes. (See Schmid and Mohler.)						
Mühler, Paul, Schwäbisch Gmünd, Germany. Smoke-consuming furnace.....	498,284	May 30	3053	760	63	1228
Mohn, Eugene, Bladensburg, Ohio. Fence-post-driving machine.....	495,747	Apr. 18	1973	498	63	398
Mohr, Frederick J. (See Southwick and Mohr.)						
Mohr, Frederik, assignor to Grusonwerk, Magdeburg-Buckau, Germany. Manufacture of cartridge-cases.....	497,192	May 9	1276	324	63	866
Mohr, Frederik, assignor to Grusonwerk, Magdeburg-Buckau, Germany. Brake for gun-carriages.....	500,927	July 4	612	160	64	112
Mohr, Frederik, assignor to Grusonwerk, Magdeburg, Germany. Cartridge.....	503,096	Aug. 8	1430	353	64	844
Mohr, Joseph, assignor to J. Mohr & Son, Chicago, Ill. Punching-machine.....	501,152	July 11	992	253, 254	64	195
Mohr & Son, John. (See Mohr, Joseph, assignor.)						
Mohring, John, Lancaster, Pa. Trunk-strap fastener.....	511,350	Dec. 26	2606	634	65	1934
Mohrroff, Edward W., Madison, Wis. Stovepipe-fastener.....	500,667	July 4	224	58	64	43
Molchior, Herman, assignor of one-half to A. Baumgarten, Freeport, Ill. Scraper.....	510,986	Dec. 19	2005	495	65	1809
Moldenhauer, Carl, Frankfort-on-the-Main, Germany. Extracting gold from its ores.....	492,221	Feb. 21	1854		62	1151
Molé, Charles, Boston, Mass. Necktie-fastener.....	499,466	June 13	1218	291	63	1618
Mole, James R. (See Sailer, John M., assignor.)						
Mole, John G., Batavia, Ill. Portable grinding-mill.....	490,812	Jan. 31	2939	754	62	650

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Moler, Asa, Iowa City, Iowa. Tree-cultivator	509,544	Nov. 28	2633	636	65	1296
Molera, Eusebius J., San Francisco, Cal. Camera-shutter	490,031	Jan. 17	1654	429	62	369
Molié, François F., Paris, France. Machine for making spinning or other rollers	504,813	Sept. 12	838	214 215	64	1440
Moline Plow Company. (See Anderson, Andrew G., assignor.)						
Molitor, Frederick G. (See Austin and Molitor.)						
Möller, Bertel G. P., Kolding, Denmark. Photographic camera	500,023	June 20	2122	514	63	1788
Möller, Georg H. S. O., Hamburg, Germany. Thermometer	497,925	May 23	2485	620	63	1112
Möller, Max. (See Kieserling and Möller.)						
Moller, William, New York, N. Y. Storm-step for outdoor stairs	501,211	July 11	1080	274	64	213
Molloy, Edmond, Philadelphia, Pa. Floor	506,521	Oct. 10	1261	315 316	65	253
Molloy, James F., New Haven, Conn. Fastening device for suspenders	492,232	Feb. 21	1855	464	62	1151
Molloy, M. P., et al. (See Graves, Cashions M., assignor.)						
Moloney, Michael J. (See Kinsella, Edward, assignor.)						
Moltrup, Stephen and W., Beaver Falls, Pa. Die and die-holder for drawing steel rods, &c. (Reissue)	11,318	Mar. 28	2893	724	62	1957
Moltrup, William. (See Moltrup, Stephen and W.) (Reissue.)						
Monachesi, Hannah D., New York, N. Y. Gridiron, &c.	498,984	June 6	415	96	63	1464
Monaghan, James, Batavia, N. Y., assignor of one-half to T. C. Monaghan, Aspen, Colo. Spring-gun	498,070	May 23	2706	677	63	1151
Monaghan, Peter J., and H. Mohaupt, Chicago, Ill.; said Mohaupt assignor to said Monaghan. Grain-car door	497,193	May 9	1276	324	63	866
Monaghan, Thomas C. (See Monaghan, James, assignor.)						
Monahan, John J., assignor of one-half to E. Bradley, Nashville, Tenn. Incrustation device	490,671	Jan. 31	2721	700	62	607
Monash, Charles P. (See Van Auken, Clarence E., assignor.)						
Moncreiff, Robert W., Manchester, England. Suction-box for paper-machines	504,885	Sept. 12	947	244 245	64	1463
Mond, Ludwig, Northwick, England. Apparatus for volatilizing ammonium chloride	491,741	Feb. 14	1102	279	62	985
Monday, Newton, assignor of one-half to J. M. O'Carr, Lathrop, Mo. Churn	489,872	Jan. 10	1347	351	62	295
Monday, Robert, assignor of one-half to E. G. Knight and W. J. Caven, Dallas, Tex. Buckle	495,899	Apr. 18	2208	556	63	441
Mondor, Hector J., Holyoke, Mass. Combination-tool	491,715	Feb. 14	1064	269	62	978
Mondy, David H., Denver, Colo. Dust-guard for railway-cars	494,643	Apr. 4	181	46	63	37
Monell, Ira F., Sugar Loaf, Colo. Ore separator and concentrator	504,931	Sept. 12	1024	264	64	1478
Monfort, Abram C., Pawtucket, R. I., assignor to Monfort Stamp and Envelope Company, of Maine. Envelope-dispensing machine	489,683	Jan. 10	1069	278	62	238
Monfort Stamp and Envelope Company. (See Monfort, Abram C., assignor.)						
Monger, Ivor J. and R., Baltimore, Md. Furnace	489,319	Jan. 3	513	140	62	111
Monger, Robert. (See Monger, Ivor J. and R.)						
Monk, Henry, Chicago, Ill. Injector overflow attachment	499,640	June 13	1496	359	63	1666
Monk, William J. (See Pearson, Stead, and Monk.)						
Monks, Frank H., Brookline, Mass. Game-board	500,409	June 27	2764	681	63	1914
Monks, George H., Boston, Mass. Game-board	491,293	Feb. 7	389	99	62	821
Monnet & Cartier, Gilliard P. (See Monnet, Prosper, assignor.)						
Monnet, Prosper, assignor to G. P. Monnet & Cartier, Lyons, France. Anisolin and making it	499,927	June 20	1972		63	1763
Monoline Composing Company. (See Scudder, Wilbur S., assignor.)						
Monroe, Alphonso, Poyntell, Pa. Roofing compound	500,024	June 20	2123		63	1789
Monroe, Eddy G. (See Monroe, William H. and E. G.)						
Monroe, James H., and I. Courtenay, St. John's, Newfoundland. Spinning and balling machine	500,343	June 27	2669	654 387 388 389	63	1897
Monroe, John P., Ringgold, Tenn. Self-binding harvester	506,711	Oct. 17	1549	387 388 389	65	320
Monroe, Marion B., New Orleans, La. Vehicle-brake	510,699	Dec. 12	1456	360	65	1697
Monroe, William F., and T. W. Creek, Elk Horn, Ky. Car-coupling	495,983	Apr. 25	2332	589	63	479
Monroe, William H. and E. G., Sullivan, Ill. Motor	506,926	Oct. 17	1920	475	65	389
Monsanto, Emma M., administratrix. (See Monsanto, Mauricio M.)						
Monsanto, Mauricio M., deceased, New York, N. Y.; E. M. Monsanto, administratrix. Regenerative furnace	496,365	Apr. 25	2941	735	63	594
Monsanto, Mauricio M., deceased, New York, N. Y.; E. M. Monsanto, administratrix. Apparatus for the manufacture of salt	496,615	May 2	349	95	63	683
Montanelli, Anacleto, Portland, Ore. Electrical musical instrument	490,358	Jan. 24	2204	575	62	492
Montanus, Friedrich E., Washington, D. C. Cooking utensil	507,828	Oct. 31	3471	854	65	703
Monte, Eduardo M. de, and C. Jost, Bombay, India. Means for preventing railway collisions	505,669	Sept. 26	2283	580 581	64	1740
Monteer, Alexander N., Springfield, Mo. Covering attachment for car-roofs	491,120	Feb. 7	88	24, 25	62	766
Monteer, Alexander N., Springfield, Mo. Covering attachment for car-roofs	507,627	Oct. 31	3138	768	65	641
Monteith, Jabus H., Los Angeles, Cal. Fruit-drier	508,113	Nov. 7	222	57	65	799
Montgillion, Eugene F., Elk Ridge, Md. Stop for walls of frame houses	498,563	May 30	3525	872	63	1311
Montgomerie, John C. (See Parkes and Montgomerie.)						
Montgomery, Floyd E., Tarkio, Mo., assignor of one-half to J. S. Smith, Clarinda, Iowa. Cultivator	494,341	Mar. 28	2561	645 646	62	1897
Montgomery, Frederick L., New York, N. Y. Roller cotton-gin	499,560	June 13	1374	327 328	63	1645
Montgomery, Harry C., Cleveland, Ohio. Door-closing device	490,032	Jan. 17	1655	429 430	62	370
Montgomery, Harry C., Cleveland, Ohio. Basin waste or overflow	507,237	Oct. 24	2460	606	65	499
Montgomery, Henry, Newark, N. J. Bowling-alley	490,916	Jan. 31	3114	799	62	684
Montgomery, James H., Denver, Colo. Ore-concentrator	495,003	Apr. 4	740	188	63	141
Montgomery, James H., Denver, Colo. Automatic wrench	500,025	June 20	2124	514	63	1789
Montgomery, John R., Homestead, Pa. Nut-lock	511,446	Dec. 26	2782	673	65	1965
Montgomery, John S., Georgetown, Ky. Grate attachment	508,736	Nov. 14	1217	303	65	1003
Montgomery, Marcus W., Chicago, Ill. Wagon	499,793	June 20	1748	423	63	1723
Montgomery, Marcus W., assignor to P. G. Montgomery, Chicago, Ill. Dumping-wagon	498,480	May 30	3375	841	63	1286
Montgomery, Plymouth G. (See Montgomery, Marcus W., assignor.)						
Montgomery, Thomas J., et al. (See Woolf, Albert E., assignor.)						
Montmore, Eugène G. de, Vienna, Austria-Hungary. Air-moistening apparatus	496,525	May 2	209	55	63	657
Monzel, John, Chicago, Ill. Spring-coiling machine	499,794	June 20	1750	423 424	63	1723
Monzingo, T. M. (See Carr, William L., assignor.)						
Moody, Charles D. (See Groom, Patrick W., assignor.)						
Moody, Emery C., Avon, assignor of one-half to H. A. Peach, Randolph, Mass. Last	491,489	Feb. 7	699	177	62	883

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Moody, Henry S., and F. R. Smith, assignors of one-third to A. L. Frank, Omaha, Nebr. Street-sweeper.	507,628	Oct. 31	3142	768	65	641
Moody, Leonard, <i>et al.</i> (See Burnham, Arthur M., assignor.)						
Moody, Maurice, Uhrichsville, Ohio. Head or arm rest.	510,282	Dec. 5	740	179	65	1549
Moody, Oakman A., Canaan, Me. Milking-stool.	504,992	Sept. 12	1132	290	64	1497
Moody, Walter S., Lynn, assignor to General Electric Company, Boston, Mass. System of electric distribution.	508,898	Nov. 14	1463	362	65	1048
Moore, John, What Cheer, Iowa. Ironing-table.	495,680	Apr. 18	1862	466	63	378
Mook, Charles O., Kansas City, Mo. Bale-tie machine.	493,279	Mar. 14	798	206 207	62	1532
Mook, Charles O., Kansas City, Mo. Adjustable roller for woodworking-machines.	504,932	Sept. 12	1026	264	64	1478
Mooney, Joseph G., assignor of one-half to T. Brown, Erie, Pa. Pneumatic tire.	501,290	July 11	1199	303	64	233
Moon, Hiram, deceased, Red Creek, (P. C. Moon, administratrix,) assignor of one-half to J. P. Crowell, Westbury, N. Y. Transplanter. (Reissue.)	11,305	Feb. 7	733	186	62	889
Moon, Prudence C., administratrix. (See Moon, Hiram.) (Reissue.)						
Moon, R. G., <i>et al.</i> (See Walker, Orlando O., assignor.)						
Moon, Richard D., assignor of one-half to R. J. Cowan, Ovilla, Tex. Churn.	504,737	Sept. 12	704	176	64	1416
Mooney, Patrick T., Walnut Springs, Tex. Double-incline wrecking-frog.	507,829	Oct. 31	3473	854	65	703
Mooney, William, Atlantic Highlands, N. J. Boiler.	490,257	Jan. 17	2021	528	62	443
Moor, Charlotte E., New York, N. Y. Cleaning compound.	496,274	Apr. 25	2778		63	563
Moore, Adin S. (See Derrick and Moore.)						
Moore, Albert H., Boston, Mass. Sofa-bed.	498,016	May 23	2626	656 657	63	1137
Moore, Alfred H., Brooklyn, N. Y. Pencil-sharpener.	496,128	Apr. 25	2553	643	63	521
Moore, Arthur B., G. W. Rue, C. D. Smith, F. H. Roebuck, J. F. Mills, and J. R. Kirk, East Las Vegas, N. Mex. Ter. Lighting apparatus.	502,573	Aug. 1	542	129	64	665
Moore Carving Machine Company. (See Moore, Stephen F., assignor.)						
Moore Carving Machine Company. (See Yarnell, Charles S., assignor.)						
Moore, Charles, assignor to Farrel Foundry and Machine Company, Ansonia, Conn. Calendering-machine.	509,930	Dec. 5	134	31.32	65	1435
Moore, Charles C., Columbus, Ohio. Hanging gutter.	498,286	May 30	3055	761	63	1228
Moore, Charles C., Columbus, Ohio. Metallic ceiling.	500,595	July 4	87	25	64	17
Moore, Charles C., New York, N. Y., assignor to C. C. Moore, Jr. Game apparatus.	508,524	Nov. 14	903	232	65	941
Moore, Charles C., New York, N. Y., assignor to C. C. Moore, Jr., Bridgeport, Conn. Chess and checker board.	511,306	Dec. 19	2521	613 614	65	1905
Moore, Charles E., Boston, Mass. Controlling device for electric elevators.	496,382	Apr. 25	2973	742	63	601
Moore, Charles E., assignor to Moore & Wyman Elevator and Machine Works, Boston, Mass. Controlling device for elevators.	502,372	Aug. 1	204	49	64	603
Moore, Charles F. (See Lenarz, Felix A., assignor.)						
Moore, Charles H., Yonkers, N. Y. Water-closet.	496,426	May 2	51	14	63	628
Moore, Charles J., and G. A. Burwell, assignors to Lozier Manufacturing Company, Toledo, Ohio. Bicycle-saddle.	496,664	May 2	436	117	63	698
Moore, Charles J., and G. A. Burwell, assignors to Lozier Manufacturing Company, Toledo, Ohio. Bicycle-saddle.	496,665	May 2	437	117	63	698
Moore, Charles R., Elmira, N. Y. Boiler.	500,814	July 4	446	117	64	82
Moore, Charles R., assignor of one-half to O. Newcomb, Newport, Vt. Combined screen and storm door.	507,151	Oct. 24	2311	568	65	472
Moore, Chester O., and E. C. and T. J. Fitzsimmons, Fruitland, Iowa. Machine for setting plants.	510,925	Dec. 19	1885	462 463	65	1788
Moore, Cornelius M., Dahlonaga, Ga. Fire and water proof paint and cement.	507,745	Oct. 31	3318		65	675
Moore, Daniel M., New York, N. Y. Electric-lamp vibrator-regulator.	494,531	Mar. 28	2872	718	62	1953
Moore, Daniel M., New York, N. Y. Electric regulator.	502,444	Aug. 1	331	79	64	627
Moore, Daniel M., and C. M. Jacobs, New York, N. Y. Electric-light display system.	496,366	Apr. 25	2945	735 736	63	595
Moore, Edgar A., Manlius, N. Y. Composition for architectural purposes.	504,933	Sept. 12	1029		64	1479
Moore, Edson C. (See Moore and Fitzsimmons.)						
Moore, Edward U., Chaires, Fla. Nut-lock.	501,590	July 18	1676	418	64	338
Moore, Edward Y., Milwaukee, Wis. Adjustable track for sliding doors.	492,413	Feb. 28	2151	538	62	1224
Moore, Edward Y., Milwaukee, Wis. Differential pulley-block.	492,609	Feb. 28	2474	615	62	1291
Moore, Edward Y., Milwaukee, Wis., and R. W. Lundy, South Bend, Ind. Door-hanger.	500,148	June 27	2348	568	63	1840
Moore, Enoch P., <i>et al.</i> (See Wilson, David Y., assignor.)						
Moore, Ethelbert A., New Britain, Conn. Machine for polishing hinges.	504,498	Sept. 5	315	79.80	64	1328
Moore, Everett D., assignor to Southern Toy and Novelty Company, Baltimore, Md. Pen-cil-sharpener.	500,504	June 27	2899	713	63	1937
Moore, Fillmore, Farmington, Conn. Pneumatic sole.	508,034	Nov. 7	83	24	65	773
Moore, Francis A., Tyler, Tex. Car-replacer.	499,187	Jan. 3	315	87	62	72
Moore, Frederic H., Boston, Mass. Bridging for flooring-joists.	503,245	Aug. 15	1685	414	64	903
Moore, George. (See Sherman, Lewis P., assignor.)						
Moore, George, Boston, Mass. Street-car.	498,071	May 23	2708	677	63	1151
Moore, George, Boston, Mass. Trolley-guard.	502,629	Aug. 1	638	152	64	684
Moore, George, assignor of one-half to G. W. Smith, Boston, Mass. Street-railway car. (Reissue.)	11,396	Dec. 26	3261	799 800	65	2055
Moore, George C., assignor of one-half to J. W. Green, Jr., Easthampton, Mass. Congress shoe.	496,526	May 2	209	56	63	657
Moore, George H., Norwich, Conn. Collecting-tube for filters.	493,937	Mar. 21	1880	479	62	1755
Moore, George H., Norwich, Conn. Collecting-tube for filters.	493,938	Mar. 21	1883	479 480	62	1756
Moore, George R., Philadelphia, Pa. Valve and pipe adjunct for graduating the flow of oil from tanks.	503,769	Aug. 22	2541	632	64	1075
Moore, Gideon E., New York, N. Y. Treating ores of zinc, manganese, or iron.	505,408	Sept. 19	1802		64	1635
Moore, Gilpin, Rock Island, Ill. Subsoil attachment for plows.	499,888	June 20	1919	466	63	1753
Moore, Gilpin, assignor to Deere & Company, Moline, Ill. Spring-tooth for cultivators.	503,288	Aug. 15	1756	434	64	916
Moore, Harrey, Wellingborough, England. Vehicle-wheel.	504,440	Sept. 5	208	54.55	64	1309
Moore, Harry S., assignor of one half to S. B. Cole, Bridgeton, N. J. Merry-go-round.	504,886	Sept. 12	949	245 246	64	1463
Moore, Horatio N., Savannah, Ga. Pianoforte-action.	493,172	Mar. 7	623	157	62	1481
Moore, James S., Portland, Oreg. Blacking-brush and box-holder.	499,436	June 13	1173	280	63	1609
Moore, James S., Sullivan, assignor of one-half to W. S. Bristol, Flat Rock, Ind. Can-filling machine.	490,033	Jan. 17	1656	430	62	370
Moore, Jennie B., Covington, Ky. Dress-stay.	509,480	Nov. 28	2537	612	65	1278
Moore, John L., New York, N. Y. Electric bell.	499,305	June 13	923	223	63	1565
Moore, John S. (See Barrow, Jacob, assignor.)						
Moore, John R., Topeka, Kans. Machine for the manufacture of railway-frogs.	509,442	Nov. 28	2462	592	65	1265
Moore, Joseph, San Francisco, Cal. Tube-splitting machine.	495,257	Apr. 11	1190	298	63	239

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Moore, Joseph C. (See Burleigh, Joseph A., assignor.)						
Moore, Levi, Baraboo, Wis. Car-coupling	495,595	Apr. 18	1727	435	63	356
Moore, Levi, Baraboo, Wis. Car-coupling	506,827	Oct. 17	1752	441	65	358
Moore, Morris W., assignor of five-sixths to J. E. Chase and W. D. Park, Holyoke, Mass. Fountain-pen	501,895	July 18	2175	539	64	424
Moore, Mortimer M., assignor of one-half to J. F. Walther, Erie, Pa. Elevator	500,344	June 27	2670	655	63	1897
Moore, Moses E., Westfield, Mass. Machine for splitting rattan or other stock	500,813	July 4	444	117	64	82
Moore, Moses M., assignor to Eclipse Wind Engine Company, Beloit, Wis. Tappet for duplex steam pumping-engines	489,655	Jan. 10	1027	268	62	229
Moore, Samuel J., et al. (See Rodwell, George J. B., assignor.)						
Moore, Samuel T., et al. (See Wilson, David Y., assignor.)						
Moore, Stephen, trustee. (See Cummings and Coupal, assignors.)						
Moore, Stephen F., assignor to Moore Carving Machine Company, Minneapolis, Minn. Rubbing or polishing machine	507,280	Oct. 24	2533	624	65	511
Moore, Sylvester, Audubon, Iowa. Fence-wire reel	491,849	Feb. 14	1273	{ 315 316 }	{ 62 64 }	1018
Moore, Thomas, Cheyenne, Wyo. Self-lubricating axle-box	501,727	July 18	1901	473	64	376
Moore, Thomas C., et al. (See Cleeland, William M., assignor.)						
Moore, Thomas H., Fort Madison, Iowa. Roof-bracket	498,285	May 30	3054	760	63	1228
Moore, Waverly C., Greer's Depot, S. C. Wheel-cultivator	510,923	Dec. 19	1883	462	65	1787
Moore, Waverly C., Greer's Depot, S. C. Attachment for bicycles	510,924	Dec. 19	1884	462	65	1787
Moore, William, Kokomo, Ind. Drill-press	510,648	Dec. 12	1377	337	65	1682
Moore, William B. (See Wright, Judson E., assignor.)						
Moore, William B., New Glasgow, and G. B. Willett, Moncton, Canada, assignors of two-thirds to W. M. Walton and H. Richmond, New York, N. Y. Ticket-holder	493,511	Mar. 14	1166	298	62	1600
Moore, William H., assignor to W. H. Moore Mattress Company, Gardiner, Me. Apparatus for filling mattresses	489,540	Jan. 10	871	228	62	197
Moore, William J. (See Steel, Robert, assignor.)						
Moore, William N., Joliet, Ill. Heating-stove	499,306	June 13	924	{ 223 224 }	{ 63 64 }	1565
Moore, William S., New York, N. Y. Vacuum-pump	501,954	July 25	2270	567	64	457
Moore, William W., Philadelphia, Pa. Broom or brush holder	504,887	Sept. 12	951	246	64	1464
Moore & Wyman Elevator and Machine Works. (See Moore, Charles E., assignor.)						
Moore, George W., New Orleans, La. Buckle	489,656	Jan. 10	1028	268	62	229
Moorfield, Frank, Newark, N. J. Apparatus for forming or shaping hollow articles	506,247	Oct. 10	783	{ 193 194 }	{ 65 66 }	160
Moorhead, Robert L., et al. (See Wiley, George, assignor.)						
Moorhouse, Robert O., Philadelphia, Pa. Doctor for paper making and calendering machines	507,746	Oct. 31	3318	813	65	675
Moorman, Eli H., Minneapolis, Minn. Steam-cooker	511,351	Dec. 26	2609	634	65	1935
Moran, Daniel E., New York, N. Y. Air-lock	500,149	June 27	2350	{ 568 569 }	{ 63 64 }	1840
Moran Flexible Steam Joint Company. (See Moran, Thomas W., assignor.)						
Moran, Lewis P., J. O'Brien, and J. Davin, Montgomery, W. Va. Switch stand and lock	509,754	Nov. 28	2962	716	65	1359
Moran, Michael, assignor to R. T. Blow and V. Moran, St. Louis, Mo. Machine for removing lint from cotton-seeds	500,102	June 20	2236	544	63	1808
Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Relief-valve for steam-pipes	500,505	June 27	2900	713	63	1937
Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Combination coupling for steam-pipes of railway-cars	501,435	July 11	1483	373	64	285
Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Pipe-coupling	502,234	July 25	2722	686	64	542
Moran, Victoria, et al. (See Moran, Michael, assignor.)						
Morden, William J. (See McKinnon, John, assignor.)						
Mordey, William M., London, England. Dynamo-electric machine	493,104	Mar. 7	519	130	62	1462
Morean, Wilfrid A. (See Massé, Bazile, assignor.)						
Morehead, J. Turner. (See Cable, George W., assignor.)						
Morehead, John, Detroit, Mich. Steam-boiler feeder	507,716	Oct. 31	3282	803	65	668
Morehouse, Cyrus E., et al. (See Bowen, Philip A., assignor.)						
Morehouse, Leonard M., et al. (See Bowen, Philip A., assignor.)						
Morel, Ferdinand, Paris, France. Apparatus for turning music-sheets	501,212	July 11	1081	275	64	213
Moreland, Oscar C. and P. B., Henderson, Ky. Wire fence	509,755	Nov. 28	2963	717	65	1359
Moreland, Pierre B. (See Moreland, Oscar C. and P. B.)						
Moreland, Willis J., Mottville, N. Y. Folding chair	505,321	Sept. 19	1664	429	64	1609
Morein, Jules, Norfolk, Va. Awning	493,105	Mar. 7	522	131	62	1462
Morey, Albert E., assignor to Akron Tool Company, Akron, Ohio. Journal for barrows	502,082	July 25	2474	621	64	495
Morey, Charles L., Centralia, Ill. Electric-lighting system	500,026	June 20	2124	515	63	1789
Morfit, Clarence, New York, N. Y. Car coupling	493,638	Mar. 21	1397	354	62	1662
Morford, Charles H., Allentown, Pa. Permutation-lock	494,154	Mar. 28	2264	575	62	1841
Morford, Lewis L. E. and C. F. Pike, Philadelphia, Pa. Flush-tank for water-closets, &c	511,540	Dec. 26	2921	711	65	1993
Morford, Thomas E., Minneapolis, Minn., assignor of one-half to Enamel Insulator Company, of Illinois. Electric heater	490,034	Jan. 17	1658	430	62	370
Morford, Thomas E., Minneapolis, Minn., assignor of one-half to Enamel Insulator Company, of Illinois. Insulation of dynamo-armatures	491,490	Feb. 7	700	177	62	883
Morford, Thomas E., Minneapolis, Minn., assignor of one-half to Enamel Insulator Company, of Illinois. Insulated magnetic coil	491,491	Feb. 7	701	177	62	883
Morford, Thomas E., Chicago, Ill., assignor to Enamel Insulator Company, of Illinois. Insulating electric conductors. (Reissue)	11,303	Feb. 7	731	185	62	889
Morgan Alcohol Time Signal Company. (See Morgan, Benjamin B., assignor.)						
Morgan, Benjamin B., Ypsilanti, Mich. Railway time-signal	511,307	Dec. 19	2522	614	65	1905
Morgan, Benjamin B., assignor to Morgan Alcohol Time Signal Company, Ypsilanti, Mich. Railway time-signal	494,509	Mar. 28	2827	709	62	1946
Morgan, Charles, assignor of one-half to B. F. O'Neil, L. H. Thayer, and F. D. Tomlinson, Latah, Wash. Can-opener	508,332	Nov. 7	573	141	65	864
Morgan, Charles, and M. Redlinger, Jr., assignors to said Morgan, E. H. Morgan, and A. Baumgarten, Freeport, Ill. Coffee-mill	495,099	Apr. 11	909	229	63	189
Morgan Construction Company. (See Edwards, Victor E., assignor.)						
Morgan, David J., Cardiff, England. Combined match box and lighter	509,481	Nov. 28	2538	612	65	1278
Morgan, Edgar H., et al. (See Morgan and Redlinger, assignors.)						
Morgan, Edmund C., Chicago, Ill. Electric coal-mining machinery	494,587	Apr. 4	91	22	63	19
Morgan, Edmund C., Chicago, Ill. System for operating electric motors	507,629	Oct. 31	3143	769	65	642
Morgan Envelope Company. (See Hicks, Oliver H., assignor.)						
Morgan, Frank E. (See Lane, Frederic A., assignor.)						
Morgan, Fred W., and R. Wright, Chicago, Ill. Manufacture of pneumatic tires	490,035	Jan. 17	1659	{ 431 432 }	{ 62 63 }	370

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Morgan, Fred W., and R. Wright, Chicago, Ill. Mandrel for pneumatic tires	496,321	Apr. 25	2860	713	63	579
Morgan, Fred W., and R. Wright, Chicago, Ill. Pneumatic tire	496,789	May 2	634	169 170	63	732
Morgan, Fred W., and R. Wright, Chicago, Ill. Pneumatic tire	502,047	July 25	2417	608 609	64	484
Morgan, Fred W., and R. Wright, Chicago, Ill. Pneumatic tire	502,048	July 25	2419	609	64	484
Morgan, Fred W., and R. Wright, Chicago, Ill. Valved pneumatic tire	507,026	Oct. 17	2068	511	65	417
Morgan, Gerry. (See Morgan, William G., assignor.)						
Morgan, Gwilym. (See Lewis and Morgan.)						
Morgan, Harry W., Rochester, N. Y. Box-machine	496,431	May 2	63	19, 20	63	630
Morgan, Hubert W., Meriden, Conn. Wood-screw	507,919	Oct. 31	3611	891	65	729
Morgan, James B., Davenport, Iowa. Tag-holder	491,581	Feb. 14	852	216	62	934
Morgan, John. (See Pratt, John C., assignor.)						
Morgan, John B., Middleborough, Mass. Thread-waxing and tension device for sewing-machines	493,637	Mar. 21	1395	354	62	1661
Morgan, John M., Salisbury, N. C. Filter	489,084	Jan. 3	152	42	62	37
Morgan, John R., et al. (See Morgan, Thomas R., Sr., and W. H., assignors.)						
Morgan, John R., et al. (See Morgan, William H., assignor.)						
Morgan, L. W., et al. (See Chamberlin, James R., assignor.)						
Morgan, Newton, Springfield, Mass. Dental-disk holder	493,893	Mar. 21	1802	459	62	1740
Morgan, Theophilus D., New Philadelphia, assignor of one-half to J. Ashton, Canal Dover, Ohio. Shield for metal-rolls	500,345	June 27	2671	655	63	1897
Morgan, Thomas R., Sr. (See Gordon, William B., assignor.)						
Morgan, Thomas R., Sr., et al. (See Morgan, William H., assignor.)						
Morgan, Thomas R., Sr., Alliance, Ohio. Overhead traveling crane	496,434	May 2	74	22	63	632
Morgan, Thomas R., Sr., and W. H., assignors of one-half to T. R., Jr., and J. R. Morgan, Alliance, Ohio. Trolley for overhead traveling cranes	509,758	Nov. 28	2965	718	65	1360
Morgan, Waitman M., Kansas City, Mo. Apparatus for elevating and equalizing the supply of liquids	502,102	July 25	2501	628	64	500
Morgan, Warren, Houghton, N. Y. Cattle-stanchion	504,605	Sept. 5	476	122	64	1358
Morgan, William, Brooklyn, Ohio. Cutter-head	501,685	July 18	1836	457	64	365
Morgan, William, assignor of one-fifth to J. L. Hopkins, St. Louis, Mo. Harness-support	494,532	Mar. 28	2873	719	62	1953
Morgan, William A. (See Worcester and Morgan.)						
Morgan, William G., assignor of one-half to G. Morgan, Fryeburg, Me. Surgical lamp	501,524	July 18	1577	397	64	318
Morgan, William H. (See Morgan, Thomas R., Sr., and W. H.)						
Morgan, William H., Alliance, Ohio. Locomotive jib-crane	496,430	May 2	62	19	63	630
Morgan, William H., Alliance, Ohio. Magnetic crane	496,432	May 2	70	20, 21	63	631
Morgan, William H., Alliance, Ohio. Pillar-crane	496,433	May 2	72	21	63	632
Morgan, William H., Alliance, Ohio. Electric traveling crane	496,945	May 9	908	238	63	801
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Electrically-operated overhead traveling crane	496,427	May 2	53	15, 16	63	628
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Locomotive-crane	496,428	May 2	58	17, 18	63	629
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Gravity-brake for vehicles	496,429	May 2	61	18	63	629
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Current-controlling device	509,322	Nov. 21	2218	535 536	65	1206
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Overhead traveling crane	509,756	Nov. 28	2964	717	65	1359
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Overhead traveling crane	509,757	Nov. 28	2965	717	65	1360
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr., and Jr., and J. R. Morgan, Alliance, Ohio. Overhead traveling crane	510,041	Dec. 5	338	75, 76	65	1473
Morgan, William J., Hillsborough, Ohio. Expansion-spring for seats	507,027	Oct. 17	2070	511	65	417
Morgeneier, Robert, assignor to American Carving and Manufacturing Company, Winona, Minn. Automatic duplicating-machine	501,091	July 11	882	227 228 229	64	176
Morgeneier, Robert, assignor to American Carving and Manufacturing Company, Winona, Minn. Duplicating-machine	509,931	Dec. 5	136	32, 33	65	1435
Moriarty, Edward D., Broadland, S. D. Railway-track jack and liner	494,155	Mar. 28	2266	575	62	1841
Moriarty, Matthew, Bangor, Me. Cesspool	498,287	May 30	3056	761	63	1228
Morin, Frank, Fall River, assignor to G. Draper & Sons, Hopedale, Mass. Top-roll mechanism	506,641	Oct. 10	1430	358	65	286
Morison, Alexander, Alpena, Mich. Breaking and scutching machine for flax, &c	511,352	Dec. 26	2610	634 635	65	1935
Morison, Samuel L., New York, N. Y. Filter	497,807	May 23	2286	575	63	1076
Moritz, Carl C., and S. D. Greenwood, Salt Lake City, Utah Ter. Flat-iron holder	495,354	Apr. 11	1337	335	63	265
Morley, Albert, assignor to Laskey Company, Chicago, Ill. Bobbin-winder for sewing-machines	497,476	May 16	1765	445	63	967
Morley, Albert, assignor to Laskey Company, Chicago, Ill. Sewing-machine	499,845	June 20	1840	448	63	1739
Morley Button Sewing Machine Company. (See Bennett, Walter E., assignor.)						
Morley, Robert, assignor of one-half to T. Herbert, Philadelphia, Pa. Stop-motion device for knitting-machines	499,138	June 6	663	159 160	63	1506
Morrell, Benjamin D., Pittsburg, Pa. Portable folding cot	505,409	Sept. 19	1804	465 466	64	1636
Morrell, Edward E., assignor to National Gas and Water Company, Chicago, Ill. Gas-manufacturing apparatus	495,900	Apr. 18	2210	557	63	441
Morrell, James A., Lansdale, Pa. Process of and apparatus for evaporating cane-juice	509,749	Nov. 28	2953	715	65	1357
Morrell, Samuel, Wellington, New Zealand. Sash-fastener	490,209	Jan. 17	1946	510	62	428
Morrill, Allen P. (See Smith and Morrill.)						
Morrill, Charles, New York, N. Y. Saw-set	507,152	Oct. 24	2312	568	65	473
Morrill, George P., Canterbury, N. H. Ax wedge and guard	503,351	Aug. 15	1864	461	64	935
Morrill, George W., Alton, N. H. Pipe-wrench	491,850	Feb. 14	1275	316	62	1019
Morrill, Ichabod P., Noble, Mich. Combined kitchen-table and flour-sifter	502,630	Aug. 1	639	153	64	684
Morrill, Osgood. (See Wells, Harlan P., assignor.)						
Morrill, Osgood, and H. P. Wells, Amesbury, Mass. Carriage-seat	492,414	Feb. 28	2152	538	62	1224
Morris, Alice. (See Morris, George W., assignor.)						
Morris, Charles E. (See Park, Evans, Turner, and Morris.)						
Morris, Charles O. (See Hunt and Morris.)						
Morris, Elmer P., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Switch and safety-fuse	490,917	Jan. 31	3116	799	62	685
Morris, Frank, Alliance, Ohio. Ladle for handling molten steel, &c	506,328	Oct. 10	922	229	65	188
Morris, George. (See Thompson, William B., assignor.)						
Morris, George H. (See Brown and Morris.)						
Morris, George M., Cincinnati, Ohio. Autographic register	508,552	Nov. 14	943	232	65	946

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Morris, George M., and R. L. Stokes, Cincinnati, Ohio: said Stokes assignor to said Morris. Autographic register	508,553	Nov. 14	946	232	65	949
Morris, George W., assignor to A. Morris, Brantford, Canada. Band-cutter and automatic feeder for thrashing-machines	495,101	Apr. 11	914	230 231	63	190
Morris, Henry G., Philadelphia, Pa. Evaporating apparatus	489,260	Jan. 3	434	120	62	96
Morris, James L., Tiburon, Cal. Lubricator	491,788	Apr. 4	423	105	63	82
Morris, James R., Passaic, N. J., assignor to New York Belting and Packing Company, Limited, of England. Self-healing pneumatic tire	496,527	May 2	210	56	63	657
Morris, James R., Passaic, N. J., assignor to New York Belting and Packing Company, Limited, of England. Self-healing pneumatic tire	496,528	May 2	212	56	63	657
Morris, John B., Cincinnati, Ohio. Fence-wire ratchet	509,580	Nov. 28	2690	651	65	1308
Morris, John H., Seward, Nebr. Permutation-lock	495,100	Apr. 11	910	229 230	63	190
Morris, John H., Seward, Nebr. Vehicle-wheel	501,525	July 18	1578	397	64	318
Morris, John T. L., Kirksville, Mo. End-gate lock	489,386	Jan. 3	619	167	62	133
Morris, Joseph L., Lawrence, Kans. Adjustable-speed bicycle	504,168	Aug. 29	3165	790	64	1210
Morris, Joseph L., and J. P. Nace, Lawrence, Kans. Trip for automatic railway-switches	492,042	Feb. 21	1571	391	62	1092
Morris, Llewellyn B. (See Postel and Morris.)						
Morris Manufacturing Company. (See Tinsman, Samuel H., assignor.)						
Morris, Matthias K., Holliday's Cove, W. Va. Type-writing machine	506,712	Oct. 17	1554	389	65	321
Morris, Norman K., and J. W. Bailey, Denver, Colo. Producing white lead	493,106	Mar. 7	533	131	62	1463
Morris, Norman K., and J. W. Bailey, Denver, Colo. White lead	493,173	Mar. 7	624		62	1481
Morris, Simeon I., assignor of one-half to J. W. Wait, St. Paul, Minn. Apparatus for building tunnels	498,855	June 6	187	45, 46	63	1426
Morris, Simeon I., assignor of one-half to J. W. Wait, St. Paul, Minn. Apparatus for re-lining tunnels	504,045	Aug. 29	2969	742	64	1173
Morris, Thomas, Brooklyn, assignor to J. Berbecker & Co., New York, N. Y. Stop-hinge for desks	498,564	May 30	3525	872	63	1312
Morris, Thomas D., Seward, Nebr. Permutation-lock	510,514	Dec. 12	1110	268	65	1634
Morris, William B., Seattle, Wash. Elevator	511,447	Dec. 26	2783	673	65	1965
Morrison, Alonzo, assignor of one-fourth to F. H. Gleason, Los Angeles, Cal. Self-oiling antifriction-roller journal-bearing	496,888	May 9	816	215	63	784
Morrison, Charles F., Thompsonville, Conn. Feeding device for carding-machines	507,664	Oct. 31	3209	785	65	653
Morrison Convertible Car Seat Company. (See Morrison, James D., assignor.)						
Morrison, Henry K., Jersey City, N. J., assignor to United Gas Improvement Company, Philadelphia, Pa. Coal-handling appliance	502,445	Aug. 1	332	80	64	627
Morrison, James D., Reinbeck, Iowa, assignor to Morrison Convertible Car Seat Company, Chicago, Ill. Railway-car	497,677	May 16	2080	519 520	63	1024
Morrison, James W. (See Porter, Joseph Y., assignor.)						
Morrison, John H., Salida, Colo. Surgical apron	489,132	Jan. 3	229	61	62	53
Morrison, John H., Salida, Colo. Surgical irrigating-basin	493,280	Mar. 14	806	207	62	1533
Morrison, Joseph, assignor of one-half to B. S. Van Tuyl, Petrolia, Canada. Combined horse collar and hame	508,483	Nov. 14	830	206	65	927
Morrison, Leonard D., New York, N. Y. Barrel-hooping machine	497,806	May 23	2284	574 575	63	1077
Morrison, P. B. (See Munslow, Joseph B., assignor.)						
Morrison, Quin W., St. Louis, Mo. Jack for loading or unloading cars	502,049	July 25	2422	610	64	484
Morrison, Robert J., St. Louis, Mo. Safety attachment for elevators	494,933	Apr. 4	637	163	63	123
Morrison, Thomas, Duquesne, Pa. Automatic transfer device	505,921	Oct. 3	190	47	65	37
Morrison, Thomas, Duquesne, Pa. Swinging guide for rolling-mills	505,922	Oct. 3	190	47, 48	65	37
Morrison, Thomas, Duquesne, Pa. Automatic edging-guide for rolling-mills	505,923	Oct. 3	191	48	65	37
Morrison, Walter G., Willimantic, Conn. Spindle for spinning-machines	492,415	Feb. 28	2153	538	62	1224
Morrison, Willard A., and C. L. Ames, Chicago, Ill., assignors to Ames & Frost Company, of Illinois. Leg for wardrobe-beds	505,411	Sept. 19	1809	466 467	64	1637
Morrison, William, Lansingburg, N. Y. Sectional brush-mold	491,757	Feb. 14	1124	284	62	989
Morrison, William E. D., et al. (See Kitton, John C., assignor.)						
Morrison, William N., and T. P. Swin, Brooklyn, N. Y. Rail-support	498,072	May 23	2710	678	63	1151
Morrison, William N., and T. P. Swin, Brooklyn, N. Y. Rail-support	498,073	May 23	2711	678	63	1152
Morriss, Adelaide, London, England. Apparatus for use in stage-illusions	495,052	Apr. 11	817	206	63	171
Morrow, Alexander P., New Brighton, assignor of one-half to H. H. Fulton, Beaver Falls, Pa. Pneumatic tire	507,325	Oct. 24	2614	643	65	528
Morrow, John T., Lynn, assignor to General Electric Company, Boston, Mass. Armature for dynamo-electric machines	504,401	Sept. 5	141	37	64	1297
Morrow, Zachariah D., Franklin, Ill. Adjustable stove-caster	499,561	June 13	1377	328	63	1645
Morse, Andrew J., Boston, Mass. Folding bed	490,832	Jan. 31	2967	761	62	655
Morse, Charles L., Athol, Mass. Valve-reseating machine	504,606	Sept. 5	477	122 123	64	1359
Morse, Daniel, New York, N. Y. Folding hammock-support	497,282	May 9	1434	363	63	893
Morse, Daniel E., New York, N. Y. Dental apparatus for grinding teeth	506,522	Oct. 10	1264	316	65	254
Morse, Edward C., Manchester, N. H. Cremating-furnace	492,987	Mar. 7	341	86	62	1426
Morse, Edward P., et al. (See Simoneau, Joseph M., assignor.)						
Morse, Everett F., Trumansburg, N. Y. Two-wheeled vehicle	492,223	Feb. 21	1856	464	62	1151
Morse, Everett F., Trumansburg, N. Y. Two-wheeled vehicle	492,224	Feb. 21	1859	464 465	62	1151
Morse, Everett F., Trumansburg, N. Y. Vehicle-spring	505,248	Sept. 19	1539	401	64	1586
Morse, Everett F., Trumansburg, N. Y. Roller-bearing	507,153	Oct. 24	2313	568	65	473
Morse, Lansing, Brooklyn, N. Y. Secondary battery	502,824	Aug. 8	993	242	64	764
Morse, Lansing, Brooklyn, N. Y. Electric switch	502,825	Aug. 8	995	242	64	764
Morse, Leonard W., Mystic, Conn. Paper-cutting machine	495,994	Apr. 25	2333	590	63	479
Morse, Martin V. B., Marblehead, Mass. Feed-trough	493,040	Mar. 7	422	106	62	1442
Morse, Orville M., Jackson, Mich. Grain-separator	499,795	June 20	1752	424	63	1724
Morse, Orville M., Jackson, Mich. Grain-separator	499,796	June 20	1756	425	63	1724
Morse, Orville M., Jackson, Mich. Grain-cleaner	505,573	Sept. 26	2125	538	64	1710
Morse, Oscar E., Dillon, Mont. Rotary engine	507,830	Oct. 31	3474	854 855	65	703
Morse, Warren. (See Meserve and Morse.)						
Morse, Williams & Co. (See Koeberlin, Anton, assignor.)						
Mortensen, Henry, and P. C. Larsen, Friend, Nebr. Croquet tally-board	507,444	Oct. 24	2806	687	65	566
Mortier, Paul, St. Etienne, France. Fan or blowing apparatus	507,445	Oct. 24	2808	687	65	566
Mortimer, Furman F., and J. P. Coffin, Florence, S. C. Locomotive-engine pilot	489,320	Jan. 3	515	141	62	111
Mortimer, John D., Stockton, Cal. Shipping receipt-book	504,360	Sept. 5	68	18	64	1284
Morton, Albert H., assignor to Kitson Machine Company, Lowell, Mass. Machine for feeding textile fibers	506,713	Oct. 17	1556	390	65	321
Morton, Andrew, New York, N. Y. Cork mat for bath-rooms	491,851	Feb. 14	1276	316	62	1019

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Morton, Charles, <i>et al.</i> (See Mashinter, William P., assignor.)						
Morton, Ephraim S., and E. C. Woodard, Brockton, Mass. Last.	497,591	May 16	1952	489	63	1000
Morton, Francis L. (See Tolan and Morton.)						
Morton, Henry W., Boston, Mass., assignor to General Electric Company, of New York.						
Transmitting mechanism for motors and dynamos	489,026	Jan. 3	71	20	62	18
Morton, Jasper S., Los Angeles, Cal. Fly-trap	507,630	Oct. 31	3145	769	65	642
Morton, Samuel S. (See Eisenhart, Morton, and Waltman.)						
Morton, William, Kirkdale, England. Baking-oven	496,838	May 2	710	{ 188 189 }	53	746
Morton, William O., assignor of one-half to F. L. Dupree, Richland, Ga. Car-coupling	508,035	Nov. 7	84	24	65	773
Mortson, George, <i>et al.</i> (See Claussen, Edward E., assignor.)						
Moschcowitz, Herman, New York, N. Y. Dress-shield	500,928	July 4	614	160	64	112
Moschel, Carl, Offenbach-on-the-Main, and F. Koch, Frankfurt-on-the-Main, Germany.						
Lace-fastening hook	494,821	Apr. 4	478	120	63	92
Moseley, Carleton, and J. Walsh, assignors to Chase & Sanborn, Chicago, Ill. Crate for cans.	495,355	Apr. 11	1338	335	63	266
Mosely, Thomas C. (See Madden, Gustav, assignor.)						
Mosely, Thomas C., and A. H. Kingman, Chicago, Ill. Gasoline-heater	490,880	Jan. 31	3042	782	62	671
Moser, Charles, and C. Schirmer, Brooklyn, N. Y. Machine for dehairing fur-skins	490,976	Jan. 31	3208	{ 819 820 }	62	702
Moser, Eli D., Hiawatha, Kans. Combined plow and harrow	492,043	Feb. 21	1572	391	62	1092
Moser, Joseph J., West Covington, Ky. Well-strainer	501,655	July 18	1789	445	64	357
Moses, Frank D., Chicago, Ill., assignor to Universal Gas Construction Company, Minneapolis, Minn. Manufacture of inflammable aeriform substances for illuminating or heating.	507,663	Oct. 31	3207	785	65	653
Moses, Walter D. (See Cordley, William J., assignor.)						
Mosher, Charles P. (See Streeter and Mosher.)						
Mosher, Eliza M., Brooklyn, N. Y. Underwaist	495,053	Apr. 11	818	207	63	171
Mosher, Oscar M., Glidden, assignor of one-half to M. W. Beach, Carroll county, Iowa.	501,466	July 11	1484	{ 373 374 }	64	285
Tongue-support	510,357	Dec. 5	843	203	65	1570
Mosier, Arthur, John Day, Ore. Hay-knife	501,686	July 18	1837	457	64	365
Moskowitz, Jacob, St. Louis, Mo. Fly-trap						
Moskowitz, Morris, and S. Young, assignors of one-half to L. D. Adler and J. Loewenberg, Newark, N. J. Mechanism for transmitting power from car-wheel axles to dynamos within the cars	498,925	June 6	416	97	63	1465
Moskowitz, Morris, and S. Young, assignors of one-half to L. D. Adler and J. Loewenberg, Newark, N. J. Means for transmitting power from car-axles to dynamos	504,132	Aug. 20	3106	778	64	1200
Mosler, Julius, Rixdorf, Germany. Making caramel from distillery refuse	511,353	Dec. 26	2614		65	1936
Moss, Abraham. (See Moss, James and A.)						
Moss, Ann E., Lawson, Mo., and B. Hillyard, Allerton, Iowa. Carrying-crate	507,446	Oct. 24	2809	688	65	566
Moss, Benjamin F., Reading, Mich., assignor to E. C. Atkins, Indianapolis, Ind. Crosscut-saw	508,484	Nov. 14	831	206	65	927
Moss, George A., San Francisco, Cal. Counter-seat	508,961	Nov. 21	1609	396	65	1090
Moss, Horace G. (See Adecock, Tippet, and Moss.)						
Moss, James and A., Hebden Bridge, England. Picking-motion for looms	510,608	Dec. 12	1306	{ 318 319 }	65	1669
Moss, John H., Newburg, N. Y. Clutch	496,693	May 2	480	128	63	706
Moss, Marvin R., Huntsburg, Ohio. Sap-bucket cover	502,740	Aug. 8	846	206	64	736
Moss, Marvin R., Huntsburg, Ohio. Reaming-bit	505,322	Sept. 19	1665	429	64	1609
Moss, Leopold. (See Thomas, Henry O., assignor.)						
Mossberg, Frank, Attleborough, Mass. Drop-press pulley	502,930	Aug. 8	1171	289	64	797
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass.						
Jeweler's turk's-head roll. (Reissue)	11,344	June 13	1576	379	63	1679
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass.						
Vise for milling-machines	503,327	Aug. 15	1828	453	64	928
Mossberg Manufacturing Company. (See Mossberg, Frank, assignor.)						
Mossberg Manufacturing Company. (See Mossberg, Frank, assignor.) (Reissue.)						
Mossberg, Oscar. (See Johnson and Mossberg.)						
Motheral, John, Menden, near North McGregor, Iowa. Hoisting device	497,592	May 16	1953	489	63	1000
Mott, Francis D., London, England. Covering for ships' bottoms	492,044	Feb. 21	1573	391	62	1092
Mott, Frank M., assignor of one-half to J. McLaren, Ferris, Cal. Faucet	503,666	Aug. 22	2377	593	64	1043
Mott, John, and J. J. Fearon, Philadelphia, Pa. Carrousel	496,889	May 9	818	{ 216 217 }	63	785
Mott, John R. (See Stevens and Mott.)						
Mott, Samuel D., Passaic, N. J. Tobacco-pipe	495,258	Apr. 11	1191	299	63	239
Motter, George L., Rich Hill, Mo. Lubricator	496,578	May 2	292	78	63	672
Motter, Jacob V., Brooklyn, N. Y. Driving mechanism	491,221	Feb. 7	260	64	62	797
Mottram, William T. M., Dallas, Tex. Electric-current meter	509,750	Nov. 28	2955	715	65	1357
Mouck, Solomon F., Denver, Colo. Barbed wire	507,088	Oct. 17	2172	538	65	434
Moul, Fred W., <i>et al.</i> (See Brower, John H., assignor.)						
Moul, Martin, Hanover, Pa. Machine for bunching match-sticks	502,909	Aug. 8	1127	{ 277 278 }	64	789
Moul, Martin, Hanover, and E. G. Quickel, York, Pa. Machine for punching match-sticks	499,752	Jan. 10	1185	310	62	260
Moulder, James H., Boston, Mass. Cleaner for spoons, forks, &c.	499,467	June 13	1220	291	63	1618
Moulton, Alvin D. (See Beardsley and Moulton.)						
Moulton, Hamilton L., assignor to James Smith Woolen Machinery Company, Philadelphia, Pa. Hub friction-clutch	495,748	Apr. 18	1974	498	63	398
Moulton, James N., Haverhill, Mass., assignor to Eppler Welt Machine Company. Channel-molding machine	498,017	May 23	2627	657	63	1137
Moulton, Luther V., assignor to F. R. Luce, E. Boise, and J. R. Shelly, Grand Rapids, Mich. Machine for making school-crayons	492,361	Feb. 21	2065	516	62	1194
Mount, Frederick W., St. John, Canada. Steam-engine regulator	498,672	May 30	3707	916	63	1343
Mount, Frederick W., St. John, Canada. Electric switchboard	504,738	Sept. 12	705	177	64	1416
Mount Washington Glass Company. (See Snow, Andrew, Jr., assignor.)						
Mounthess, George W. (See Reynolds, Hiram C., assignor.)						
Mower, Edwin F., Boston, Mass. Fair-stitch sewing-machine	507,377	Oct. 24	2702	{ 663 664 }	65	545
Mower, Samuel E., and G. E. Haight, assignors to H. G. Thompson & Son, New Haven, Conn. Torpedo	498,183	May 23	2873	{ 717 718 }	63	1181
Mowrer, George W., and J. R. Jordan, Dayton, Ohio. Lubricator	508,485	Nov. 14	832	206	65	927
Mowrer, Oscar D., Claremont, Ill. Cornstalk-shocker	505,225	Sept. 19	1504	392	64	1579
Mowrey, Harvey A., Homestead, Kans. Hay-rack	506,180	Oct. 3	618	158	65	120
Mowry, Edward, Maplewood, Ohio. Hand corn-planter	489,491	Jan. 10	794	209	62	182
Mowry, Joseph B., assignor of one-fourth to J. F. Stine, Mansfield, Ohio. Brick-machine	489,974	Jan. 17	1542	{ 403 404 }	62	348
Mowry, Joseph B., assignor of one-half to J. F. Stine, Mansfield, Ohio. Wheeled scraper	497,283	May 9	1436	{ 363 364 }	63	893
Mowry, Joseph B., assignor of one-half to J. F. Stine, Mansfield, Ohio. Brick-mold	503,667	Aug. 22	2378	593	64	1043
Mowry, William G., Greenwich, N. Y. Vehicle-spring	489,321	Jan. 3	516	141	62	112
Mowry, William G., Greenwich, N. Y. Vehicle-spring	506,523	Oct. 10	1265	316	65	254

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Moxham, Arthur J., Johnstown, Pa. Tie-rod for railway-tracks	492,469	Feb. 28	2240	560	62	1242
Moxham, Arthur J., Johnstown, Pa. Rail-chair for railway-rails	495,985	Apr. 25	2334	590	63	479
Moxham, Arthur J., Johnstown, Pa. Railway-rail and support	495,986	Apr. 25	2335	590	63	479
Moxham, Arthur J., Johnstown, Pa. Railway-track	495,987	Apr. 25	2336	591	63	480
Moxham, Arthur J., Johnstown, Pa. Rail-joint	495,988	Apr. 25	2336	591	63	480
Moxham, Arthur J., Johnstown, Pa. Welding metal	495,989	Apr. 25	2337	591	63	480
Moxham, Arthur J., Johnstown, Pa. Welding metal	496,890	May 9	820	217	63	7-5
Moxham, Arthur J., Johnstown, Pa. Railway-rail and uniting same	497,808	May 23	2287	575	63	1078
Moxham, Arthur J., Johnstown, Pa. Railway rail and chair and uniting same	498,074	May 23	2712	678	63	1152
Moxham, Arthur J., Johnstown, Pa. Transfer-table for railways	500,929	July 4	615	160	64	112
Moxham, Arthur J., Johnstown, Pa. Switch-piece and making it	503,930	July 4	616	161	64	113
Moxham, Arthur J., Johnstown, Pa. Railway-rail chair	500,931	July 4	618	163	64	113
Moxham, Arthur J., Johnstown, Pa. Means for and method of securing metal objects together	505,988	Oct. 3	294	75	65	57
Moxham, Arthur J., Johnstown, Pa. Railway-rail support	505,989	Oct. 3	295	76	65	57
Moxham, Arthur J., Johnstown, Pa. Rail-joint	505,990	Oct. 3	296	77	65	58
Moxham, Arthur J., Johnstown, Pa. Apparatus for welding	508,036	Nov. 7	85	21, 25	65	773
Moxham, Arthur J., Johnstown, Pa. Clamp for holding articles while being welded	508,037	Nov. 7	86	25	65	774
Moxham, Arthur J., Johnstown, Pa. Railway-track	508,038	Nov. 7	87	25	65	774
Moyer, Harvey A., Syracuse, N. Y. Folding seat for carriages	490,080	Jan. 17	1727	450	62	385
Moyer, Harvey A., Syracuse, N. Y. Bolster-plate	491,783	Feb. 14	1170	292	62	997
Moyer, Harvey A., Syracuse, N. Y. Spring-vehicle	497,548	May 16	1881	474	63	988
Moyer, Jacob S. (See Bartlett, George H., assignor.)						
Moyer, Oliver A., and H. W. Rhodes, Ogden, Utah Ter. Electric lock	491,369	Feb. 7	515	132	62	846
Moyer, Solomon. (See Rohrer, Reuben C., assignor.)						
Moyes, Alexander H., Ogden, Utah Ter. Fluid-pressure brake	507,447	Oct. 24	2810	688	65	567
Mozingo, Lewis W., Bloomington, Ill. Pressure water-filter	492,501	Feb. 28	2307	572	62	1255
Muckle, Henry A., St. Paul Park, Minn. Side-spring vehicle	490,299	Jan. 24	2102	548	62	471
Mudd, Frank X., Chicago, Ill. Poultry-car	489,657	Jan. 10	1029	268	62	229
Muehlig, John V., Chicago, Ill., and F. N. Slade, Columbus, Ohio. Driving and cutting chain	496,529	May 2	213	56	63	657
Muehlmann, Adolph, Newport, Ky. Machine for bending stud-spirals	497,809	May 23	2389	575	63	1078
Mueller, August H. (See Algeo, Charles C., assignor.)						
Mueller, Charles L., assignor of one-half to T. F. Collins, Barnesville, Minn. Sliding-door lock	509,089	Nov. 21	1827	418	65	1132
Mueller, David, Hoboken, N. J. Atomizing-head for carbonating liquids	496,579	May 2	293	78	63	672
Mueller, Frank H., assignor, by mesne assignments, of one-third to J. Oelke, Milwaukee, Wis. Device for operating sliding doors	491,121	Feb. 7	90	25	62	766
Mueller, Frederick, Butte City, Mont. Apparatus for condensing fumes	492,225	Feb. 21	1860	465	62	1152
Mueller, John, assignor of one-half to E. B. Warren, Hot Springs, S. D. Music-stand	511,908	Dec. 19	2526	614	65	1906
Mueller, Otto E. (See Weinedel, Charles, assignor.)						
Mueller, Sebastian. (See Eggers and Mueller.)						
Mueller, William M., and O. F. Burford, Elmwood, Nebr. Stalk-cutter	504,934	Sept. 12	1029	265	64	1479
Muender, Henry, et al. (See Wanamaker, Edward A., assignor.)						
Muenster, Charles L. (See Bowen, George A., assignor.)						
Mugnier, Joseph C. G., Paris, France. Railway signal apparatus	500,668	July 4	225	58, 59	64	43
Mühlmann, Wilhelm R., Klingenthal, Germany. Accordion	501,803	July 18	2034	501	64	399
Muir, Alfred, Manchester, England. Tool-rest for lathes	493,041	Mar. 7	423	106	62	1442
Muir, Alfred, Manchester, England. Chuck	493,231	Mar. 7	712	182	62	1498
Muir, John, Brantford, Canada. Combined drill-hoe and cultivator-tooth	490,833	Jan. 31	2969	762	62	656
Mulcahy, Richard T., Rosenberg, Tex. Gate	511,635	Dec. 26	30-3	753	65	2021
Mulchrone, Patrick F. (See Cullen and Mulchrone.)						
Mulford, John E., Havana, N. Y. Bench-vise	498,288	May 30	3058	761	63	1228
Mulhollen, Joseph S., Fostoria, Pa. Corn-planter	511,354	Dec. 26	2615	635	65	1937
Mullholland, Fred A., et al. (See Rodden, William H., assignor.)						
Mullane, Denis A., New Orleans, La. Car-coupling	506,788	Oct. 17	1685	424	65	345
Mullane, Patrick, Moline, Ill. Buckle	510,358	Dec. 5	841	204	65	1570
Mullen, Curtis, Harrisville, Ind. Carriage	501,687	July 18	1839	458	64	365
Mullen, James C. (See Bedgood, George A., assignor.)						
Müller, August, Hanover, Germany. Heating-stove	508,962	Nov. 21	1610	396	65	1091
Müller, Carl, assignor to Badische Anilin and Soda Fabrik, Ludwigshafen, Germany. Violet-dye	501,434	July 11	1439		64	277
Müller, Frank X., Buffalo, N. Y. Gripper for printing-presses	509,090	Nov. 21	1828	448	65	1133
Müller, Friedrich, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Machine for winding sewing-machine bobbins	495,990	Apr. 25	2338	592	63	480
Müller, Hartwig C., Hamilton, N. Y. Metal-cutting device	495,356	Apr. 11	1339	335	61	266
Müller, Herman J., New York, N. Y. Combined book-mark and paper-cutter	497,454	May 16	1731	436	63	962
Müller, Hermann, assignor to G. W. Roeseberg, Leipsic, Germany. Coin-album	509,546	Nov. 28	2635	637	65	1297
Müller, Hermann O., New York, N. Y. Fountain-pen	498,213	May 23	2933	730	63	1191
Müller, Johann F., Markneukirchen, Germany. Rosin-holder	509,482	Nov. 28	2338	612	65	1279
Muller, John A., New York, N. Y. Ice-machine	489,387	Jan. 3	619	167	62	133
Muller, John D., New York, N. Y. Screw-propeller	507,502	Oct. 24	2901	713	65	5-3
Müller, Peter, Kemi, Minn. Automatic swinging straw-stacker	509,386	Nov. 28	2336	565	65	1240
Mulligan, James H., Rochester, N. Y. Shoe	507,154	Oct. 24	2315	569	65	473
Mulligan, John, Dayton, Ohio. Axle-lubricator	490,300	Jan. 24	2103	548	62	471
Mullin, Bernard A., assignor of one-half to A. Segal and H. Hoopes, Philadelphia, Pa., and Mullin Dredging and Lightering Company, of New Jersey. Dumping-scow	501,020	July 4	760	199	64	139
Mullin, Peter. (See Bowser, Smawley, and Mullin.)						
Mullins, Hugh, Albany, N. Y. Fastening for blind-hinges	510,082	Dec. 18	410	91	65	1487
Mullins, John W., Fariston, Ky. Cultivator and planter	495,901	Apr. 18	2211	557	63	441
Mullins, William H., Salem, Ohio. Ridge-cresting	490,5-1	Jan. 24	2537	653	62	557
Mullins, William L. (See Petway and Mullins.)						
Mulot, Otto L., Long Island City, N. Y. Medicinal composition	496,694	May 2	481		63	707
Mulvey, Oliver, Wichita, Kans. Apparatus for carbureting air	498,673	May 30	3709	916	63	1344
Mulville, Frank, Philadelphia, Pa. Rail-joint	493,939	Mar. 21	1886	480	62	1756
Mumery, Edwin G., Detroit, Mich. Hydrocarbon-burner	503,548	Aug. 15	2169	542	64	990
Munchweiler, Maurice, St. Louis, Mo. Convertible skid or truck	492,416	Feb. 28	2155	539	62	1225
Mundell, Alfred, Brooklyn, N. Y. Sewer-cleaning apparatus	502,130	July 25	2545	638	64	509
Mundlos & Co., H. (See Mundlos, Heinrich, assignor.)						
Mundlos, Heinrich, assignor to H. Mundlos & Co., Magdeburg, Germany. Presser-foot for sewing-machines	511,539	Dec. 26	2920	711	65	1993

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Mundwiler, William H., Attica, Ohio. Eaves-trough hanger	505,717	Sept. 26	2373	599	64	1755
Mundy, George E. (See Frantz, William B., assignor.)						
Mundy, John W., Keokuk, Iowa. Safety-switch	494,934	Apr. 4	638	164	63	123
Mundy, Judson T., Marlborough, N. Y. Reverse-lever	507,831	Oct. 31	3476	855	65	704
Mundy, William A., Philadelphia, Pa. Device for watering stock	499,797	June 20	1759	426	63	1725
Munger-Colton Manufacturing Company. (See Colton, George A., assignor.)						
Munger, Robert S., Birmingham, Ala. Machine for handling and feeding seed-cotton	509,759	Nov. 28	2967	719	65	1360
Munn, William G. (See Christman and Munn.)						
Munro, Colin, assignor of one-half to E. Boyd, Cincinnati, Ohio. Billiard-chalk holder and protector	497,886	May 23	2425	604	63	1103
Munroe, Charles E., Newport, R. I. Explosive powder and making same	489,684	Jan. 10	1070		62	238
Munroe, Robert, Jr. (See Gloekler and Munroe.)						
Munsell & Co., Eugene. (See Jefferson, Charles W., assignor.)						
Munsell, William W., Dodge City, Kans. Safe	501,092	July 11	891	229	64	178
Munsell, William W., Dodge City, Kans. Safe-lock	506,714	Oct. 17	1557	390	65	322
Munsey, John D., Diona, Ill. Horseshoe and quarter-boot	503,869	Aug. 22	2673	670	64	1101
Munsing, George D., Minneapolis, Minn. Driving-wheel	500,669	July 4	227	59	64	43
Munsing, George D., Minneapolis, Minn. Crocheting-machine	507,238	Oct. 24	2462	606 607	65	499
Munsing, George D., Minneapolis, Minn., assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine	506,524	Oct. 10	1266	317	65	254
Munsing, George D., Minneapolis, Minn., assignor to Union Special Sewing Machine Company, Chicago, Ill. Seam for uniting or ornamenting fabrics	506,525	Oct. 10	1267	317	65	254
Munslow, Joseph B., Findlay, Ohio. Steam-engine valve	502,374	Aug. 1	209	49, 50	64	604
Munslow, Joseph B., assignor of one-half to P. B. Morrison, Findlay, Ohio. Reel for wire-nail machines	502,373	Aug. 1	208	49	64	604
Munson, Albert L., New York, N. Y. Cigarette-machine	505,630	Sept. 26	2213	561 562 563 769 770 771 772	64	1726
Munson, Albert L., assignor to Tobacco Company, New York, N. Y. Cigarette-machine ..	507,631	Oct. 31	3147	379 380	65	643
Munson, Andrew M., Rockford, Ill., assignor of one-half to Munson Manufacturing Company, of Illinois. Barbing-machine	495,464	Apr. 11	1521	379 380	63	301
Munson, Council, Utica, N. Y. Sewer well and grate	490,301	Jan. 24	2105	548	62	471
Munson, George H., and G. B. Haines, assignors to said Munson and C. A. B. Pratt, New York, N. Y. Combined writing-tablet and copy-holder	502,574	Aug. 1	543	129	64	666
Munson Manufacturing Company. (See Munson, Andrew M., assignor.)						
Munton, James, Maywood, Ill. Manufacturing car-couplings	493,218	Mar. 7	687	176	62	1494
Munton, James, and A. Frazier, Maywood, Ill. Car-coupling	500,815	July 4	448	117	64	83
Muntz, Oliver H., assignor to H. D. Squires, Pittsburg, Pa. Bridle-bit	506,526	Oct. 10	1268	318	65	254
Munz, Charles W., assignor of one-half to W. Williams, Detroit, Mich. Piano-stool	493,441	Mar. 14	1056	272	62	1541
Muralt, Aloys R. de. (See Badoni, Massimiliano, assignor.)						
Murch, John H., and J. A. Gray, San Francisco, Cal., assignors to R. D. Hume, Gold Beach, Oreg. Can-body-making machine	495,426	Apr. 11	1448	366	63	246
Murch, William H., Southampton, England. Rotary engine	495,357	Apr. 11	1340	336	63	266
Murchison, Daniel R. (See Dowell, Lawson H., assignor.)						
Murchland, William, Kilmarnock, Scotland. Apparatus for milking cows	501,804	July 18	2035	501	64	399
Murdoch, Alexander. (See McHarrie, James, assignor.)						
Murdoch, Edwin H., Cincinnati, Ohio. Cash indicator and register	489,085	Jan. 3	153	42	62	37
Murdoch, Edwin H., Cincinnati, Ohio. Cash indicator and register	501,153	July 11	996	254	64	196
Murdoch, Frank. (See Stratton and Murdoch.)						
Murdoch, John B., Washington, D. C. Wire-splicing tool	508,963	Nov. 21	1611	396	65	1091
Murdoch, William J., Boston, Mass. Electric bell	500,027	June 20	2125	515	63	1789
Murnane, Daniel J. (See Sheldon, Murnane, and Van Beek.)						
Murnan, John, Coopersville, N. Y. Railway-track	499,139	June 6	664	160	63	1506
Muron, William, Woonsocket, R. I. Pulley	495,749	Apr. 18	1975	498	63	398
Murphree, Richard L. (See Thompson, Murphree, and Harrison.)						
Murphy, Andrew, Columbus, Ohio. Truck	490,716	Jan. 31	2789	716	62	621
Murphy, Edward, assignor to himself and F. Keller, Yellow Bud, Ohio. Knife attachment for plows	511,636	Dec. 26	3084	753	65	2021
Murphy, J. E., et al. (See West, John S., assignor.)						
Murphy, James, et al. (See Hunt, Edward P., assignor.)						
Murphy, James A., Holyoke, Mass. Attachment for pencils or pens	494,510	Mar. 28	2830	709	62	1947
Murphy, James A., Holyoke, Mass. Ash-sifter	495,596	Apr. 18	1728	435	63	356
Murphy, James F., Michigan City, Ind. Headlight	498,443	May 30	3319	826	63	1276
Murphy, James M., Pittsburg, Pa. Feed mechanism for rolling-mills	506,060	Oct. 3	402	105 106	65	79
Murphy, Jeremiah. (See Tabor and Murphy.)						
Murphy, Jeremiah, Chicago, Ill. Opera-glass holder	506,012	Oct. 3	328	86	65	64
Murphy, John, Creston, Iowa. Car-coupling	497,593	May 16	1955	489	63	1001
Murphy, John N., Springfield, Ill. Steam-valve	508,486	Nov. 14	833	207	65	928
Murphy, Joseph, and F. M. Rankin, Covington, Ohio. Portable fire-escape	499,562	June 13	1378	328	63	1645
Murphy, Joseph E., et al. (See Vernon, William E., assignor.)						
Murphy, Mary A., San Francisco, Cal. Body and bed warmer	495,427	Apr. 11	1451	366	63	287
Murphy, Michael. (See Reardon, Patrick, assignor.)						
Murphy Patent Nailless Horseshoe Company. (See Murphy, Timothy W., assignor.)						
Murphy, Peter H., East St. Louis, Ill. Car-roof	489,322	Jan. 3	517	141	62	112
Murphy, Peter H., East St. Louis, Ill. Flanged metal plated and sheeted double car-roof ..	499,641	June 13	1496	359	63	1666
Murphy, Peter H., East St. Louis, Ill. Non-conductor compound car-roof	500,028	June 20	2126	515	63	1789
Murphy, Robert, Canisteo, N. Y. Planter	492,096	Feb. 21	1645	409 410	62	1107
Murphy, Robert D., Baltimore, Md. Sash-fastener	493,107	Mar. 7	524	131	62	1463
Murphy, Thomas. (See Hatch and Murphy.)						
Murphy, Thomas, San Francisco, Cal. Fire-engine harness	505,410	Sept. 19	1805	466	64	1636
Murphy, Thomas S., Jr., Albany, N. Y. Book-finishing machine	507,553	Oct. 31	3000	736 737	65	615
Murphy, Timothy W., assignor to Murphy Patent Nailless Horseshoe Company, Washington, D. C. Horseshoe	508,114	Nov. 7	224	58	65	800
Murray, Alexander, assignor of one-half to J. Turney, Nottingham, England. Machine for pressing hosiery, &c.	508,333	Nov. 7	575	141	65	865
Murray, Alexander M., Chicago, Ill. Farm-gate	503,229	Aug. 15	1758	434	64	916
Murray, David, Milwaukee, Wis., and A. Robbins, Fitchburg, Mass. Pole-splitting machine ..	497,333	May 16	1541	388	63	928
Murray, David, Milwaukee, Wis., and A. Robbins, Fitchburg, Mass. Hoop-dressing machine ..	507,920	Oct. 31	3612	892 893	65	729

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Murray, Donald, Sydney, New South Wales. Printing-telegraph.....	498,674	May 30	3710	{ 917 918 919 }	63	1344
Murray, Edward M., Chicago, Ill. Ladder.....	499,028	June 6	502	118	63	1478
Murray, Henry F., <i>et al.</i> (See Borden, William H., assignor.)						
Murray, James, Hillsborough, Ohio. Paper-holder.....	496,090	Apr. 25	2502	631	63	511
Murray, James, Hillsborough, Ohio. Window-blind-adjusting device.....	497,810	May 23	2291	576	63	1079
Murray, James, and C. E. Haynes, Hillsborough, Ohio. Adjustable door-fastener.....	506,789	Oct. 17	1687	424	65	346
Murray, James A., deceased, Minneapolis, Minn.; K. F. Murray, administratrix. Pipe joint and coupler.....	504,739	Sept. 12	707	177	64	1416
Murray, Kate F., administratrix. (See Murray, James A.)						
Murray, Michael, Baltimore, Md. Mirror attachment for spectacles.....	498,018	May 23	2630	658	63	1138
Murray, Michael, Baltimore, Md. Mirror attachment for opera-glasses.....	498,019	May 23	2630	658	63	1138
Murray, Michael, Baltimore, Md. Holder for lids of vessels.....	498,020	May 23	2631	658	63	1138
Murray, Michael, Baltimore, Md. Heel.....	500,816	July 4	450	118	64	83
Murray, Peter, Seattle, Wash. Preserving timber.....	495,991	Apr. 25	2342	.....	63	481
Murray, Samuel. (See Murray, William F., assignor.)						
Murray, Samuel, and C. Epps, St. George, Canada. Lard or butter cutter.....	507,028	Oct. 17	2072	511	65	418
Murray, Samuel J., assignor to National Card Company, Indianapolis, Ind. Printing-press.....	492,893	Mar. 7	189	46, 47	62	1396
Murray, Samuel J., assignor to National Card Company, Indianapolis, Ind. Packing-case for cards, &c.....	494,218	Mar. 28	2370	598	62	1862
Murray, Thomas E., assignor of one-half to W. McEwan, Albany, N. Y. Construction of bins or pockets for containing coal, grain, &c.....	490,258	Jan. 17	2023	528	62	443
Murray, Thomas E., assignor of one-half to W. McEwan, Albany, N. Y. Pocket or bin for the storage of coal, grain, &c.....	503,097	Aug. 8	1431	353	64	844
Murray, Thomas R. (See Sterne and Murray.)						
Murray, Thomas W. B., and T. G. Scott, Chicago, Ill. Fire-escape.....	493,556	Mar. 14	1256	322	62	1618
Murray, William F., assignor of one-half to S. Murray, San Francisco, Cal. Capstan.....	498,075	May 23	2713	679	63	1152
Murrey, Jasper, assignor of two-thirds to S. W. Watterson and G. F. McKay, Cleveland, Ohio. Observation-wheel.....	506,828	Oct. 17	1754	441	65	358
Murry, Oliver P., and J. V. K. Walker, Portsmouth, Va., assignors to Automatic Track-Sanding Company, Portland, Me. Track-sanding apparatus.....	509,234	Nov. 21	2070	499	65	1179
Musham, William H., assignor to J. J. Ahern and G. Leslie, Chicago, Ill. Thill-support. Muskegon Chemical Fire Engine Company. (See Bruegger, Abraham, assignor.)	499,846	June 20	1842	449	63	1739
Musselman, George A., assignor of one-half to J. Walters, Richland county, Ohio. Wind-engine.....	502,860	Aug. 8	1043	256	64	773
Musser, Frank P. (See Brewer, William M., assignor.)						
Musser, Henry N., Blachleville, Ohio. Binder.....	498,481	May 30	3377	841	63	1286
Mussey, Nathan D. (See Getze, Frank F., assignor.)						
Mussinan, Oscar, New York, assignor to E. Faber, West Brighton, N. Y. Attachment for lead-pencils.....	489,685	Jan. 10	1071	279	62	238
Mustard, James E., Glen Hall, assignor of two-thirds to G. A. Harrison, Lafayette, and T. M. Andrew, West Point, Ind. Safety-switch.....	502,232	Nov. 7	415	101	65	835
Mustin, James G., Knoxville, Pa. Annealing wire.....	489,194	Jan. 3	327	90	62	74
Mutchenbacher, Asa, Rosseau Falls, Canada. Boom-chain.....	506,790	Oct. 17	1628	425	65	346
Muther, Lorenz, Oak Park, assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine.....	506,527	Oct. 10	1269	318	65	255
Mutter, William W., and W. Dawson, Glasgow, Scotland. Distiller's safe.....	507,832	Oct. 31	3478	{ 855 856 }	65	704
Mutual Engineering Company. (See Schmidt, Frederick T., assignor.)						
Myatt, George C. (See Dalton and Myatt.)						
Myer, John P., and H. Carlton, Baltimore, Md. Die for shaping double-tapered metal bars.....	497,101	May 9	1142	292	63	842
Myers, Abraham H., Sterling, Ill. Automatic bridge-gate.....	504,169	Aug. 29	3170	{ 790 791 }	64	1211
Myers, Alton G., Sidney, Ohio. Ditching-scoop.....	499,437	June 13	1174	280	63	1609
Myers, Annetta, Ashbourne, Pa. Game apparatus.....	503,382	Aug. 15	1914	{ 474 475 }	64	944
Myers, Charles O., Boiling Springs, Pa. Car-coupling.....	498,675	May 30	3720	919	63	1345
Myers, Charles H., Leroy, Ill. Oscillating grain-meter.....	505,840	Oct. 3	53	15	65	14
Myers, Clarence A., <i>et al.</i> (See Frey, Frank, assignor.)						
Myers, David, North Manchester, Ind. Stovepipe-thimble.....	494,342	Mar. 28	2565	646	62	1898
Myers, David E., Indianapolis, Ind. Motor.....	504,993	Sept. 12	1133	290	64	1497
Myers, Edward, and L. Hanhart, Cincinnati, Ohio. Offset mechanism for sawmill-carriages.....	496,129	Apr. 25	2554	643	63	521
Myers, Frank, Buffalo, N. Y. Portable bellows-force.....	510,700	Dec. 12	1457	360	65	1697
Myers, Frederick H. (See Masterman, William H., assignor.)						
Myers, Garson, Chicago, Ill. Street-car heater.....	496,091	Apr. 25	2503	631	63	511
Myers, Henry, Philadelphia, Pa. Wheel-tire.....	502,741	Aug. 8	847	206	64	736
Myers, Henry J. (See Hyams, Hyam J., assignor.)						
Myers, Hosea P., Chicago, Ill. Curling-iron.....	498,986	June 6	418	97	63	1465
Myers, Jacob H., Rochester, N. Y. Voting-machine.....	494,588	Apr. 4	93	23, 24	63	20
Myers, John, Mechanicsburg, assignor to M. Dock and S. C. Myers, Mifflintown, Pa. Knockdown crate.....	505,061	Sept. 12	1239	{ 318 319 }	64	1518
Myers, John A., Millersburg, Iowa. Milk-cooling apparatus.....	508,146	Nov. 7	273	69	65	809
Myers, John F., San Francisco, Cal. Stove for heating and lighting purposes. (Reissne.)	11,383	Nov. 7	685	{ 167 168 }	65	855
Myers, John W., <i>et al.</i> (See Frey, Frank, assignor.)						
Myers, Joseph J., <i>et al.</i> (See Langwith, Frank A., assignor.)						
Myers, Joseph L., Mathis, Tex. Car-coupling.....	494,878	Apr. 4	566	142	63	110
Myers, Martin, Mundy, Mich. Reversible plow.....	492,821	Mar. 7	78	18	62	1373
Myers, Moses E., Cambridge City, Ind. Gate.....	501,526	July 18	1579	397	64	318
Myers, Philip A., Ashland, Ohio. Windmill and pump regulator.....	495,992	Apr. 25	2342	592	63	481
Myers, Philip A., Ashland, Ohio. Windmill-pump regulator.....	501,354	July 11	1317	329	64	253
Myers, Philip A., Ashland, Ohio. Windmill-regulator.....	501,355	July 11	1319	330	64	253
Myers, Phineas B., Brooklyn, N. Y. Inkstand.....	499,140	June 6	665	160	63	1507
Myers, Samuel C., <i>et al.</i> (See Myers, John, assignor.)						
Myers, Samuel C., Mifflintown, Pa. Folding crate.....	506,181	Oct. 3	618	{ 158 159 }	65	120
Myers, Sheridan J., Hebron, Miss. Nut-lock.....	494,707	Apr. 4	283	71	63	57
Myers, Thomas C., Cleveland, Ohio. Street-sweeper.....	501,352	July 11	1316	329	64	253
Myers, Thomas C., Cleveland, Ohio. Street-sweeper.....	501,353	July 11	1316	329	64	253
Myers, William H., Brooklyn, N. Y. Valve-chest for steam-engines.....	506,061	Oct. 3	404	106	65	79
Myers, William H., and L. Anderson, Oregon, Wis. Corn-harvester.....	493,639	Mar. 21	1398	351	62	1662
Myers, William M., Cosby, Mo. Whiffletree-clip.....	492,630	Feb. 28	2510	622	62	1297
Myers, William M., Hannibal, Mo. Construction of buildings.....	506,062	Oct. 3	405	106	65	79
Myers, William M., Hannibal, Mo. Spring-bed.....	507,029	Oct. 17	2072	512	65	418

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Myers, William O., Canton, Ohio. Building-block	508,577	Nov. 14	991	242	65	958
Naber, Moses H. (See Caswell, William A., assignor.)						
Nace, John P. (See Morris and Nace.)						
Nadeau, Joseph A., Detroit, Mich. Electric alarm-lock	490,161	Jan. 17	1862	485	62	412
Nadon, Joseph, assignor of one-half to J. York, St. Paul, Minn. Car-seal	511,642	Dec. 26	3091	755	65	2022
Nagel, Frederick W., Waldo, Wis. Roller-bearing for wagons	499,847	June 20	1845	449	61	1740
Nageldinger, John, New York, N. Y. Pressure-regulating valve	498,482	May 30	3377	842	63	1286
Nagele, John, assignor of one-half to M. J. Manning, Clarendon, Ark. Car-fender	492,423	Feb. 28	2163	540	62	1226
Nagle, Augustus F., Chicago, Ill. Temperature-regulator	509,625	Nov. 28	2759	665	65	1321
Nagle, Gerard B., Revelstoke, Canada. Spittoon-carrier	504,607	Sept. 5	480	123	64	1359
Nagle, James J., Milwaukee, Wis. Hatchway-ladder	506,063	Oct. 3	407	107	65	79
Nagley, Charles C. (See Manwaring and Nagley.)						
Nagley, Charles C., Memphis, N. Y. Shears	489,612	Jan. 10	976	254	62	218
Nagley, Frank G. (See Manwaring and Nagley.)						
Nalton, Thomas M., Syracuse, N. Y. Cover for coal-cars	509,935	Dec. 5	149	34, 35	65	1437
Naly, Sarah L., and M. S. Jones, Philadelphia, Pa. Bicycle-saddle	499,244	June 13	826	196	63	1548
Nanny, Amos W., Cleburne, Tex. Churn	511,056	Dec. 19	2100	519	65	1227
Napier, James M., London, England. Speed-indicator	498,483	May 30	3379	842	63	1286
Napion, Louis, Chicago, Ill. Bridge-gate	500,290	June 27	2571	628	63	1879
Nappin, Ira, Farmington, Ill. Nut-lock	504,608	Sept. 5	481	123	64	1359
Naramore, Henry L. (See Richards, Edwin G., assignor.)						
Narberti, Giorgio, assignor to himself and C. Brizzi, New York, N. Y. Violin-supporter	491,372	Feb. 7	519	133	62	847
Nase, John, assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Hose-clamp	492,165	Feb. 21	1763	440	62	1132
Nase, John, assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Lawn-rake	492,166	Feb. 21	1764	440	62	1132
Nase, John, assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Lawn-rake	492,167	Feb. 21	1765	440	62	1133
Naset, Jens J., Stoughton, Wis. Sled-tongue	509,820	Nov. 28	3074	743	65	1381
Nash, Arthur C., Cambridge, Mass. Trousers-hanger	496,696	May 2	483	129	63	707
Nash, Daniel A., Jackson, Miss. Dental chair	500,103	June 20	2237	544	63	1808
Nash, Edward. (See Nash, Richard, assignor.)						
Nash, Nathan E., and G. A. Eddy, assignors to National Electric Valve Company, Cleveland, Ohio. Water-regulator for steam-boilers	504,234	Aug. 29	3280	819 } 820 }	64 }	1232 }
Nash, Richard, assignor of one-half to E. Nash, Ellensburg, Wash. Railway-switch	493,179	Mar. 7	633	160	62	1482
Nash, Richard, assignor of one-half to D. L. Levino, Tacoma, Wash. Car-coupling	500,074	June 20	2198	536	63	1802
Nash, Rodney G. (See Allison and Nash.)						
Nash, William A., et al., trustees. (See Mattullath, Hugo, assignor.)						
Nasi, Luigi, Panama, Colombia. Pump	506,533	Oct. 10	1277	320	65	256
Nason, Joseph H., Somerville, assignor of one-half to H. M. Hewes, Boston, Mass. Self-threading shuttle for looms	494,879	Apr. 4	567	142	63	110
Nason, William A., Pleasantville, Pa. Vehicle-seat back	500,240	June 27	2499	611	63	1867
Nastvogel, Oscar, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue dye	496,435	May 2	75		63	632
Nathan, Scheyer, New York, N. Y. Purse	496,130	Apr. 25	2556	643	63	521
Nathan, Scheyer, New York, N. Y. Purse or pocket-book	501,728	July 18	1902	473	64	376
National Automatic Knitter Company. (See Franck, Emil J., assignor.)						
National Candy Mold Company. (See Boyer and Dixon, assignors.)						
National Card Company. (See Murray, Samuel J., assignor.)						
National Carving Company. (See Snow, Frederick, assignor.)						
National Cash Register Company. (See Benton, John B., assignor.)						
National Cash Register Company. (See Blanchard, Allen I., assignor.)						
National Cash Register Company. (See Carney, Thomas, assignor.)						
National Cash Register Company. (See Cowley, James T., assignor.)						
National Cash Register Company. (See Ehrlich, Leo, assignor.)						
National Cash Register Company. (See Ehrlich and Benton, assignors.)						
National Cash Register Company. (See Gibbs, Edmund D., assignor.)						
National Cash Register Company. (See Gilbert, Henry J., assignor.)						
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National Cash Register Company. (See Hess, Edward B., assignor.)						
National Cash Register Company. (See Houk, Robert T., assignor.)						
National Cash Register Company. (See Koch, William, assignor.)						
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National Cash Register Company. (See Sneekner, Frank A. L., assignor.)						
National Cash Register Company. (See Weiss, Carl W., assignor.)						
National Cash Register Company. (See Wythe, William W. and W. H., assignors.)						
National Chain Gear Company. (See Brown, James O., assignor.)						
National Company. (See Baldwin, Cyrus W., assignor.)						
National Company. (See Heermans, Thaddeus W., assignor.)						
National Company. (See Reynolds, George H., assignor.)						
National Company. (See Smith, Rudolph C., assignor.)						
National Drying Company. (See Koyl, Charles H., assignor.)						
National Electric Gas Company. (See Goff, Mott P., assignor.)						
National Electric Machine Company. (See Pope, William R., assignor.)						
National Electric Valve Company. (See Nash and Eddy, assignors.)						
National Electrical Manufacturing Company. (See Porter, Major D., assignor.)						
National Engraving Machine Company. (See Bruckner, Charles C., assignor.)						
National Folding Box and Paper Company. (See Hibson, Albert R., assignor.)						
National Gas and Water Company. (See Morrell, Edward E., assignor.)						
National Heat and Power Company. (See Hastings, James L., assignor.)						
National Hollow Brake Beam Company. (See Robischung, Henry B., assignor.)						
National Key-Opening Can Company. (See Zimmerman, John, assignor.)						
National Key-Opening Can Company. (See Zimmerman and Underdown, assignors.)						
National Malleable Castings Company. (See Tower, Clinton A., assignor.)						
National Railway Signal Company. (See Karr and Bradrick, assignors.)						
National Switch and Signal Company. (See Clark, Henry F., assignor.)						
National Switch and Signal Company. (See Lattig, Jacob W., assignor.)						
National Ticker Company. (See Porter, Major D., assignor.)						
National Time Register Company of Ohio. (See Bennett, Herbert D., assignor.)						
National Type Writer Company. (See Unz, Henry H., assignor.)						
National Vacuum Drying and Air Distilling Company. (See Bornholt, Adolph, assignor.)						
Natural Body Brace Company. (See Rash, Howard C., assignor.)						
Nau, John B., New York, N. Y. Making metal plates	490,451	Jan. 24	2335	606	62	516

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Naumburg, Aaron. (See Egger, Ernst, assignor.)						
Navarre, Anthony F. (See Warner, John P., assignor.)						
Navarro, Alfonso de. (See Navarro, José F. de, assignor.)						
Navarro, José F. de, assignor to A. de Navarro, New York, N. Y. Apparatus for turning over cement.	499,391	June 13	1081	262	63	1593
Navin, Thomas P., Stover, S. D. Riding attachment for harrows.	511,025	Dec. 19	2054	508	65	1818
Naylor, Ernest W., Cleveland, Ohio. Jib-crane.	491,126	Feb. 7	95	26	62	767
Naylor, Ernest W., Cleveland, Ohio. Jib-crane.	491,127	Feb. 7	96	27	62	767
Naylor, George W., and N. W. Foley, Jersey City, N. J. Car-gate.	492,826	Mar. 7	84	20	62	1374
Naylor, James, Jr. (See McLaughlin and Naylor.)						
Naylor, James, Jr., Poughkeepsie, assignor to Burrell & Whitman, Little Falls, N. Y. Hoop-cutting machine.	507,503	Oct. 24	2902	713 714	65	583
Naylor, Joshua G., and H. Williams, Richmond, Victoria. Apparatus for pressing bricks.	490,412	Jan. 24	2279	592 593	62	506
Naysmith, Robert, assignor to Oliver & Roberts Wire Company, Pittsburg, Pa. Die for wire-nail machines.	507,379	Oct. 24	2704	664	65	546
Neafie, James, Boonton, N. J. Railway-frog.	497,455	May 16	1732	437	63	962
Neal, Afton H., et al. (See Smith, George, assignor.)						
Neal, Augustus, and R. B. Suhr, Ashland, Nebr. Harrow.	503,434	Aug. 15	1984	492	64	956
Neal, Blau A., et al. (See Smith, George, assignor.)						
Neal, Dixie A., et al. (See Smith, George, assignor.)						
Neal, George S. and H. C., Eddyville, N. Y. Bolster-spring.	490,083	Jan. 17	1732	451	62	385
Neal, Henry C. (See Neal, George S. and H. C.)						
Neal, James H., Boston, Mass. Controlling device for electric cars.	494,344	Mar. 28	2567	646 647	62	1898
Neal, Lemuel C., Lewiston, Idaho. Current-motor.	502,931	Aug. 8	1773	229	64	797
Neal, Lewis F., assignor to himself and W. B. Bowser, Waltham, Mass. Dusting apparatus.	500,415	June 27	2174	623	63	1915
Neal, Orrin B., et al. (See Smith, George, assignor.)						
Neal, William A., Bunker's, W. Va. Adding and registering machine.	510,927	Dec. 19	1890	463 464	65	1789
Neale, David, Fort Calhoun, Nebr. Compressor.	489,920	Jan. 17	1553	406	62	350
Near, William T., and D. J. Deegan, Bridgeport, Conn. Printer's galley.	494,644	Apr. 4	182	46	63	37
Neave, William H. M., Sheffield, England. Manufacture of picks.	502,746	Aug. 8	259	200	64	739
Nebeker, Aquila, assignor of one-half to G. W. Huber, Philadelphia, Pa. Device for making tablets.	506,791	Oct. 17	1689	425	65	346
Nebeling, Philip A. (See Reiss, Heinrich J., assignor.)						
Neblett, N. H. (See Winn, Columbus M., assignor.)						
Necker, August, Lippstadt, Germany. Safety-ladder.	494,073	Mar. 21	2119	540 541	62	1800
Nedden, Frederick Z. (See Koepf, Henry, assignor.)						
Neeb, William, Burkett, Tex. Gate.	490,491	Jan. 24	2411	623	62	532
Needham, Alvin W., Detroit, Mich. Machine for making core-supports.	506,717	Oct. 17	1566	391 392	65	323
Needham, Arthur J., H. C., and W. C., London, England. Link for fastening cuffs, &c.	490,413	Jan. 24	2283	593	62	507
Needham, Horace C. (See Needham, Arthur J., H. C., and W. C.)						
Needham, John E., Mount Tabor, Oreg. Steam-boiler furnace.	501,729	July 18	1903	473	64	377
Needham, Joseph, Braddock, Pa. Manufacture of wire and wire rods.	510,703	Dec. 12	1463	361	65	1698
Needham, Moses W., Lincoln, N. Mex. Ter. Car-coupling.	507,685	Oct. 31	3233	792	65	658
Needham, Walter C. (See Needham, Arthur J., H. C., and W. C.)						
Neel, John T., Millersport, Ohio. Metallic roofing.	502,009	July 25	2347	588	64	471
Neel, William. (See Van Horn and Neel.)						
Neeley, George S., Pacific, Mo. Centrifugal shaft-governor.	506,534	Oct. 10	1279	320	65	257
Neeley, George S., assignor to himself and F. Meurer, Pacific, Mo. Balanced slide-valve.	502,132	July 25	2549	639	64	510
Neely, Edward, Chicago, Ill. Draining-board for bars.	508,740	Nov. 14	1224	305	65	1004
Neely, Samuel M., Smith's Turn Out, S. C. Hay or cotton press.	501,435	July 11	1441	361	64	277
Neer, Harry M., assignor of two-thirds to O. W. Kelly and T. Reynolds, Springfield, Ohio. Cash-register.	490,304	Jan. 24	2110	549 550 551	62	472
Neer, Harry M., assignor to O. W. Kelly and T. Reynolds, Springfield, Ohio. Cash register and indicator.	491,020	Jan. 31	3276	837 838 839	62	715
Neff, Abram H. B. and E. H. N., Petersburg, Canada. Metal wheel.	505,633	Sept. 26	2227	555	64	1728
Neff, Edmund H. N. (See Neff, Abram H. B. and E. H. N.)						
Neff, John W., assignor of one-half to J. G. Hall, Buckhannon, W. Va. Desk attachment.	499,142	June 6	668	161	63	1507
Negus, John S., Brooklyn, N. Y. Ship's bell-clock.	500,717	July 4	296	80	64	55
Neidl, William J., New Britain, Conn. Lock.	503,706	Aug. 22	2438	607	64	1054
Neil, James O., Sacramento, Cal. Continuous brick-kiln.	492,965	Mar. 7	306	78	62	1420
Neil, John, New York, N. Y. Sash-weight holder.	503,291	Aug. 15	1760	435	64	917
Neilson, Alfred T., Jersey City, N. J. Air-valve.	507,320	Oct. 24	2704	664	65	546
Neilson, Charles, Glendale, Ohio. Game apparatus.	495,509	Apr. 18	1589	399 400	63	332
Neilson, Henry H., et al. (See Robertson, James, assignor.)						
Neilson, William J. (See Skelly and Neilson.)						
Neill, James W., Salt Lake City, Utah Ter. Method of and apparatus for separating and settling molten metal.	505,904	Oct. 3	164	42	65	32
Neitzel, George A., Bedford, Ohio. Attachment for molding or turning machines.	504,111	Aug. 29	3077	770	64	1194
Nell, Abraham, and T. J. Corcoran, Peru, Ind. Gate-latch.	507,155	Oct. 24	2316	569	65	473
Neller, Albert H., Mapleton, Minn. Windmill.	504,994	Sept. 12	1134	291	64	1498
Nellis, Aaron J., Pittsburg, Pa. Portable electric abrading device.	497,197	May 9	1282	3	63	867
Nellis, Jacob H., Canajoharie, N. Y. Bottle-case.	511,643	Dec. 26	3092	755	65	2023
Nelsen, Peder, assignor of two-thirds to P. J. Keough, St. Paul, Minn. Baling-press.	508,966	Nov. 21	1617	397	65	1092
Nelson, Abiel W., New London, Conn. Policeman's club.	503,977	Aug. 29	2860	717	64	1154
Nelson, Andrew G. (See Lagerquist and Nelson.)						
Nelson, Charles, Brooklyn, N. Y. Fire-cracker.	511,644	Dec. 26	3093	755	65	2023
Nelson, Charles A., Ithaca, Mich. Hame-staple.	491,128	Feb. 7	97	27	62	768
Nelson, Charley A., Des Moines, Iowa. Wagon dump and elevator.	490,674	Jan. 31	2725	701 702	62	608
Nelson, Edward, Frederick, Md. Dental disk-holder.	505,121	Sept. 19	1347	347	64	1551
Nelson, Erick, St. Paul, Minn. Tool for sharpening plows.	502,747	Aug. 8	860	210	64	739
Nelson & Gelabert. (See Gelabert, William P., assignor.)						
Nelson, Henry, Fort Wayne, Ind. Organ.	502,050	July 25	2423	610	64	485
Nelson, Jay, assignor of one-half to T. C. White, St. Louis, Mo. Crossing for electric railways.	504,276	Aug. 29	3347	836	64	1245
Nelson, John I. E., Cedar Home, Wash. Sole and heel plate.	504,995	Sept. 12	1136	291	64	1498
Nelson, Joseph, Nauvoo, Ill. Animal-trap.	502,966	Aug. 8	1271	311	64	813

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Nelson, Joseph C. (See Keach and Nelson.)						
Nelson, Kilburg, West Duluth, Minn. Rotary cutter-head	501,956	July 25	2273	568	64	457
Nelson, Nels, assignor to G. Dittmann, Chicago, Ill. Combined scouring, polishing, and buffing machine	492,099	Feb. 21	1650	411	62	1108
Nelson, Nels, assignor to G. Dittman, Chicago, Ill. Combined scouring, polishing, and buffing machine	510,438	Dec. 12	984	235	65	1611
Nelson, Nelse M. (See Green, John H., assignor.)						
Nelson, Pehr P., New York, N. Y. Electric bowling-alley	504,087	Aug. 29	3029	756 757	64	1185
Nelson, Robert H., and T. H. Temple, Ridgeway, Mich. Photograph-exhibitor	489,713	Jan. 10	1116	288	62	247
Nelson, Searick F. (See Schimmel and Nelson.)						
Nelson, Thomas. (See Quick and Nelson.)						
Nelson, Thomas J. (See West, Edward B., assignor.)						
Nelson, William C., Santa Rosa, Cal. Car-coupling	510,360	Dec. 5	846	204	65	1571
Nelson, William G. (See Fisher and Nelson.)						
Nelson, William G., assignor of one-half to A. A. Fisher, Brooklyn, N. Y. Chuck	497,986	May 23	2580	645	63	1129
Nelson, William G., assignor of one-half to A. A. Fisher, Brooklyn, N. Y. Valve	499,030	June 6	505	118	63	1479
Nelson, William G., assignor of one-half to A. A. Fisher, Brooklyn, N. Y. Tap-holder	500,291	June 27	2572	628	63	1879
Nelson, William G., assignor of one-half to A. A. Fisher, Brooklyn, N. Y. Chuck	500,292	June 27	2574	629	63	1879
Nembach, Andrew, Jr., assignor of one-half to J. M. French and C. F. Stewart, Cincinnati, Ohio. Puzzle	493,941	Mar. 21	1889	481	62	1757
Nenninger, Robert F., assignor to E. J. Ill, Newark, N. J. Producing zinc oxide from sulphite or sulphate of zinc	489,873	Jan. 10	1348		62	295
Nenninger, Robert F., assignor to E. J. Ill, Newark, N. J. Treating materials containing metals. (Reissue.)	11,345	June 13	1578	380	63	1679
Neracher, Adolph, Cleveland, Ohio. Roof-gutter	500,416	June 27	2775	684	63	1915
Neracher, William, Cleveland, Ohio. Fire-bucket	490,717	Jan. 31	2790	716	62	623
Nerzer, Charles G., Abilene, Tex. Milk-cooler	490,398	Jan. 24	2261	587	62	501
Nesbit, Arthur E., Milton, Pa. Car-coupling	490,978	Jan. 31	3214	821	62	703
Nesbit, John J. (See Queen and Kimball, assignors.)						
Nesbit, Samuel H., Anthony, Kans. Type-holder	501,358	July 11	1325	332	64	254
Nesbitt, John D., Nantucket, Mass. Bicycle-bell	499,245	June 13	827	196	63	1548
Nesbitt, Scott. (See Miller, Alonzo R., assignor.)						
Nesdall, James P., C. E. Colton, and R. Mara, Syracuse, N. Y. Sewer	508,967	Nov. 21	1619	398	65	1092
Nessler, Charles L. (See Cleveland, Arthur, assignor.)						
Nesmith, John J. (See Bogart and Nesmith.)						
Nesmith, John W., assignor to Colorado Iron Works, Denver, Colo. Blast-furnace	507,031	Oct. 17	2076	512 513	65	418
Ness, Olaf O., and P. J. Setbacken, Lake Preston, S. D. Combined pole and shaft	495,995	Apr. 25	2346	593	63	482
Ness, Thomas W., Montreal, Canada. Telephone-switch	505,170	Sept. 19	1423	366	64	1564
Nessel, Fred, and F. McLish, Chicago, Ill. Hub for bicycle-wheels	504,888	Sept. 12	952	246	64	1464
Nessler, Louis D. (See Fishel, Henry W., assignor.) (Reissue.)						
Nethery, Joseph W., assignor to Indiana Manufacturing Company, Indianapolis, Ind. Straw-stacker	493,734	Mar. 21	1556	397	62	1693
Nethery, Joseph W., assignor to Indiana Manufacturing Company, Indianapolis, Ind. Conveyor	498,903	June 6	279	65	63	1442
Nettlefolds. (See Sheldon, John, assignor.)						
Netzer, Joseph, Laredo, Tex. Ventilator for refrigerators	501,253	July 11	1149	291	64	224
Neuhaus, Alfred. (See Kleppe and Neuhaus.)						
Neuhaus, Carl, Vienna, Austria-Hungary. Toy pistol	494,432	Mar. 28	2705	679	62	1923
Neuhaus, Frank C., Kinkler, Tex. Pliers	511,091	Dec. 19	2163	533	65	1839
Neukirch, Friedrich, Bremen, Germany. Combined petroleum and compressed-air engine for tramways	507,032	Oct. 17	2078	513 514	65	419
Neukirch, Friedrich, Bremen, Germany. Suction-valve for air-compressors	511,248	Dec. 19	2421	590	65	1887
Neuls, George W., Kane, Pa. Gurrycomb	505,951	Oct. 3	229	60	65	45
Neuman, William, Ashland, Wis. Safety-buffer for railway-trains	503,270	Aug. 15	1723	425	64	910
Neumann, Christ, St. Louis, Mo. Sash-fastener	495,905	Apr. 18	2217	559	63	443
Neumann, Ernest F., New Britain, Conn. Stovepipe-thimble	493,641	Mar. 21	1401	355	62	1663
Neumann, John, Brooklyn, N. Y. Ale-tap	494,015	Mar. 21	2025	516	62	1783
Neumann, John, Brooklyn, N. Y. Ale-tap	494,016	Mar. 21	2027	516	62	1783
Neumann, Michael J., Jr., New York, N. Y. Game-register	503,978	Aug. 29	2861	718	64	1154
Neutacher, Allise, Mendoza, Ill. Gate	507,717	Oct. 31	3284	803	65	668
Nevin, Harper P., and W. S. Farrar, Detroit, Mich. Routing-machine	490,492	Jan. 24	2416	624	62	533
Nevins, William S., Terre Haute, Ind. Reflector and bracket for lamps	493,284	Mar. 14	811	208	62	1534
Nevins, Barnett L., Jr. (See Barchell and Nevius.)						
New England Butt Company. (See McCahey, John, assignor.)						
New Gaynor Electric Company. (See Gaynor, Thomas F., assignor.)						
New, George, and A. Mittelsteadt, Menomonee Falls, Wis. Incubator	509,389	Nov. 28	2341	567	65	1241
New Haven Clock Company. (See Porter, Wilson E., assignor.)						
New Haven Manufacturing Company. (See Ferrigo, Oscar E., assignor.)						
New, Henry F., et al. (See Spencer, Charles R., assignor.)						
New Jersey Wire Cloth Company. (See Orr, Walter C., assignor.)						
New Jersey Wire Stitching Machine Company. (See Johnson, Eldridge R., assignor.)						
New Power Company. (See Chappell, George H., assignor.)						
New Process Nail Company. (See Miner, William W., assignor.)						
New York Barrel Machine Company. (See Vale, William T., assignor.)						
New York Belting and Packing Company. (See Cheever, John D., assignor.)						
New York Belting and Packing Company. (See Hardwick, Frederick W., assignor.)						
New York Belting and Packing Company. (See Morris, James R., assignor.)						
New York Carbon Works. (See Mills, William, assignor.)						
New York Filter Company. (See Blessing, James H., assignor.)						
Newark Chemical Works. (See Rissmüller and Vollbrecht, assignors.)						
Newberry, Henry S., Cleveland, Ohio. Water-sealed ink-well	497,889	May 23	2431	605	63	1103
Newbigging, William, and G. A. Worz; said Worz assignor to Milford Manufacturing Company, Milford, Ohio. Carpet-sweeper	504,846	Sept. 12	892	229	64	1452
Newburn, John. (See Werner, Louis G., assignor.)						
Newbury, Alonzo, Coxsackie, N. Y. Beam-clamp for pipe-hangers	497,679	May 16	2084	520	63	1025
Newcomb, Obadiah W., Welda, Kans. Music-leaf turner	499,680	June 13	1555	375	63	1676
Newcomb, Orem. (See Moore, Charles R., assignor.)						
Newell, Alfred T., Anderson, S. C. Wagon-brake	494,645	Apr. 4	183	46	63	38
Newell, Augustus W., Bradford, Pa. Convertible trunk	494,590	Apr. 4	104	24	63	22
Newell, Benjamin P. (See Hilton, John W., assignor.)						
Newell Brothers Manufacturing Company. (See Workheiser, Charles, assignor.)						
Newell, Frank A., assignor of two-thirds to T. Gorie and H. Donzelman, Cheyenne, Wyo. Corn-planter	510,186	Dec. 5	578	134 135	65	1519

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Newell, George H., Grand Rapids, Mich. Fishing rod and reel.....	495,827	Apr. 18	2095	527	63	419
Newell, Henry A. (See Goodfellow and Newell.)						
Newell, Henry L., Dayton, Ohio. Printing attachment for envelope-machines.....	510,043	Dec. 5	341	77	65	1474
Newell, John F., Gardiner, Me. Composition for bearings.....	491,156	Mar. 28	2268		62	1842
Newell, John F., Gardiner, Me. Composition for bearings.....	494,433	Mar. 28	2707		62	1924
Newell, Sarah, assignor of one-half to M. Peacock, Versailles, Ill. Milk-pan cover.....	494,157	Mar. 28	2268	576	62	1842
Newell, Susie A. (See Osterman, William J., assignor.)						
Newhall, George M., and C. L. Hamilton, Philadelphia, Pa. Chloride-of-lime dissolver.....	489,261	Jan. 3	435	120 121	62	96
Newington, Harry M., New York, N. Y. Fireproof wall.....	508,968	Nov. 21	1632	398	65	1093
Newkirk, Eugene W., Wooster, Ohio. Window-head fastener.....	505,122	Sept. 19	1348	347	64	1551
Newlin, Joseph S., Fairfax, S. C., assignor of one-fourth to V. Walker, Savannah, Ga. Locomotive-boiler.....	489,827	Jan. 10	1286	337	62	282
Newman, Charles E., Baltimore, Md. Brake for vehicles.....	502,576	Aug. 1	546	130	64	066
Newman, Charles E., Baltimore, Md. Spring-propelled vehicle.....	502,577	Aug. 1	547	130 131	64	667
Newman, Emma, Minneapolis, Minn. Cover-fastener for storage-vessels.....	506,928	Oct. 17	1924	476	65	389
Newman, Eugene. (See Berger and Newman.)						
Newman, Henry A., Huntsville, J. D. Werden, Kansas City, and O. A. Stempel, St. Louis, assignors of one-fourth to T. M. Elmore, Huntsville, Mo. Artificial-slate blackboard.....	490,979	Jan. 31	3215	821	62	703
Newman, Ira W., Toledo, Ohio. Addressing attachment for printing-presses.....	496,484	May 2	141	39	63	644
Newman, John J., Elkhart, Ind. Machine for waterproofing or coating paper.....	497,198	May 9	1283	327	63	868
Newman, John W., et al. (See Savill, Edward, assignor.)						
Newman, Samuel, Buffalo, N. Y. Tracing-wheel.....	491,716	Feb. 14	1065	269	62	978
Newman, Socrates, et al. (See Coze, André, assignor.)						
Newman, Ulrich B., Greenfield, Ohio. Cash register and indicator.....	489,086	Jan. 3	155	43	62	37
Newman, Wilson J., assignor to H. E. and C. Baxter, Brooklyn, N. Y. Electric bell.....	501,292	July 11	1202	304	61	233
Newpher, Alfred H., Pullman, Ill. Device for preventing spreading of railway-tracks.....	491,441	Feb. 7	625	157	62	867
Newsom, George, Leeds, England. Bronzing-machine.....	494,017	Mar. 21	2029	517	62	1784
Newton, George H., Monson, Mass. Trimming.....	505,670	Sept. 26	2294	581	64	1741
Newton, George H., Monson, Mass. Toy or ornamental bird or winged animal.....	507,381	Oct. 24	2705	665	65	546
Newton, James L., et al. (See Bennett, Willis, assignor.)						
Newton, James M., assignor of one-half to W. R. Newton, Dansville, N. Y. Putty-knife.....	503,098	Aug. 8	1433	354	64	844
Newton, John, Farnworth, near Bolton, England. Presser-flier.....	491,840	Apr. 4	567	143	63	110
Newton, Lunus C., Detroit, Mich. Bank-check, draft, or similar instrument.....	505,884	Oct. 3	131	33 34	65	26
Newton, Nelson A., Kalamazoo, Mich. Carriage-gear coupling.....	511,541	Dec. 26	2923	712	65	1993
Newton, Oscar C., assignor of one-half to G. N. Pierce, H. May, and G. Seyfang, Buffalo, N. Y. Garbage-receptacle.....	511,156	Dec. 19	2272	556	65	1860
Newton, Robert W., Providence, R. I. Automatic sprinkler.....	506,929	Oct. 17	1925	477	65	389
Newton, Wiley R. (See Newton, James M., assignor.)						
Newton, William H. (See Steese, George F., assignor.)						
Nichol, William H., Chatham, Canada. Cartridge-shell crimper.....	510,187	Dec. 5	580	135	65	1519
Nicholas, Anthony, and L. Tachau, Newark, N. J. Umbrella-cover.....	505,476	Sept. 26	1914	493	64	1670
Nicholls, George H., Galveston, Tex. Cooking utensil.....	508,831	Nov. 14	1359	336	65	1028
Nicholls, John C., assignor of one-half to P. D. Spooner, Blue Mound, Ill. Bread-raiser.....	494,018	Mar. 21	2031	517	62	1784
Nichols, Dora H. (See McArthur, Peter, assignor.)						
Nichols, Edward A., Crockett, Tex. Trace-carrier.....	490,980	Jan. 31	3216	821	62	703
Nichols, Elmer P. (See Griffin and Nichols.)						
Nichols, Emmett D., Wilkes-Barre, Pa. Water-cooler.....	496,436	May 2	76	22	63	632
Nichols, George, Brooklyn, N. Y. Stopper-fastener.....	511,645	Dec. 26	3094	755	65	2023
Nichols, Henry W., Salt Lake City, Utah Ter. Roof-templet.....	495,828	Apr. 18	2098	527	63	420
Nichols, Joseph, et al. (See Vanstone, Samuel, assignor.)						
Nichols, L. T., West Concord, Minn. Rotating measuring-vessel.....	491,064	Jan. 31	3352	855	62	732
Nichols, Marshall C., Viroqua, Wis. Sheathing-lath.....	495,906	Apr. 18	2220	559	63	443
Nichols, Seth A., Fowlerville, Mich. Device for preventing animals from jumping.....	500,152	June 27	2358	570	63	1841
Nichols & Shepard Company. (See Flagg, Eli W., assignor.)						
Nichols, Walker B., Black River Falls, Wis. Hame and trace connector.....	495,560	Apr. 18	1669	421	63	346
Nichols, William K., Washington, D. C. Cash-register.....	493,557	Mar. 14	1257	322	62	1618
Nicholson, Thomas N., Embarras, Wis. Potato-digger.....	494,684	Apr. 4	242	61, 62	63	49
Nicholson, William, assignor of one-half to A. A. Webster, Brooklyn, N. Y. Fruit-holder.....	505,323	Sept. 19	1666	430	64	1610
Nickel, Samuel, Flint, Mich. Sully.....	511,092	Dec. 19	2164	533	65	1840
Nickerson, Truman K., Maquoketa, Iowa. Kiln for burning lime or cement rock.....	509,550	Nov. 28	2643	639	65	1298
Nickerson, William E. (See Cary and Nickerson.)						
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	500,075	June 20	2199	536	63	1802
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	500,076	June 20	2200	536	63	1802
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	500,078	June 20	2201	537	63	1803
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	500,079	June 20	2201	537	63	1803
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	500,671	July 4	229	60	64	43
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	501,531	July 18	1584	399	64	319
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	503,669	Aug. 22	2381	594	64	1043
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	503,670	Aug. 22	2382	591	64	1044
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	503,671	Aug. 22	2383	594	64	1044
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	503,770	Aug. 22	2512	632	64	1075
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	507,554	Oct. 31	3003	737	65	615
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	507,555	Oct. 31	3004	737	65	616
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	507,556	Oct. 31	3005	738	65	616
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	507,557	Oct. 31	3006	738	65	616
Nickerson, William E., Cambridge, Mass. Incandescent electric lamp.....	507,558	Oct. 31	3007	738	65	617
Nickerson, William E., Cambridge, and E. E. Cary, Boston, Mass. Incandescent electric lamp.....	500,077	June 20	2200	537	63	1802
Nickerson, William E., Cambridge, and E. E. Cary, Boston, Mass. Incandescent electric lamp.....	500,670	July 4	228	60	64	43
Nickerson, William E., Cambridge, and E. E. Cary, Boston, Mass. Incandescent electric lamp.....	501,529	July 18	1582	398	64	319
Nickerson, William E., Cambridge, and E. E. Cary, Boston, Mass. Incandescent electric lamp.....	501,530	July 18	1583	398	64	319
Nickleus, William. (See Woodward and Johnston, assignors.)						
Nicodemus, Michael, et al. (See Heinlein, John F., assignor.)						
Nicolai, Ludwig. (See Saltzkorn and Nicolai.) (Reissue.)						
Nicolai, Servatius, St. Louis, Mo. Street or other sign.....	503,489	Aug. 15	2073	517	64	973
Nicole, Henry J., London, England. Siphon or seltzogene for aerated waters.....	504,235	Aug. 29	3283	820	64	1232
Nicolet, Georges, Chaux-de-Fonds, Switzerland. Stop-watch.....	490,123	Jan. 17	1799	469	62	400
Niedergesaess, Robert, Seattle, Wash. Conveyor-belt.....	507,156	Oct. 24	2318	569	65	474
Niederriter, William F., assignor of one-fourth to A. L. Anderson, Minneapolis, Minn. Thill-tug.....	501,293	July 11	1205	304	64	234

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Niedringhaus, George W., St. Louis, Mo. Enameled sheet-metal ware.....	503,247	Aug. 15	1687	415	64	903
Niedringhaus, George W., St. Louis, Mo. Enam- led sheet-metal ware.....	503,248	Aug. 15	1687	415	64	904
Niedringhaus, William F., St. Louis, Mo. Apparatus for the manufacture of tin-plate and coating sheet metal.....	505,171	Sept. 19	1424	367	64	1565
Niedringhaus, William F., and C. A. Wettengel, assignors to St. Louis Stamping Company, St. Louis, Mo. Plate-metal-folding machine.....	503,292	Aug. 15	1761	{ 435 436 }	64	917
Niehaus, John D., New Waterford, Ohio. Fire-escape.....	500,030	June 20	2129	516	63	1790
Niehoff, Ernest, Tacoma, Wash. Egg-puzzle.....	491,021	Jan. 31	3286	839	62	718
Niehoff, Ernest, Tacoma, Wash., assignor of one-half to H. T. D. Entremont, Pubnico, Canada. Apparatus for raising sunken vessels.....	497,199	May 9	1285	327	63	868
Nielsen, Hans P., Alameda, Cal. Automatic releasing device.....	497,249	May 9	1367	347	63	883
Nielsen, Jens, Copenhagen, Denmark. Cow-milker.....	490,211	Jan. 17	1949	511	62	428
Nielsen, Jens, Copenhagen, Denmark. Fire-escape tower.....	496,581	May 2	294	79, 80	63	673
Nielsen, Olaus, Eau Claire, Wis. Fire-escape tower.....	490,329	June 13	963	{ 232 233 }	63	1572
Nielsen, Peter H., Denver, Colo. Device for removing shoe-buttons.....	491,948	Feb. 14	1426	356	62	1049
Nieman, William L., and W. Hieronymus, Mount Olive, Ill. Cultivator.....	510,812	Dec. 12	1644	409	65	1732
Niemczyk, Anton, Leipsic, Germany. Gas-motor.....	508,042	Nov. 7	93	27	65	776
Nies, Frederick R., and F. J. Linnehan, Swampscott, Mass. External joint for escape-pipes, &c.....	506,930	Oct. 17	1927	477	65	390
Nies, Philipp. (See Stuebner and Nies.)						
Niethammer, Ludwig A. J., Kriebstein, near Waldheim, and A. Pfarr, Heidenheim-on-the-Brenz, Germany. Machine for cutting wood for the manufacture of cellulose.....	508,147	Nov. 7	280	69, 70	65	810
Nieuwenhuys, Auguste, Brussels, Belgium. Dioptric appliance for street-lamps.....	506,332	Oct. 10	927	230	65	189
Nightingale, Isaiah, Evansville, Ind. Attachment for guitars, mandolins, zithers, or other stringed instruments.....	494,485	Mar. 28	2782	698	62	1937
Nightingale, Miles J., and J. B. Stearns, Oakdale, Cal. Seed-sower.....	502,051	July 25	2424	610	64	485
Niles, George S., Brooklyn, N. Y. Cat-barrier.....	504,936	Sept. 12	1033	265	64	1479
Niles, Jesse E., assignor of two-thirds to M. W. Bloomburg, Pontiac, Mich. Stovepipe-fastener.....	491,949	Feb. 14	1427	356	62	1049
Niles, Milton C., Oak Park, Ill. Rail-joint.....	501,093	July 11	894	230	64	178
Niles, Milton C., Oak Park, Ill. Rail-joint.....	507,382	Oct. 24	2706	665	65	546
Niles, Milton C., Oak Park, Ill. Rail-joint.....	509,581	Nov. 28	2691	651	65	1308
Niles, Peter H., Potwin Place, assignor of one-half to A. M. Legg, Topeka, Kans. Automatic adjustable window-screen.....	490,752	Jan. 31	2846	730	62	631
Nilsen, Sivert B., Duluth, Minn. Device for unloading vessels.....	492,827	Mar. 7	85	20, 21	62	1374
Nilson, Oliver C., Joplin, Mo. Hay-stacker.....	500,599	July 4	93	27	64	19
Nilson, Peter E., Chicago, Ill. Sliding-door hanger.....	511,208	Dec. 19	2357	{ 575 576 }	65	1875
Nilsson, Nils, Brooklyn, N. Y. Strap.....	494,019	Mar. 21	2032	518	62	1784
Nipher, Henry W., assignor of one-half to W. M. Derr and J. S. Snavely, Lebanon, Pa. Steam-engine.....	505,991	Oct. 3	297	76, 77	65	58
Nirdlinger, Max, Milwaukee, Wis., assignor to Fuel Patents Company. Artificial fuel.....	500,934	July 4	620		64	113
Nisbet, William H., and W. McLaren, London, England. Window-blind apparatus.....	507,747	Oct. 31	3319	813	65	675
Nisbett, William, Toronto, Canada. Builder's level.....	500,031	June 20	2131	516	63	1790
Nithack, Gustav, Obernigk, Germany. Druggist's weighing-scale.....	494,685	Apr. 4	245	62	63	50
Nithack, Gustav, Obernigk, Germany. Tongue-depressor and throat-illuminator.....	510,516	Dec. 12	1113	269	65	1635
Nivens, William, Deep Creek, N. C. Cotton-chopping machine.....	496,225	Apr. 25	2703	677	63	548
Nivrois, Victor, Brooklyn, N. Y. Watchcase-spring.....	499,564	June 13	1380	329	63	1646
Nixdorf-Kr. in Manufacturing Company. (See Stowe, William J., assignor.)						
Nixholm, Calle P., assignor of one-third to C. Rundberg, Hecla, Mont. Lock.....	506,792	Oct. 17	1689	425	65	346
Nixon, George W., Chattanooga, Tenn. Coke-oven.....	499,565	June 13	1381	{ 329 330 }	63	1646
Nixon, James A., et al. (See Ward, Wiley, assignor.)						
Nixon, James A., Titusville, Pa. Combined cane and camp-stool.....	494,303	Mar. 28	2499	631	62	1886
Nixon, James A., Titusville, assignor of three-fourths to H. J. Hopkins, Pleasantville, Pa. Combined cane and stool.....	493,285	Mar. 14	812	{ 208 209 }	62	1534
Nixon, Joseph, Altoona, Pa. Stay-bolt.....	502,827	Aug. 8	997	243	64	764
Nixon, Moses C., Omaha, Nebr. Baling-press.....	494,686	Apr. 4	246	63	63	50
Noad, James, assignor of one-half to R. Matthews, London, England. Manufacture of white lead and colored pigments.....	508,115	Nov. 7	226		65	800
Nobbs, James J., London, England. Shield for tunneling.....	499,566	June 13	1383	{ 330 331 }	63	1646
Noble, Andrew, and G. Henderson, assignors to Sir W. G. Armstrong, Mitchell & Company, Limited, Newcastle-upon-Tyne, England. Breech-loading ordnance.....	492,942	Mar. 7	266	68, 69	62	1412
Noble, Benjamin, et al. (See Weber, Adolph, assignor.)						
Noble, Donald, Leeds, England. Portable pumping apparatus.....	491,186	Feb. 7	205	52, 53	62	797
Noble, Donald, Leeds, England. Portable pumping apparatus.....	494,921	Mar. 23	2374	{ 599 600 }	62	1863
Noble, Harriet I., New York, N. Y. Sad-iron.....	494,020	Mar. 21	2033	518	62	1784
Noble, Hiram. (See Tracy and Noble.)						
Noble, James B., and C. G. Thomson, Southampton, England. Life-saving grapnel.....	508,234	Nov. 7	418	101	65	836
Noble, John B., Tatum, and J. B. Hensley, Baird, Tex. Belt-tightener.....	489,323	Jan. 3	518	141	62	112
Noble, John F. (See Schofield, John, assignor.)						
Noble, John W., and F. Street, Philadelphia, Pa. Violin-bow.....	508,741	Nov. 14	1225	305	65	1004
Noble, Oscar L. (See Childs, Eugene, assignor.)						
Noble, Thomas A., et al. (See Saitz, John F., assignor.)						
Nobles, Alonzo W. (See Joyce, Owen C., assignor.)						
Noblet, Charles H. (See Matthew, William E., assignor.)						
Noblett, Edward J., Chicago, Ill. Gynecological wall-table.....	498,293	May 30	3081	{ 766 767 }	63	1232
Noë, Peter, Mosbach, Germany. Apparatus for expanding and contracting hats.....	491,553	Feb. 14	1278	317	62	1019
Noelcke, Louis, Cincinnati, Ohio, assignor of one-third to P. Boehmer, Newport, Ky. Ice-velocipede.....	510,813	Dec. 12	1646	409	65	1733
Nogar, Russell H., Dundee, Mich., assignor of one-half to B. E. Bullock, Toledo, Ohio. Burner for sawdust or refuse fuel.....	503,328	Aug. 15	1829	453	64	928
Nogar, William H., Mount Jewett, Pa. Saw-sharpener.....	494,021	Mar. 21	2033	518	62	1784
Nolan, Eugene M., Jacksonville, Fla. Cotton chopper and cultivator.....	489,640	Jan. 10	1003	{ 262 263 }	62	225
Nolan, James, Oakland, Cal. Gas-generator.....	500,935	July 4	622	163	64	114
Nolan, John H., Boston, Mass. Fluid-pressure generator.....	495,140	Apr. 11	998	250	63	203
Nolan, William F., San Francisco, Cal. Ratchet-drill brace.....	506,931	Oct. 17	1928	477	65	390
Noland, John, Pittsburg, Pa. Door-securer.....	489,230	Jan. 3	386	106	62	86
Nolen, Caleb M., et al. (See Titman, James R., assignor.)						
Nolen, Stephen A., McCrory, Ark. Harness-saddle.....	489,087	Jan. 3	157	43	62	38

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Noll, Augustus, assignor to S. Bergmann, New York, N. Y. Coupling for electric conduits	509,603	Nov. 28	2730	659	65	1316
Noonan, Edward T., and J. V. Schmill, Chicago, Ill. Polycycle	498,484	May 30	3380	842	63	1287
Noone, Thomas D., Camden, N. J. Caterpillar-trap	505,226	Sept. 19	1506	393	64	1580
Norberg, Charles. (See Green, John, assignor.)						
Norcross, George A., assignor of one-half to H. E. Verner, San Antonio, Tex. Car-coupling	501,688	July 18	1840	454	64	366
Nordberg, Bruno V. (See Conradson and Nordberg.)						
Nordberg, Bruno V., assignor to Bruno Nordberg Company, Milwaukee, Wis. Steam-engine valve-gear	497,285	May 9	1443	364 365	63	894
Nordmann, Paul, assignor to Siemens & Halske, Berlin, Germany. Safety cut-out apparatus for networks of multiple electrical conductors	497,680	May 16	2095	520 521	63	1025
Nordmann, Paul, assignor to Siemens & Halske, Berlin, Germany. Electric-arc lamp	498,566	May 30	3527	873	63	1312
Nordmann, Paul, assignor to Siemens & Halske, Berlin, Germany. Equalizer for rotary current systems	501,094	July 11	897	230	64	179
Nordmann, Paul, assignor to Siemens & Halske, Berlin, Germany. Electric-lighting system	501,095	July 11	899	231	64	179
Nordström, Andrew D., Snake, Minn. Thermometer	499,750	June 20	1690	405	63	1713
Nordyke & Marmon Company. (See Brantingham, Allen C., assignor.)						
Nordyke, Sylvanus A., Kansas City, Kans. Bolting-machine	501,155	July 11	1001	255 256	64	197
Norell, Ernst, assignor to Eagle Pencil Company, New York, N. Y. Pencil-sharpener	502,632	Aug. 1	641	153	64	685
Norfleet, Abram L., Kearney, Mo. Credit-balance register	502,133	July 25	2550	639	64	510
Noriega, Eloy, Mexico, Mexico. Telephone-transmitter	508,829	Nov. 14	1355	335	65	1028
Noriega, Eloy, Mexico, Mexico. Electric telephone	508,830	Nov. 14	1357	335 336	65	1028
Norman, Charles, Frankfort, Mich. Rowlock	508,969	Nov. 21	1623	398	65	1094
Norman, Joseph L., Kansas City, Mo. Index file-holder	489,680	Jan. 10	1072	279	62	239
Norman, Thomas E., Fall River, Mass. Shuttle-binder for looms	505,574	Sept. 26	2127	539	64	1710
Norman, Thomas L. (See Herzberg and Norman.)						
Normand, Augustin, Havre, France. Feed-water heater	499,567	June 13	1334	331	63	1646
Normanton, Alfred and H., Manchester, England. Flexible tire	496,949	May 9	913	239	63	802
Normanton, Herbert. (See Normanton, Alfred and H.)						
Normanville, Samuel A., de, Liverpool, England. Vehicle brake and starter	507,033	Oct. 17	2079	514	65	419
Norington, Young, and H. Blades, Liverpool, England. Rocking horse, cradle, &c.	503,979	Aug. 29	2861	718	64	1154
Noroy, Charles F. X., Paris, France. Dyeing black	493,286	Mar. 14	813		62	1534
Norren, William, assignor of one-half to F. Turnquist, Chicago, Ill. Fare and time recorder for vehicles	510,814	Dec. 12	1647	410	65	1733
Norrington, Henry H., West Bay City, Mich., assignor to R. Woodman, Boston, Mass. Hand-stamp	505,172	Sept. 19	1426	367	64	1565
Norris, Charles F. (See Hickey and Norris.)						
Norris, Frank B., Helena, Mont. Dental hot-air syringe	497,964	May 23	2541	635	63	1122
Norris, Fred. G. (See Dante, Frank B., assignor.)						
Norris, Fred H. (See Norris, George E., assignor.)						
Norris, George E., Berlin, Canada, assignor of one-half to F. H. Norris, Troy, N. Y. Machine for folding collar or cuff blanks	502,678	Aug. 1	734	176 177	64	700
Norris, James L., administrator. (See Youngjohns and Taylor.)						
Norris, Shubrick, et al. (See Kitton, John C., assignor.)						
Norris, William. (See Richardson and Norris.)						
Norris, William A., assignor of one-half to D. B. Younce, Garland, Ohio. Wire fence	511,449	Dec. 26	2788	674	65	1967
Norris, William M., et al. (See Little, Arthur D., assignor.)						
Norris, William M., Princeton, N. J., assignor of one-half to H. Burk, Philadelphia, Pa. Tawing hides or skins	498,077	May 23	2716		63	1153
Norris, William M., Princeton, N. J., assignor of one-half to H. Burk, Philadelphia, Pa. Tawing skins	498,214	May 23	2933		63	1191
North, Albert G., Pontiac, Mich. Bolster-spring	494,158	Mar. 28	2269	576	62	1842
North, Alfred C., Benton Harbor, assignor to J. Eddy, Flint, Mich., and A. J. Eddy, Chicago, Ill. Printing-machine	489,981	Jan. 17	1554	406 407 408	62	350
North, Alfred C., Benton Harbor, assignor to J. Eddy, Flint, Mich., and A. J. Eddy, Chicago, Ill. Stringing-machine	489,982	Jan. 17	1560	408 409 410	62	351
North Branch Steel Company. (See Howe, Frank P., assignor.)						
North Brothers Manufacturing Company. (See Albrecht, Antonius C., assignor.)						
North, Charles H., assignor to Crandall Packing Company, Palmyra, N. Y. Manufacturing piston-rod packing	506,857	Oct. 17	1797	451	65	365
North, Frank S. (See Raymond and North.)						
North & Judd Manufacturing Company. (See Herrick, Frank J., assignor.)						
North, Stanley C., Tarrytown, N. Y. Automatic injector-burner	494,591	Apr. 4	105	25	63	22
Northampton Cutlery Company. (See Feickler, Frederick C., assignor.)						
Northcraft, Edward, San Marcos, Tex. Fire-extinguisher for cotton-gins	498,683	May 30	3733	922	63	1347
Northrop, George J. (See Roe, Arthur R., assignor.)						
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-support	503,060	Aug. 8	1368	338	64	833
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing	503,061	Aug. 8	1369	338	64	833
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Bolster for spinning-spindles	503,911	Aug. 22	2740	687	64	1114
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-retaining device	505,173	Sept. 19	1427	367	64	1565
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-retaining device	505,174	Sept. 19	1429	368	64	1565
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-retaining device	505,721	Sept. 26	2378	600	64	1756
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle and retaining device therefor	508,235	Nov. 7	421	102	65	836
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-support	508,742	Nov. 14	1226	305	65	1005
Northrop Loom Company. (See Bailey, Sidney C., assignor.)						
Northrop Loom Company. (See Draper, William F., assignor.)						
Northrop Loom Company. (See Smith, Oberlin, assignor.)						
Northrup, Blancher D., Washington, Pa. Valve-rod adjuster	497,681	May 16	2087	521	63	1025
Northrup, Edwin F., Ardmore, assignor to S. L. and E. B. Fox, Philadelphia, Pa. Galvanometer	494,964	Apr. 4	652	175	63	131
Northway, Joseph, and T. E. Hammond, Forsyth, Mont. Highland water-carrier	500,936	July 4	623	164	64	114
Northwestern Stove Works. (See Daman, Oscar, assignor.)						
North Western Wire Mattress Company. (See Franks, Orrin G., assignor.)						
North Western Wire Mattress Company. (See Kehr, Cyrus, assignor.)						
Nortney, James, and F. Schefold, New Albany, Ind. Electric-lamp support	497,200	May 9	1286	327 328	63	868

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Norton, Charles H., Detroit, Mich. Center-grinder	496,891	May 9	822	{ 217 218 588 589 590 849 850	63	785
Norton, Charles H., Detroit, assignor to A. Pack and R. A. Fraser, Alpena, Mich. Flax- dressing machine	502,010	July 25	2349	{ 588 589 590 849 850	64	472
Norton, Charles H., assignor to Leland, Faulconer & Norton Company, Detroit, Mich. Uni- versal grinder	504,306	Aug. 29	3393	{ 588 589 590 849 850	64	1253
Norton, Charles H., assignor to Leland, Faulconer & Norton Company, Detroit, Mich. Riv- eting-machine	507,239	Oct. 24	2464	607	65	500
Norton, Charles H., assignor to Leland, Faulconer & Norton Company, Detroit, Mich. Milling-machine	509,444	Nov. 28	2466	{ 593 594	65	1265
Norton, Clark H., Syracuse, N. Y. Ventilator	495,141	Apr. 11	1000	250	63	203
Norton, Edward J., assignor to himself and W. H. Shaw, Brooklyn, N. Y. Hose-nozzle	505,952	Oct. 3	230	60	65	45
Norton, Edwin, <i>et al.</i> (See Livingston, Andrew W., assignor.)						
Norton, Edwin and L. M., Maywood, assignors to said Edwin and O. W. Norton, Chicago, Ill. Water-closet	489,030	Jan. 3	74	{ 21 23 24 25 26 27 28	62	19
Norton, Edwin, Maywood, Ill., and F. M. Leavitt, Brooklyn, N. Y., assignors to said Nor- ton, and O. W. Norton, Chicago, Ill. Machine for making cans	498,810	June 6	94	{ 25 26 27 28	63	1406
Norton, Edwin, and J. G. Hodgson, Maywood, assignors to said Edwin Norton and O. W. Norton, Chicago, Ill. Tinning-machine	500,718	July 4	298	81	64	55
Norton, Fred O., Clinton, Iowa. Ore-amalgamator	491,686	Feb. 14	1017	257	62	969
Norton, Fred O., Oroville, Cal. Secondary battery	499,848	June 20	1845	449	63	1740
Norton, Frederick G., Waukegan, Ill. Automatic boot-blackening machine	496,437	May 2	77	22, 23	63	633
Norton, Grove E., Salt Lake City, Utah Ter. Track-fastening	504,236	Aug. 29	3284	820	64	1232
Norton, Harold P., Washington, D. C. Drawing-pen	509,137	Nov. 21	1901	465	65	1147
Norton, Henry W. (See Fauber, William H., assignor.)						
Norton, John H., St. Louis, Mo. Culinary utensil	502,748	Aug. 8	861	210	64	739
Norton, Joseph C., Lynn, Mass. Hot-water circulating system	500,268	June 27	2339	621	63	1874
Norton, Joseph J., <i>et al.</i> (See Douthit, Benjamin F., assignor.)						
Norton, Joshua, Jr., Chatham, Canada. Machine for washing and reducing wood pulp	495,262	Apr. 11	1196	300	63	240
Norton, Joshua, Jr., Chatham, Canada. Pulp-digester	496,275	Apr. 25	2778	695	63	563
Norton, Le Grand M. (See Norton, Edwin and L. M.)						
Norton, Leroy S., and F. E. Hoffman, Alpena, Mich.; said Hoffman assignor to said Norton. Telethermometer	493,558	Mar. 14	1258	323	62	1619
Norton, Oliver W. (See Norton, Edwin and L. M., assignors.)						
Norton, Oliver W. (See Norton and Leavitt, assignors)						
Norton, Oliver W., <i>et al.</i> (See Norton and Hodgson, assignors.)						
Norton, Oliver W., <i>et al.</i> (See Livingston, Andrew W., assignor.)						
Norton, Stephen, assignor to W. H. Rice, Rochester, N. Y. Wagon-tongue attachment	507,076	Oct. 17	2151	533	65	431
Norwegian Plow Company. (See Swager, Nelson, assignor.) (Reissue.)						
Norwell, John J., assignor to Smith & Egge Manufacturing Company, Bridgeport, Conn. Machine for setting facing-books	506,333	Oct. 10	928	{ 230 231	65	189
Norwood, Benjamin A., assignor, by mesne assignments, to Eureka Process Lasting Com- pany, Boston, Mass. Lasting boots or shoes	503,062	Aug. 8	1370	{ 338 339	64	833
Norwood, Benjamin A., assignor, by mesne assignments, to Eureka Process Lasting Com- pany, Boston, Mass. Lasting-pinchers	503,672	Aug. 22	2384	594	64	1044
Norwood, Benjamin A., assignor, by mesne assignments, to Eureka Process Lasting Com- pany, Boston, Mass. Lasting-machine	505,671	Sept. 26	2294	{ 581 582	64	1741
Norwood, John E. (See Babendreier and Davis, assignors.)						
Norwood, John E., Sykesville, Md. Spring-draft device	498,684	May 30	3734	922	63	1347
Norwood, John E., Sykesville, Md. Horse-detacher	498,685	May 30	3735	{ 922 923	63	1348
Norwood, John E., Baltimore, Md. Horse-detacher	510,284	Dec. 5	742	180	65	1550
Notter, John G., trustee, <i>et al.</i> (See Halfin, John B., assignor.)						
Nottingham, Henry E., and A. Tucker, Cincinnati, Ohio. Friction-clutch	5 2,446	Aug. 1	333	80	64	627
Novel Envelope-Opener Company. (See Brigham, Robert O., assignor.)						
Novel Envelope-Opener Company. (See Puckett, William J., assignor.) (Reissue.)						
Nowland, John B., Harvey, Ill. Car-door fastener	506,064	Oct. 3	409	107	65	80
Nowland, John B., Harvey, Ill. Combined lock and cinder-guard for car-doors	506,065	Oct. 3	409	107	65	80
Nowotny, August, and M. Vlasak, St. Louis, Mo. Candle-holder	499,568	June 13	1387	331	63	1647
Nowotny, John S., Cincinnati, Ohio. Combined electric motor and induction-coil	509,445	Nov. 28	2470	595	65	1266
Noyes, Arthur A., and A. A. Clement, Boston, Mass. Manufacture of para-amido-phenol sulphonic acid	511,450	Dec. 26	2789		65	1967
Noyes, Charles T. (See Heintzelman and Noyes.)						
Noyes, Charles T. (See Small and Noyes.)						
Noyes, George E., Washington Grove, Md. Conduit railway insulator	500,937	July 4	624	164	64	114
Noyes, LaVerne W. (See Adams, Phineas H., assignor.)						
Noyes, Ray N., Haverhill, Mass. Automatic disconnector for trolley-wires	500,417	June 27	2776	684	63	1915
Noyes, William S., Chicago, Ill. Support for elliptic springs	500,600	July 4	95	27	64	19
Nüesch, Jakob. (See Schweizer and Nüesch.)						
Nugent, Edward, Brooklyn, assignor to T. W. and C. B. Sheridan, New York, N. Y. Book- sewing machine	507,034	Oct. 17	2083	{ 514 515	65	419
Nugent, John B., and H. G. Gilbert, assignors to McSherry Manufacturing Company, Day- ton, Ohio. Harrow	490,718	Jan. 31	2791	716	62	621
Nugent, John B., and H. G. Gilbert, assignors to McSherry Manufacturing Company, Day- ton, Ohio. Grain-drill	499,849	June 20	1847	{ 449 450	63	1740
Nulle, Victor H., Lebanon, Ohio. Bicycle	500,938	July 4	625	164	64	114
Nunamaker, John W., assignor of one-fourth to H. L. Hopkins, Chicago, Ill. Alarm for watches	492,611	Feb. 28	2478	616	62	1291
Nunamaker, John W., assignor of one-fourth to H. L. Hopkins, Chicago, Ill. Stem wind- ing and setting watch	492,612	Feb. 28	2482	616	62	1292
Nunamaker, John W., assignor of one-fourth to H. L. Hopkins, Chicago, Ill. Stem wind- ing and setting mechanism for watches	493,642	Mar. 21	1401	{ 355 356	62	1663
Nunamaker, John W., assignor of one-fourth to H. L. Hopkins, Chicago, Ill. Stem wind- ing and setting mechanism for watches	493,643	Mar. 21	1404	356	62	1663
Nunn, David A., <i>et al.</i> (See Dugger, Collin C., assignor.)						
Nunn, Thomas H., Hughesville, Pa. Car-coupling	503,490	Aug. 15	2074	517	64	973
Nunn, William C., Toronto, Canada, assignor to Consolidated Railway Equipment Com- pany of Toronto, Limited. Railway surface cattle-guard	492,424	Feb. 28	2164	541	62	1226
Nunn, William J., Hyde Park, Mass. Fender for electric, cable, or other similar cars	501,294	July 11	1206	305	64	234

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Nusbaum, Frank A., Columbus, Ohio. Oil-filter	493,644	Mar. 21	1406	{ 356 357 }	62	1663
Nutriment Company. (See Eyre, Clarence P., assignor.)						
Nutt, George H., Worcester, Mass. Surface-gage	491,926	Feb. 14	1392	347	62	1042
Nutt, George H., assignor to Knowles Loom Works, Worcester, Mass. Machine for cutting worms for gearing	492,966	Mar. 7	308	79	62	1420
Nutt, John B. (See Dyer, John W., assignor.)						
Nuttall, Robert D., Allegheny, Pa. Trolley for electric cars	498,722	May 30	3816	940	63	1361
Nuttall, Robert D., Allegheny, Pa. Electric-railway trolley	498,723	May 30	3817	941	63	1362
Nuttle, David T., Chester, Pa. Coin-controlled game apparatus	504,996	Sept. 12	1138	291	61	1498
Nye, Charles, assignor of one-fourth to J. Cain, Newman, Cal. Water-back for straw-burning furnaces	498,686	May 30	3738	923	63	1348
Nye, George E., assignor of one-half to E. Fredick, Philadelphia, Pa. Circular-knitting machine	498,139	May 23	2807	702	63	1169
Nye, Harvey T., Cleveland, Ohio. Hot-water heater	492,695	Feb. 28	2605	{ 644 645 }	62	1316
Nye, Marvin H. (See Flowers, John S., assignor.)						
Nye, Ralph W., assignor of one-half to J. G. Scott, Richmond, Ind. Attachment for cooking-stoves	501,574	July 18	1653	413	64	334
Nyswanger, Elijah, Hanford, Cal. Parachute-propeller	495,360	Apr. 11	1347	337	63	267
O. B. North & Company. (See Smith, Charles H., assignor.)						
O'Beirne, William J., Brooklyn, N. Y. Railway-gate	495,361	Apr. 11	1349	338	63	267
O'Boiger, Thomas, Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Lasting-machine	489,031	Jan. 3	77	21, 22	62	20
O'Brien, Arthur, Helena, Mont. Apparatus for testing pipes and tubes	496,438	May 2	81	23	63	633
O'Brien, Arthur, Helena, Mont. Washbasin, bath-tub, &c	503,249	Aug. 15	1688	415	64	904
O'Brien, Arthur, Helena, Mont. Urinal	503,491	Aug. 15	2075	518	64	973
O'Brien, Charles A. (See Bryce, Andrew, assignor.)						
O'Brien, Frank, et al. (See Ketteringham, John P., assignor.)						
O'Brien, Geraldine, Boston, Mass. Combination knitted garment	505,953	Oct. 3	231	60, 61	65	45
O'Brien, Geraldine, assignor to J. Holmes, Boston, Mass. Combination knitted undergarment	491,950	Feb. 14	1428	356	62	1049
O'Brien, James. (See Moran, O'Brien, and Davin.)						
O'Brien, John, et al. (See Pickles, Charles K., assignor.)						
O'Brien, John, and C. K. Pickles, St. Louis, Mo. Downdraft-furnace	496,322	Apr. 25	2862	714	63	579
O'Brien, Joseph, Boston, Mass. Power-hammer	493,874	Mar. 21	1772	452	62	1735
O'Brien, Patrick, South Bend, Ind. Tire-setting apparatus	503,435	Aug. 15	1986	{ 492 493 }	64	957
O'Brien, Patrick, St. Johns, Newfoundland. Ship's hull	509,672	Nov. 28	2838	685	65	1336
O'Brien, Patrick J., Cincinnati, Ohio. Ratchet device for tools	501,957	July 25	2275	569	64	458
O'Brien & Sons. (See Farrell, Joseph P., assignor.)						
O'Brien, Thomas, New York, N. Y. Propeller	502,910	Aug. 8	1130	279	64	790
O'Brien, Thomas J., Buffalo, N. Y. Self-cleaning outside water-closet	490,719	Jan. 31	2793	717	62	622
O'Brien, Walter A., Boston, Mass. Knitted garment and making same	500,269	June 27	2540	621	63	1874
O'Brien, Walter A., Boston, Mass. Shirt and manufacturing same	500,270	June 27	2542	621	63	1874
O'Brien, William S., Lafayette, Ind. Vehicle-seat	490,919	Jan. 31	3117	799	62	685
O'Brien, William S., San Francisco, Cal. Chair	507,921	Oct. 31	3617	893	65	729
O'Bryan, Joseph B., Nashville, Tenn. Cloth-piling machine	506,535	Oct. 10	1281	320	65	257
O'Bryan, Joseph B., Nashville, Tenn. Cloth-piling machine	506,536	Oct. 10	1282	321	65	257
O'Byrne, Joseph, assignor of one-third to J. F. Mahon, Chicago, Ill. Trap for sinks, &c.	511,646	Dec. 26	3095	756	65	2023
O'Carr, James M. (See Monday, Newton, assignor.)						
O'Connell, Daniel. (See Green, John, assignor.)						
O'Connell, Henry B., New York, N. Y. Potato-slicer	507,383	Oct. 24	2709	666	65	547
O'Connell, John A. (See Joerges and O'Connell.)						
O'Connell, Joseph J., Chicago, Ill., assignor, by mesne assignments, to American Bell Telephone Company, Boston, Mass. Signal apparatus for telephone systems	509,484	Nov. 28	2540	613	65	1279
O'Connor, Charles J., and C. Reisky, assignors to J. Sellinger, Rochester, N. Y. Apparatus for cleaning beer-pipes	509,235	Nov. 21	2072	500	65	1179
O'Connor, Dennis, Biddeford, Me. Hasp-lock	489,613	Jan. 10	977	254	62	218
O'Connor, Hugh, Passaic, N. J. Electric-railway-track cleaner	508,743	Nov. 14	1227	306	65	1005
O'Connor, James L., New York, N. Y. Hame-fastener	505,842	Oct. 3	62	16	65	14
O'Connor, James L., New York, N. Y. Hame-fastener	505,843	Oct. 3	63	16	65	15
O'Connor, John J., Bridgeport, Conn. Lady's hat-fastener	501,295	July 11	1208	305	64	234
O'Connor, Phillip, assignor of one-half to F. R. Skidmore, Milwaukee, Wis. Band sawing-machine	490,212	Jan. 17	1951	511	62	429
O'Connor, Samuel. (See Baehr, George, assignor.)						
O'Day, Simon, et al. (See Curtis, Frederic A., assignor.)						
O'Donnell, Anthony P. (See Devers, William J., assignor.)						
O'Donnell, John, Mountain Lake Park, Md. Window shutter and curtain	506,537	Oct. 10	1283	321	65	258
O'Donnell, John L. (See Baldwin, Ozro J., assignor.)						
O'Donnell, John P. (See Sykes and O'Donnell.)						
O'Donnell, Thomas C., Winnemucca, Nev. Car-coupling	507,686	Oct. 31	3234	792	65	658
O'Donoghue, Patrick. (See Orth and O'Donoghue.)						
O'Farrell, John A. (See Lee and O'Farrell.)						
O'Friel, Thomas F., Altoona, Pa. Sand-box for locomotives	504,609	Sept. 5	482	123	64	1360
O'Grady, Gerald D., and J. R. Collins, Toronto, Canada. Station-indicator	501,096	July 11	900	231	64	179
O'Hagen, James, et al. (See Kepler, Beroth M., assignor.)						
O'Hara, Adam, Chicago, Ill. Soda-water apparatus	497,201	May 9	1288	328	63	869
O'Hara, Michael, Pittsburg, Pa. Life-preserver	496,697	May 2	484	129	63	707
O'Hara, Walter W., Arlington, Mass., assignor to Carter & Company, Limited, Niagara Falls, N. Y. Manifold memorandum-book	490,675	Jan. 31	2730	{ 702 703 }	62	609
O'Keefe, Daniel, Boston, Mass. Bottle-stopper	502,423	Aug. 1	294	70	64	620
O'Keefe, Andrew, New York, N. Y., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock	494,965	Apr. 4	686	176	63	131
O'Keefe, Frank D., assignor of seven-sixteenths to G. W. Roberts, Philadelphia, N. Y. Knockdown chair	499,798	June 20	1760	426	63	1725
O'Leary, Dennis, Winchester, Cal. Lid-holder	493,834	Mar. 21	1713	437	62	1723
O'Marra, John. (See Butts and O'Marra.)						
O'Marra, John, assignor of one-third to A. C. Butts, New York, N. Y. Automatic switch	495,227	Apr. 11	1134	{ 282 283 }	63	228
O'Neil, Bernard F., et al. (See Morgan, Charles, assignor.)						
O'Neil, Daniel, assignor of two-fifths to Howe & Bassett, Rochester, N. Y. Curb-box cover	492,227	Feb. 21	1863	465	62	1153
O'Neil, John H., Philadelphia, Pa. Box	505,533	Sept. 26	2037	520	64	1692

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O'Neil, Joseph, Taylorstown, Pa. Valve for oil-well pumps.....	502,750	Aug. 8	863	210	64	740
O'Neil, Michael S., Chicago, Ill. Horse-weight.....	494,159	Mar. 28	2270	576	62	1842
O'Neill, Charles Z., assignor of one-half to G. B. Marx, New York, N. Y. Street-sweeper.....	507,719	Oct. 31	3286	804	65	669
O'Neill, Henry G., Boston, Mass., assignor to Standard Electric Heat, Light and Power Company, of Maine. Manufacturing electric heaters.....	498,078	May 23	2717	679	63	1153
O'Neill, Henry G., assignor to Standard Manufacturing Company of Maine, Boston, Mass. Cash register and indicator.....	498,079	May 23	2718	{ 679 680 }	{ 63 63 }	{ 1153 1153 }
O'Neill, James A., assignor of one-half to J. C. Hollings, Boston, Mass. Combined gas and electric light fixture.....	503,912	Aug. 22	2741	687	64	1115
O'Neill, James J., Boston, Mass. Insulator-pin.....	505,123	Sept. 19	1349	347	64	1552
O'Neill, John M., assignor of one-half to R. L. Colvin, Janesville, Wis. Egg-beater.....	491,583	Feb. 14	853	216	62	934
O'Neill, John W., et al. (See Bryant, William H., assignor.)						
O'Neill, William, et al. (See Carlinet, John G., assignor.)						
O'Rourke, John F., Stillwater, assignor of one-half to C. W. Seville, Minneapolis, Minn. Rope or cable drive for machinery.....	511,094	Dec. 19	2167	534	65	1840
O'Shaughnessy, Patrick F. (See Sprague and O'Shaughnessy.)						
O'Shaughnessy, Patrick F., assignor to Sprague Electric Railway and Motor Company, of New York, N. Y. Electric-railway trolley.....	498,403	May 30	3254	{ 810 811 }	{ 63 63 }	{ 1264 1264 }
O'Shea, Henry, assignor to Johnson Company, Johnstown, Pa. Railway-crossing.....	497,774	May 30	3817	941	63	1362
O'Shea, Timothy, Chicago, Ill. Building construction.....	509,340	Nov. 28	2473	595	65	1266
Oakes, Harry E., assignor to G. S. Locke, Boston, Mass. Banjo.....	498,361	May 30	3197	796	63	1252
Oakes, James. (See Oakes, William and J.)						
Oakes, Joseph T., Williamsburg, Ky. Meat-tenderer.....	509,323	Nov. 21	2220	536	65	1207
Oakes, Lucian R., Bloomington, Ind. Lamp-filler.....	492,828	Mar. 7	87	21	62	1375
Oakes, Wallace K. (See Keist, George A., assignor.)						
Oakes, William and J., Leeds, England. Continuous brick-kiln.....	494,687	Apr. 4	247	63	63	50
Oakes, William and J., Leeds, England. Kiln.....	511,026	Dec. 19	2055	509	65	1818
Oakley, Theophilus D., Vevay, Ind. Type-case.....	507,718	Oct. 31	3285	803	65	668
Oastler, William C., New York, N. Y. Road engine.....	498,918	June 6	301	69	63	1445
Obbinson, Thomas, Melbourne, Victoria. Advertising apparatus.....	500,939	July 4	626	{ 164 165 }	{ 64 64 }	{ 115 115 }
Oberle, Charles, and E. Faller, assignors to M. H. C. Brombacher, North Tarrytown, N. Y. Gage for shears.....	497,412	May 16	1662	419	63	950
Oberle, Charles, and E. Faller, assignors to M. H. C. Brombacher, North Tarrytown, N. Y. Shears.....	506,371	Oct. 10	994	247	65	201
Oberle, Charles, and E. Faller, assignors to M. H. C. Brombacher, North Tarrytown, N. Y. Gutter-beading machine.....	509,936	Dec. 5	152	35	65	1438
Oberly, Virginia H., Washington, D. C. Garment-fastener.....	503,980	Aug. 29	2862	718	64	1154
Oberly, Virginia H., Washington, D. C. Corset.....	509,483	Nov. 28	2539	613	65	1279
Obermann, August W., Pittsburg, Pa. Cooking utensil.....	507,281	Oct. 24	2537	624	65	512
Oberwimmer, Rudolph, Newark, N. J. Game apparatus.....	509,179	Nov. 21	1964	478	65	1159
Obiols, Frank, Ventura, Cal. Tool-holder.....	511,057	Dec. 19	2101	520	65	1827
Oblasser, Alfred. (See Therye and Oblasser.)						
Obrist, Andrew J., assignor of one-half to F. H. Rohn, Defiance, Ohio. Nut-lock.....	495,363	Apr. 11	1352	338	63	268
Obrist, Andrew J., assignor to himself, F. H. Rohn, and H. E. Brown, Defiance, Ohio. Thill-coupling.....	495,362	Apr. 11	1350	338	63	268
Ochs, Aloysius J. (See Fernald, Charles F., assignor.)						
Ochs, Fritz, Fürth, Germany. Machine for interlacing curled horse-hair.....	502,376	Aug. 1	212	50	64	604
Odegaard, Niels, and G. Kuhnle, Chicago, Ill. Folding bed.....	505,477	Sept. 26	1915	493	64	1670
Odegaard, Niels, and G. Kuhnle, Chicago, Ill. Combined folding bed and cabinet-front.....	510,084	Dec. 5	413	91, 92	65	1487
Odegaard, John T. (See Uehermann, Fredrik S., assignor.)						
Odell, Albert P., and N. E. Smith, Bradford, Pa. Pencil-sharpener.....	491,129	Feb. 7	98	27	62	768
Odell, Stephen E., Grayling, Mich. Vehicle-brake.....	508,832	Nov. 14	1360	336	65	1029
Odgers, George L., assignor of one-half to P. A. Benham, Bonne Terre, Mo. Nut-lock.....	510,285	Dec. 5	744	160	65	1550
Odum, Pleasant W., Dallas, assignor of one-half to S. S. Watson, Burnet, Tex. Buckle.....	509,937	Dec. 5	154	36	65	1438
Odorous Deodorizer Company. (See Plumb, Sanford G., assignor.)						
Oechelhauser, Wilhelm von, and H. Junkers, Dessau, Germany. Gas-engine.....	508,833	Nov. 14	1362	{ 336 337 }	{ 65 65 }	{ 1029 1029 }
Oeffner, John G. (See Kaye, Timothy, assignor.)						
Oeffinger, Jacob, Meriden, Conn. Knife.....	504,889	Sept. 12	953	246	64	1404
Oehler, Firm of K. (See Rudolph, Christian, assignor.)						
Oehring, Augustus J., assignor to Western Electric Company, Chicago, Ill. Circuit-closer.....	502,749	Aug. 8	862	210	64	739
Oehring, Augustus J., assignor to Western Electric Company, Chicago, Ill. Electric bell.....	511,451	Dec. 26	2789	675	65	1967
Oehle, Emanuel, assignor to J. W. Bedford, Omaha, Nebr. Tamping-machine for making cement pipes.....	497,597	May 16	1959	{ 490 491 }	{ 63 63 }	{ 1002 1002 }
Oehlstrom, William, Cleveland, Ohio. Automatic coal feeder and stoker.....	489,542	Jan. 10	875	229	62	198
Oelke, Julius. (See Mueller, Frank H., assignor.)						
Offenbacher, Max, Fürth, Germany. Machine for grinding flat facets.....	497,334	May 16	1542	388	63	928
Offrell, Olof, Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Safety cut-out.....	500,601	July 4	96	28	64	19
Offrell, Olof, Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Switch for electric conductors.....	501,191	July 11	1050	266	64	206
Offrell, Olof, Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Device for regulating constant-current dynamo-electric machines.....	501,532	July 18	1585	399	64	319
Offrell, Olof, Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Safety cut-out.....	508,629	Nov. 14	1063	264	65	973
Ogden, Arthur E., Ashley, N. D. Horseshoe.....	511,093	Dec. 19	2164	531	65	1840
Ogden, William F., Denver, Colo. Valve-controlling mechanism.....	498,751	May 30	3862	952	63	1370
Oglethorpe, William A., Liverpool, England. Ship steering-gear.....	499,569	June 13	1388	{ 331 332 }	{ 63 63 }	{ 1647 1647 }
Ogletree, James F., Stinson, Ga. Fence.....	490,162	Jan. 17	1864	486	62	413
Ogram, Thomas E., Washington, D. C. Cover for jars.....	490,720	Jan. 31	2794	717	62	622
Ogren, Andrew F. (See Clark and Ogren.)						
Ogner, Joseph C., Foster, Ill. Weather-strip.....	507,922	Oct. 31	3619	894	65	730
Ohio Injector Company. (See Young, Edwin J., assignor.)						
Ohl, Adam. (See Haefner, Hugo, assignor.)						
Ohl, Christina, et al. (See Christ, Jacob, assignor.)						
Ohl, George D., Milwaukee, Wis. Combined horse-collar and hames.....	501,097	July 11	904	231	64	180
Ohlinger, Frederick W., Winter Haven, Fla. Fertilizer-distributor.....	507,923	Oct. 31	3620	894	65	730
Ohlinger, Frederick W., Winter Haven, Fla. Seed-planter.....	507,924	Oct. 31	3621	895	65	730
Ohlrich, Claus F., Chicago, Ill. Uterine bandage.....	505,249	Sept. 19	1540	401	64	1586
Ohlschlager, Henry, Quincy, Ill. Back-rest.....	494,434	Mar. 28	2708	679	62	1924
Ohlschlager, Henry, Quincy, Ill. Table attachment for beds.....	494,435	Mar. 28	2709	679	62	1924
Ohlsson, Olof, Newark, N. J. Centrifugal butter-extractor.....	508,744	Nov. 14	1229	306	65	1005

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Ohlsson, Olof, Newark, N. J., assignor to United States Butter Extractor Company, New York, N. Y. Centrifugal butter-extractor	499,392	June 13	1082	263	63	1594
Ohlstrom, Gustav H. (See Guth, Frederick A., assignor.)						
Ohman, Anders W., Tunsta, Insjön, Sweden. Fruit-picker	497,202	May 9	1388	328	63	869
Ohmart, Charles H. (See Bowman, Ohmart, and Allen.)						
Ohmart, Eli C., Detroit, Mich., assignor, by mesne assignments, to F. Doane, C. F. Crowell, and M. L. Severy, trustees, Boston, Mass. Device for reflecting and refracting radiant energy	504,890	Sept. 12	954	247	64	1464
Ohmer, Wilfred L., assignor to M. Ohmer's Sons Company, Dayton, Ohio. Bookcase-shelf	506,829	Oct. 17	1755	441 442	65	358
Ohrnstedt, Martin E., Middletown, Conn. Garment-clasp	509,551	Nov. 28	2644	639	65	1299
Ohse, Wilhelm, Dessau, Germany, assignor to F. Heuer, New York, N. Y. Photographic-printing device	494,022	Mar. 21	2034	519	62	1785
Oil Well Supply Company. (See Mack, Patrick H., assignor.)						
Okey, Joseph B., assignor of one-half to J. C. Hassey, Indianapolis, Ind. Bicycle	496,093	Apr. 25	2505	632	63	512
Olberg, Gustav. (See Proeber, Gustav, assignor.)						
Oldcott, William W., Fremont, Nebr. Lifter or drainer	504,237	Aug. 29	3285	820	64	1232
Oldenbusch, Ernst, Jersey City, assignor to W. Schimper & Co., Hoboken, N. J. Pocket match-safe	501,689	July 19	1843	458	64	366
Oldfield, Joseph, assignor to R. J. Oldfield and F. R. James, Toronto, Canada. Duplicating check-book	490,038	Jan. 17	1665	432	62	371
Oldfield, Rosa J., et al. (See Oldfield, Joseph, assignor.)						
Oldham, Carrick P., Knoxville, Tenn. Car-coupling	509,552	Nov. 28	2645	640	65	1299
Olds, Henry G., Fort Wayne, Ind. Churn	501,806	July 18	2037	501	64	399
Olds, Henry G., Fort Wayne, Ind. Washboard	509,236	Nov. 21	2073	500	65	1179
Olejnik, Franz, Newark, N. J., assignor of one-half to M. Walter, New York, N. Y. Machine for and process of manufacturing kettles	496,439	May 2	82	24	61	633
Oler, Henry D., Paterson, N. J. Conduit electric railway	504,847	Sept. 12	893	230	64	1453
Oler, Henry D., Paterson, N. J. Conduit for electric railways	511,452	Dec. 26	2791	675	65	1967
Olliphant, Alfred, New Birmingham, assignor of one-third to W. P. Long, Rusk, Tex. Cotton feeder and cleaner	496,367	Apr. 25	2946	736	63	595
Olitky, Max, New York, N. Y. Pencil-holder	510,609	Dec. 12	1308	319	65	1669
Oliver, Andrew J. (See Wren and Oliver.)						
Oliver, Charles J., Atlanta, Ga. Railway-track sleeper	495,004	Apr. 4	742	188	63	142
Oliver, Doctor F., Oakland, Cal. Stamping-machine	504,682	Sept. 5	606	155	64	1384
Oliver, George S., assignor of one-half to G. Cutter, Chicago, Ill. Syringe	497,250	May 9	1369	347	63	883
Oliver Iron and Steel Company. (See Crehan, Hubert, assignor.)						
Oliver, James, assignor to South Bend Iron Works, South Bend, Ind. Molding-flask	497,890	May 23	2432	606	63	1104
Oliver, James C., et al. (See Savill, Edward, assignor.)						
Oliver, James M. (See Berry and Oliver.)						
Oliver, John D., and I. S. Phillips, Le Sueur, Minn. Advertising apparatus	499,570	June 13	1391	332	63	1647
Oliver & Roberts Wire Company. (See Naysmith, Robert, assignor.)						
Oliver, Samuel F., and J. M. Reed, Brooklyn, N. Y.; said Reed assignor to said Oliver. Door-check	490,920	Jan. 31	3118	800	62	685
Oliver, Thomas, Newark, N. J. Thill-coupling	499,393	June 13	1084	263	63	1594
Oliver, Wiley E. (See Henry, Mike, assignor.)						
Ollier, Marie. (See Souchet, Mathieu E. A., assignor.)						
Olliphant, Samuel R., and T. A. Clayton, New Orleans, La. Fumigating apparatus	490,981	Jan. 31	3217	821 822	62	704
Olm, Charles F. (See Olm, Max M., assignor.)						
Olm, Max M., assignor of one-half to C. F. Olm, Fond du Lac, Wis. Hand-drill	509,938	Dec. 5	155	36	65	1438
Olmesdahl, August, assignor to A. Eisler, New York, N. Y. Machine for cutting material into curved forms	511,453	Dec. 26	2792	675 676	65	1967
Olmstead, Freeman E., Denver, Colo. Pedal attachment for pianos	502,261	July 25	2779	702	64	553
Olmsted, Alfred, Byron, N. Y. Potato-digger	498,522	May 30	3452	856	63	1299
Olmsted, Edwin B., Yorkshire Centre, N. Y. Machine for putting up packages	494,688	Apr. 4	248	63, 64	63	50
Olmsted, Franklin H., Yokohama, Japan. Device for administering medicine	490,493	Jan. 24	2417	624	62	533
Olmsted, Levi, assignor of two-thirds to J. Stark, Jr., and W. A. Selts, Jersey Shore, Pa. Fruit-gatherer	493,287	Mar. 14	816	209	62	1535
Olmsted, Walter B., H. O. Warner, and H. A. Giddings, Hartford, Conn. Fluid-holding pencil	501,958	July 25	2376	569	64	457
Olney, H. S. (See Walker, Charles W., assignor.)						
Olp, Robert, Manitowoc, Wis. Vegetable-grater	502,527	Aug. 1	472	113	64	653
Olp, Robert, Manitowoc, assignor to G. H. Simon, Kiel, Wis. Cheese-vat heater	505,413	Sept. 19	1813	468	64	1637
Olphearts, Wybrants G., London, England. Chair, sleeper, and tie for rails	494,074	Mar. 21	2119	541	62	1800
Olsen, Anton, Copenhagen, Denmark. Autographic register	494,881	Apr. 4	568	143	63	110
Olsen, Charles, New York, N. Y. Fire brick or slab	510,610	Dec. 12	1309	319	65	1669
Olsen, Charles, assignor of one-half to C. A. Olsen, Chicago, Ill. Tree-protector	511,058	Dec. 19	2103	520	65	1827
Olsen, Charles A. (See Olsen, Charles, assignor.)						
Olsen, Charles E., et al. (See Funcheon, Daniel C., assignor.)						
Olsen, Herman, and J. F. Miller, Chicago, Ill. Brush	509,237	Nov. 21	2074	500	65	1180
Olsen, Jens P., Hot Springs, Ark. Device for tuning musical instruments	490,494	Jan. 24	2418	624	62	533
Olsen, Lars A., Oakland, Cal. Steam-boiler	495,829	Apr. 18	2100	528	63	421
Olsen, Olaf R., Indianapolis, Ind. Elevator	495,598	Apr. 18	1731	436	63	356
Olsen, Andrew B., Kansas City, Mo. Retaining device for hats	509,092	Nov. 21	1633	440	65	1134
Olsen, Bernard G., Chinoock, Mont. Hay-sling	505,227	Sept. 19	1507	393	64	1580
Olsen, Erik, Neihart, Mont. Bench-clamp	494,882	Apr. 4	570	143	63	110
Olsen, John P., et al. (See Erickson, Edward, assignor.)						
Olsen, Nils, Superior, Wis. Brick-protector	502,987	Aug. 8	1273	311	64	814
Olsen, Nils M., Chicago, Ill. Writing-slide for furniture	489,389	Jan. 3	622	168	62	134
Omohundro, R. C., et al. (See Tucker, Lorenzo B., assignor.)						
Omohundro, W. E., et al. (See Tucker, Lorenzo B., assignor.)						
Onderdonk, Lansing, assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine	506,538	Oct. 10	1225	321	65	258
Oneida Community. (See Ellis, Ferrand F., assignor.)						
Ongley, Charles E., New York, N. Y. Steam-engine	508,043	Nov. 7	94	27	65	776
Ongley, Charles E., New York, N. Y. Automatic piston-returning device	508,044	Nov. 7	95	27	65	776
Ongley, Charles E., assignor to Ongley Electric Company, New York, N. Y. Non-interference signal-box	498,987	June 6	419	97, 98	63	1465
Ongley, Charles E., assignor to Ongley Electric Company, New York, N. Y. Electric signal and protective system	498,988	June 6	421	98, 99	63	1466
Ongley, Charles E., assignor to Ongley Electric Company, New York, N. Y. Electric time-recorder	505,062	Sept. 12	1241	319	64	1518
Ongley Electric Company. (See Ongley, Charles E., assignor.)						
Opdale, John, Duluth, Minn. Vehicle-wheel	492,735	Feb. 28	2664	660	62	1328

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Opdyke, Stacy B., Jr., Philadelphia, Pa. Elevator.	496,666	May 2	438	118	63	698
Ophoven, Alois, Paderborn, assignor to C. H. S. Schultz, Berlin, Germany. Making colored pictures on textile fabrics.	492,362	Feb. 21	2067	62	1194
Oppenheimer, Albert C., assignor of one-half to J. Helming, Jr., Cincinnati, Ohio. Manufacture of shoes.	499,571	June 13	1392	333	63	1647
Oppenheimer & Co., Henry E. (See Lambert, Alonzo, assignor.)						
Oppenheimer, Leo, College Point, N. Y. Roof drying-frame.	498,080	May 23	2722	681	63	1154
Oppenheimer, Leo, College Point, N. Y. Clothes-line attachment.	507,835	Oct. 31	3485	857	65	705
Oppenheimer, Milton E., New York, N. Y. Finger-ring.	499,928	June 20	1975	480	63	1763
Oppenheimer, Simon, New York, N. Y. Board for winding veils.	491,808	Feb. 14	1210	303	62	1006
Oppenheimer, Simon, New York, N. Y. Continuous veiling fabric.	491,809	Feb. 14	1211	303	62	1006
Opper, John M. (See Opper, William J. and J. M.)						
Opper, William J. and J. M., Kenesaw, Nebr. Fence-wire reel.	511,542	Dec. 26	2924	712	65	1993
Opperman, Jesse, St. Louis, Mo. Means for determining the presence and intensity of atmospheric electricity.	506,066	Oct. 3	411	107	65	80
Oppermann, Gustav, Röbel, Germany. Process of and apparatus for purifying water.	506,248	Oct. 10	786	194	65	161
Oppmann, Andrew W., Cleveland, Ohio. Barrel-registering machine.	504,610	Sept. 5	483	124	64	1360
Oppold, Joseph, Grant, Iowa. Earth-loading machine.	503,250	Aug. 15	1689	{ 416 417 }	{ 64 64 }	{ 904 904 }
Oram, John J. (See Holmes, William C., assignor.)						
Orcutt, Orrin W., St. Johnsbury, Vt. Power-hammer.	503,492	Aug. 15	2076	518	64	973
Ord, Craven R., Ontario, Canada. Pressure-regulator.	492,100	Feb. 21	1651	411	62	1109
Ordway, Albert H., South Framingham, Mass. Chair-frame.	498,140	May 23	2809	703	63	1170
Orewiler, Elza, Upper Sandusky, Ohio. Ironing-board.	497,007	May 9	999	257	63	816
Orford Copper Company. (See Bartlett, Charles C., assignor.)						
Orford Copper Company. (See Thompson, Robert M., assignor.)						
Orford Copper Company. (See Thompson, John L., assignor.)						
Orford, John M. (See McGregory, Fred S., assignor.)						
Orme, Daniel, Oldham, England. Coin-operated gas-meter.	497,682	May 16	2088	{ 521 522 }	{ 63 63 }	{ 1026 1026 }
Orme, George L. (See Back, James S., assignor.)						
Orme, John, London, England. Signaling apparatus for railways.	503,981	Aug. 29	2863	718	64	1154
Ormiston, Cyrus D., Lockport, assignor to United Indurated Fibre Company of New Jersey, New York, N. Y. Pulp-molding machine.	494,789	Apr. 4	424	105	63	83
Ormsby, Charles C., Waterford, N. Y. Amalgamator.	492,425	Feb. 28	2164	541	62	1226
Ormsby, Charles C., Waterford, N. Y. Amalgamating ores.	492,426	Feb. 28	2168	542	62	1227
Ormsby, Oliver H., et al. (See Reagan, Saupp, and Hibbs, assignors.)						
Orndorff, Thomas C., Worcester, Mass. Producing printed matter for the blind.	506,718	Oct. 17	1568	392	65	324
Orndorff, Thomas C., Worcester, Mass. Shedding mechanism for looms.	507,240	Oct. 24	2466	608	65	500
Orndorff, Thomas C., Worcester, Mass. Tobacco-pipe.	507,241	Oct. 24	2467	608	65	500
Orndorff, Thomas C., Worcester, Mass. Woven cartridge-belt.	507,836	Oct. 31	3485	857	65	705
Orne, Edward T., Chicago, Ill. Newspaper-clip.	506,604	Oct. 10	1376	345	65	276
Orr, George H. (See Dean, Proctor, assignor.)						
Orr, Ralph, Pawtucket, R. I. Thread-guide for loom-shuttles.	499,308	June 13	926	224	63	1566
Orr, Walter C., assignor to New Jersey Wire Cloth Company, Trenton, N. J. Method of and machine for making wire-netting.	502,084	July 25	2478	623	64	496
Orr, William, Trenton, N. J. Fireproof construction.	504,537	Sept. 5	375	94	64	1340
Orris, W. W., et al. (See Brower, Asher A., assignor.)						
Orser, Levi, Galveston, Tex. Harmonic organ.	497,056	May 9	1070	{ 274 275 }	{ 63 63 }	{ 830 830 }
Orser, Levi, Galveston, Tex. Feeder for printing-presses.	503,063	Aug. 8	1371	{ 339 340 }	{ 64 64 }	{ 833 833 }
Ort, Jacob, Wahoo, Nebr. Doorway-conformator.	509,582	Nov. 28	2694	652	65	1309
Ortega y Espinosa, José, Mexico, Mexico. Electric railway-signal.	511,131	Dec. 19	2233	{ 547 548 549 }	{ 65 65 65 }	{ 1854 1854 1854 }
Orth, Ernst W., Hamburg, Germany. Egg-cup.	510,085	Dec. 5	414	92	65	1488
Orth, Frank, Astoria, Oreg. Surgical appliance.	494,436	Mar. 28	2712	680	62	1924
Orth, Frank, Astoria, Oreg. Surgical appliance.	494,437	Mar. 28	2713	680	62	1925
Orth, Henry, administrator. (See Bentz, Edmeston, and Grether.)						
Orth, Ludwig Von, Berlin, Germany. Electric signaling apparatus.	491,758	Feb. 14	1125	284	62	989
Orth, Samuel P., and P. O'Donoghue, Philadelphia, Pa. Device for cutting pearl, &c.	498,811	June 6	107	28	63	1410
Orth, Susette, Philadelphia, Pa. Spectacles.	503,803	Aug. 22	2585	645	64	1084
Orthwein, George H., assignor of one-half to J. F. Orthwein, Broken Sword, Ohio. Spade attachment.	493,110	Mar. 7	528	132	62	1463
Orthwein, Jeremiah F. (See Orthwein, George H., assignor.)						
Ortloff, Julius T. O., Heidelberg, Germany. Book-stapling machine.	503,271	Aug. 15	1724	425	64	910
Ortner, John E., Newark, N. J. Pocket-book fastening.	492,521	Feb. 28	2333	579	62	1260
Orton, Allen T., Battle Creek, Mich. Radiator, stove, &c.	489,874	Jan. 10	1349	351	62	295
Orton, Lyman C., Philadelphia, Pa. Mortising-bit.	493,444	Mar. 14	1060	272	62	1582
Orton, Otho H., Beloit, Wis. Lubricator for windmills.	504,611	Sept. 5	484	124	64	1360
Ortt, Rowley K., and M. A. Shearer, Norristown, Pa. Railway-coach vestibule.	505,324	Sept. 19	1667	430	64	1610
Ortt, Rowley K., and M. A. Shearer, Norristown, Pa. Guard-rail attachment for curtain-poles.	508,116	Nov. 7	227	58	65	800
Ortt, Rowley K., and M. A. Shearer, Norristown, Pa. Curtain-fixture for bay-windows.	509,238	Nov. 21	2075	500	65	1180
Ortt, Rowley K., and M. A. Shearer, Norristown, Pa. Nut-lock.	509,239	Nov. 21	2076	501	65	1180
Orvis, Orland D., Chicago, Ill. Steam-boiler furnace.	503,214	Aug. 15	1638	402	64	895
Orwig, Thomas G. (See Shackelford, Howard D., assignor.)						
Osborn, Francis C., assignor to himself, G. Maitland, and J. A. Marsh, Detroit, Mich. Cash-register.	491,022	Jan. 31	3287	{ 839 840 }	{ 62 62 }	{ 718 718 }
Osborn, Francis L., Windsor, N. Y. Horse hay-rake.	494,381	Mar. 28	2631	660	62	1910
Osborn, Henry E., et al. (See Iske, Anthony and A., assignors.)						
Osborn, Isaac P., Florida, Ind. Fence.	500,032	June 20	2131	516	63	1790
Osborn, Virgil C. (See Wallace and Osborn.)						
Osborn, William H. (See Sullivan and Osborn.)						
Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Perforating metal.	490,773	Jan. 31	2876	739	62	637
Osborne, Charles F., Cape Town, Cape Colony, assignor to A. Borwick, London, England. Propeller for floating vessels.	508,334	Nov. 7	576	142	65	865
Osborne, George P., New York, N. Y. Safety-plate for railway-rails.	502,633	Aug. 1	642	{ 153 154 }	{ 64 64 }	{ 685 685 }
Osborne, J. C., et al. (See Connor, John R., assignor.)						
Osborne, James P. (See Van Vleet, Charles W., assignor.)						
Osborne, John H., Union City, Ind. Vehicle-pole.	500,602	July 4	97	28	64	20

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Osborne, John H., Union City, Ind. Vehicle-shaft iron	502,911	Aug. 8	1132	279	64	790
Osborne, John W., Washington, D. C. Movement-cure apparatus	502,578	Aug. 1	549	131	64	667
Osborne, John W., Washington, D. C., assignor of one-third to C. Edelheim, Philadelphia, Pa. Printer's chase	503,251	Aug. 15	1692	417	64	904
Osborne, Thomas J. (See Goodrich, Charles E., assignor.)						
Osborne, Wilbur F. (See Kelly, Fergus, assignor.)						
Osborne, Wilbur F., Ansonia, Conn. Buckle	495,117	Apr. 11	952	239	63	196
Osborne, Wilbur F., Ansonia, Conn. Buckle	495,118	Apr. 11	953	239	63	196
Osborne, Wilbur F., Ansonia, Conn. Suspender-buckle	495,119	Apr. 11	955	240	63	197
Osborne, William H. (See Meitzler, George R., assignor.)						
Osborne, William H. (See Meitzler, George R., assignor.) (Reissue.)						
Osborne, William J., Sonora, N. Y. Extension-ladder	509,673	Nov. 28	2839	686	65	1336
Osbourne, David K., St. Paul, Minn. Commode	499,438	June 13	1175	280	63	1610
Osbron, Andrew T., Willow Springs, Mo. Horse-collar fastener	493,513	Mar. 14	1168	299	62	1600
Osburn, Harry G., Chicago, Ill. Secondary-battery electrode	490,753	Jan. 31	2847	730	62	631
Oscanyan, Paul C., New York, N. Y. Coin-controlled device	510,086	Dec. 5	414	92	65	1488
Osgood, A. S., et al. (See Jones, Thomas D., assignor.)						
Osgood, Elijah R., Columbus, Ohio. Curtain-stretcher	490,230	Jan. 17	1976	518	62	434
Osgood, Ernest J., et al. (See Horton, Peter D., assignor.)						
Osgood, Frederick S., Toledo, Ohio. Butter-firkin	492,470	Feb. 28	2241	560	62	1243
Osgood, Silas R., et al. (See Horton, Peter D., assignor.)						
Ostee, William A., assignor of one-half to J. F. Johnson, De Ann, Ark. Wrench	489,032	Jan. 3	79	22	62	20
Osteman, Carl G., Boston, assignor of one-half to F. B. Carpenter, D. H. Darling, and E. N. Heath, Wakefield, Mass. Photographic camera	502,198	July 25	2661	672	64	531
Osteman, Carl G., assignor of one-half to S. A. Woods Machine Company, Boston, Mass. Bevel	502,199	July 25	2663	673	64	532
Ostenberg, John A., Des Moines, Iowa, assignor to F. M. Gilbert, Walpole, N. H. Automatic weighing and packing machine	492,485	Feb. 28	2270	565 566	62	1248
Oster, Herman W., Cleveland, Ohio. Adjustable die-stock	490,676	Jan. 31	2732	703 704	62	609
Osterberg, August F. S. and H. G., Boston, Mass. Pianoforte-action	498,523	May 30	3454	856	63	1299
Osterberg, Hans G. (See Osterberg, August F. S. and H. G.)						
Osterloh, Adolph, Richmond, Va., assignor to Y. S. Marriott, Baltimore, Md. Bag-fastener	503,113	Aug. 8	1461	359	64	849
Osterman, William J., assignor of one-half to S. A. Newell, Richmond, Va. Spoon	510,286	Dec. 5	745	180	65	1550
Ostersetzer, Oscar, Sagan, Germany. Printing cotton fabrics	501,156	July 11	1006		64	197
Ostlick, Robert J., Covington, Ky. Button-drilling machine	507,384	Oct. 24	2710	666	65	547
Ostrander, Willie. (See Abell and Ostrander.)						
Otis Brothers & Company. (See Smith, Rudolph C., assignor.)						
Otis, Charles H. (See McKay, Neil, assignor.)						
Otis, John D., and J. M. Harper, Peoria, Ill.; said Otis assignor to said Harper. Hose-patch	492,047	Feb. 21	1576	392	62	1093
Otis, Norton P., Yonkers, N. Y. Guide-sheave for elevators	507,157	Oct. 24	2319	569 570	65	474
Otis, Willard D. (See Culver and Otis.)						
Ott, Charles F. X., Pawtucket, R. I., assignor to G. W. Smith, Philadelphia, Pa. Cloth-napping machine	500,347	June 27	2673	655 656	63	1897
Ott, Ernst, Alexandria, Va. Keg-tapping apparatus	490,039	Jan. 17	1665	433	62	371
Ott, Frederick, Gloucester City, N. J. Cloth-shearing machine	506,067	Oct. 3	412	108	65	80
Ott, John F., and A. E. Kennelly, Orange, N. J., assignors to Edison General Electric Company, New York, N. Y. Means for controlling electric motors	489,687	Jan. 10	1073	279 280	62	239
Ott, Philipp, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Greenish-blue dye	498,404	May 30	3256		63	1264
Ott, Philipp, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Diazo dye	498,405	May 30	3257		63	1264
Ottawa Glass Company. (See Zellers, Theodor A., assignor.)						
Otte, Heinrich C. F., Altona, Germany. Meat cutting and filling machine	498,940	June 6	335	78	63	1451
Ottershagen, Charles, Portland, Oreg. Adjustable combination flush and supply for closet-tanks	510,649	Dec. 12	1379	337	65	1683
Ottinger, Benjamin, Georgetown, Tex. Invalid-bed	509,674	Nov. 28	2839	686	65	1337
Otto, Frank, and O. Reinacher, New York, N. Y. Bung for barrels	506,334	Oct. 10	929	231	65	189
Oudin, Charles P., Spokane, Wash. Hollow-tile girder and wall	511,249	Dec. 19	2422	590	65	1888
Oudin, Marie P., Paris, France assignor to J. Ehlis, Liege, Belgium. Apparatus for the production and inhalation of ozone	499,572	June 13	1393	333	63	1648
Oubraska, John H., et al. (See Saxton, Harry, assignor.)						
Oulton, Joseph. (See Edmondson and Oulton.)						
Oulton, Joseph, and J. Edmondson, Bradford, England. Correcting electricity meters	496,746	May 2	566	152	63	721
Out, George B., assignor of one-third to R. C. Vetter, Syracuse, N. Y. Wheel	502,447	Aug. 1	335	80	64	628
Outcalt, David D. A. (See Outcalt, John and D. D. A.)						
Outcalt, John and D. D. A., Spotswood, N. J. Electric grain-weighing scale	511,647	Dec. 26	3096	756	65	2023
Outwater, H. E. (See Klees, William H., assignor.)						
Oval Wood Dish Company. (See Tinkham, Lewis W., assignor.)						
Oval Wood Dish Company. (See Tinkham, Jacob W., assignor.)						
Ovenshire, Elijah A., Lansing, Mich., assignor to E. Bement & Sons, of Michigan. Cultivator	492,307	Feb. 21	1980	493	62	1178
Ovenshire, Elijah A., assignor to American Harrow Company, Detroit, Mich. Pole attachment for various implements	496,892	May 9	823	218	63	786
Ovenshire, Elijah A., assignor to American Harrow Company, Detroit, Mich. Walking-cultivator	510,044	Dec. 5	345	78	65	1475
Ovenshire, Elijah A., assignor to American Harrow Company, Detroit, Mich. Disk harrow	511,273	Dec. 19	2463	601	65	1895
Over, Ewald, Indianapolis, Ind. Soil pulverizer and roller	500,418	June 27	2777	684	63	1916
Overbaugh, Charles B., St. Louis, Mo. Packing-box	495,907	Apr. 18	2221	560	63	449
Overbaugh, Charles B., St. Louis, Mo. Confectionery-case	502,634	Aug. 1	643	154	64	685
Overbaugh, Charles E., Jersey City, N. J. Cartridge-shell	498,856	June 6	189	46	63	1426
Overbaugh, Charles E., Bayonne, N. J. Cartridge	498,857	June 6	189	46	63	1426
Overhalser, Jeremiah, Bellefontaine, Ohio. Combined churn and butter worker	494,222	Mar. 28	2377	600	62	1863
Overhiser, Charles F., and C. D. Marsh, assignors to Rowley & Hermance Company, Williamsport, Pa. Chip breaker for woodworking-machines	506,249	Oct. 10	788	194	65	161
Overman Wheel Company. (See Gardner and Marshall, assignors.)						
Overman Wheel Company. (See Hadley, Charles E., assignor.)						
Overman Wheel Company. (See Shortsleeve, William H., assignor.)						
Overman Wheel Company. (See Woodward, Charles E. W., assignor.)						
Overshiner, Gideon J., San Diego, Cal. Road-cart	498,687	May 30	3739	923	63	1348

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Ovitt, Simeon D. (See Lytle, Albert B., assignor.)						
Owen, David, Morriston, near Swansea, England. Apparatus for the purification of molten tin or its alloys	504,238	Aug. 29	3286	821	64	1232
Owen, Edward A., assignor to Union Store Service Company, East Saginaw, Mich. Cash and parcel carrier apparatus.	491,130	Feb. 7	99	27 28	62	768
Owen, Frederick D., Washington, D. C. Wheel-tire	507,089	Oct. 17	2173	538 539	65	435
Owen, Frederick D., Washington, D. C. Tire for vehicles	507,090	Oct. 17	2176	539	65	435
Owen, Harry B., Manchester, Va. Truck	503,982	Aug. 29	2865	719	64	1154
Owen, Herbert S., Washington, D. C. Tire for bicycles	497,965	May 23	2542	635	63	1122
Owen, Herbert S., Washington, D. C. Wheel for bicycles	497,966	May 23	2545	635	63	1122
Owen, Jessie C. (See Owen, William P., assignor.)						
Owen, Louis H. (See Albertsen, Albert C., assignor.)						
Owen, Mary A., Portland, Oreg. Cabinet	511,741	Dec. 26	3246	796	65	2051
Owen, Oscar L., assignor to Whittin Machine Works, Whitinsville, Mass. Revolving-flat carding-engine	493,408	Mar. 14	996	257	62	1570
Owen, Thomas G. (See Rosenblatt, Dickson, and Owen.)						
Owen, William P., assignor to J. C. Owen, Joplin, Mo. Bridge and tail-piece	509,240	Nov. 21	2076	501	65	1180
Owen, William P., and C. L. Eggert, Jr., Joplin, Mo. Combined bridge and tail-piece for musical instruments	490,213	Jan. 17	1953	512	62	429
Owens, Abner, et al. (See Snee, William, assignor.)						
Owens, Charles, Warren county, Ill. Butter-worker	511,274	Dec. 19	2466	601	65	1895
Owens, Charles, Gerlaw, Ill. Churn	511,275	Dec. 19	2467	601	65	1896
Owens, Michael J., Toledo, Ohio. Apparatus for mechanically operating paste-glass molds	489,543	Jan. 10	876	229	62	199
Owens, Michael J., Findlay, assignor to Libbey Glass Company, Toledo, Ohio. Receptacle for leers or annealing-ovens	506,719	Oct. 17	1570	392	65	324
Owens, Ross, and M. Lewellyn, assignors of one-third to G. E. Ramsey, Olean, N. Y. Tan-liquor heater, &c.	494,990	Apr. 4	720	183	63	137
Owens, Samuel T., Pittsburg, Pa. Boiler-furnace	492,943	Mar. 7	268	69	62	1412
Owens, Thomas B., Marshall, Tex. Locomotive-headlight	496,276	Apr. 25	2779	696	63	563
Owens, William J., assignor to Kernan Furnace Company, Utica, N. Y. Hot-air furnace	499,573	June 13	1394	333	63	1648
Owl Cigar Company. (See Hesse and Sternberg, assignors.)						
Owl Cigar Company. (See Storm and Warnken, assignors.)						
Oxnam, Thomas H., J. Joyce, and J. Francis, De Lamar, Idaho. Pipe-wrench	503,215	Aug. 15	1643	402	64	896
Oyler, John T., Traverse City, Mich. Bicycle-wheel	498,688	May 30	3740	923	63	1349
Ozias, Orange O., Dayton, Ohio. Price-scales	506,793	Oct. 17	1691	425 426	65	347
Ozley, John H., Weldon, La. Wagon-brake	507,158	Oct. 24	2321	570	65	474
P. & B. Nail Machine Company. (See Roth and Bispham, assignors.)						
P. & F. Corbin. (See Eddy, George W., assignor.)						
P. P. Mast & Company. (See Butt, Leroy S., assignor.)						
Pacific Cable Railway Company. (See Hood, William M., assignor.)						
Pacific Compound Stone Company. (See Gallinowsky, Hugo, assignor.)						
Pacific Labeling Company. (See Crittenden and Pease, assignors.)						
Pack, Arthur, et al. (See Norton, Charles H., assignor.)						
Pack, Carl, Barmen, Germany. Skate	489,088	Jan. 3	158	43	62	38
Packard, Clarence A., assignor of one-half to F. H. Holladay, Richmond, Va. Holdback for vehicles	503,158	Aug. 15	1546	379	64	878
Packard, James W., Brockton, assignor of one-half to Bouvé, Crawford & Company, Boston, Mass. Shoe. (Reissue)	11,362	Aug. 22	2777	695	64	1122
Packard, James W., Brockton, assignor of one-half to Bouvé, Crawford & Company Corporation, Boston, Mass. Box-toe	503,614	Aug. 22	2302	574	64	1029
Packard, James W., assignor to Bouvé, Crawford & Company Corporation, Brockton, Mass. Boot or shoe	509,241	Nov. 21	2077	501	65	1180
Packard, Ralph G., Morristown, N. J. Steam-generator	489,495	Jan. 10	805	212	62	184
Packard, William D., Warren, Ohio. Armature attachment	496,791	May 2	637	170	63	732
Packard, William D., Warren, Ohio. Hand-regulator for electric motors	511,157	Dec. 19	2273	557	65	1860
Packer, George W., Rock Falls, assignor to Keystone Manufacturing Company, Sterling, Ill. Combined corn-husker and fodder-shredder	494,511	Mar. 28	2832	709	62	1947
Packer, George W., Rock Falls, assignor to Keystone Manufacturing Company, Sterling, Ill. Disk-harrow seeder	495,120	Apr. 11	956	240	63	197
Packer, George W., Rock Falls, assignor to Keystone Manufacturing Company, Sterling, Ill. Disk harrow-seeder	505,534	Sept. 26	2038	520	64	1692
Packer, George W., Rock Falls, assignor to Keystone Manufacturing Company, Sterling, Ill. Corn-husker and fodder-shredder	506,642	Oct. 10	1431	358 359	65	287
Packer, John F., La Grange, Ill. Cultivator	498,294	May 30	3084	768 769	63	1233
Packer, John F., La Grange, Ill. Harrow	498,295	May 30	3088	769 770	63	1234
Packham, Frank R., assignor to Superior Drill Company, Springfield, Ohio. Grain-drill	490,360	Jan. 24	2209	575 576	62	493
Paddock, George A., et al. (See Locke, Fred M., assignor.)						
Paddock, Ralph L., Philadelphia, Pa. Automatic operator for drawbridge-gates	496,893	May 9	825	219	63	786
Paesler, Eduard, Hanover, Germany. Paper-feeder	506,605	Oct. 10	1377	345	65	278
Paganini, Robert. (See Schmid and Paganini.)						
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Lock and latch combined	499,469	June 13	1222	291	63	1619
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Snap-hook	504,538	Sept. 5	378	95	64	1340
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Snap-hook	504,539	Sept. 5	379	95	64	1341
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Door-bell	505,277	Sept. 19	1589	414	64	1595
Page, Albert A., and W. E. Sparks, assignors to Sargent & Company, New Haven, Conn. Bell	493,042	Mar. 7	494	107	62	1442
Page, Almon D., Newark, N. J. Electrically-illuminated character for advertising	501,533	July 18	1586	399	64	320
Page, Almon D., and E. J. McAllister, Newark, N. J. Universal sign	501,690	July 18	1844	458	64	366
Page Brothers & Co. (See West, Augustine C., assignor.)						
Page, Calvin S., Pontiac, Ill. Bicycle	496,616	May 2	352	96	63	683
Page, Carter H., Jr., assignor to United Gas Improvement Company, Philadelphia, Pa. Gas-mixer	507,748	Oct. 31	3321	813	65	675
Page, Charles G., trustee. (See Huss, Rudolph W., assignor.)						
Page, Dustan A., and R. C. Bird, Chicago, Ill.; said Page assignor to said Bird. Adjustable bracket for window-shades	510,815	Dec. 12	1648	410	65	1733
Page, Fred H., New York, N. Y. Can-receptacle	492,101	Feb. 21	1656	411	62	1109

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Page, Harlan. (See Bennett, Henry L., assignor.)						
Page, Harlan, <i>et al.</i> , trustees. (See Messer, Walter L., assignor.)						
Page, Harvey L. (See Butts and Page.)						
Page, Herbert S., Medford, assignor to E. D. Spear, Boston, Mass. Circuit-closing clock.	494,966	Apr. 4	688	176	63	131
Page, Herbert S., Medford, and L. Spear, assignors to E. D. Spear, Boston, Mass. Electric time stock-feeder.	497,203	May 9	1289	328 329	63	869
Page, J. Seaver. (See Gott, Clarence P., assignor.)						
Page, John J., Haverhill, Mass. Making boots or shoes	489,196	Jan. 3	330	90	62	75
Page, Justin E., assignor of one-half to J. Luff, Independence, Mo. Non-telescopic railway-car.	493,597	Mar. 14	1324	338 339	62	1632
Page, Justin E., assignor of one-half to J. Luff, Independence, Mo. Non-telescopic railway-car.	510,816	Dec. 12	1650	411 412	65	1733
Page, Marvin J., Buffalo, N. Y. Saw-filing device	493,445	Mar. 14	1060	273	62	1582
Page, Marvin J., Buffalo, N. Y. Wire fence	493,296	May 30	3090	770	63	1234
Page, Willard C., <i>et al.</i> (See Locke, Fred M., assignor.)						
Page, William B., and B. Hausheer, Dixon, Ill. Fluid-heater	499,850	June 20	1830	450	63	1741
Page, William H., assignor to Wm. H. Page Boiler Company, Norwich, Conn. Sectional boiler	500,507	June 27	2904	714	63	1938
Page, William H., assignor to Wm. H. Page Boiler Company, Norwich, Conn. Fluid-pressure regulator for heating apparatus	507,077	Oct. 17	2152	533	65	431
Pagels, William F. (See Barclay, William P., assignor.)						
Paget, Alexandre, Marseilles, France. Apparatus for treating oleaginous or other seeds	494,883	Apr. 4	571	144	63	111
Paget, Leonard. (See Borgmeyer and Paget.)						
Paget, Leonard, New York, N. Y. Pyroxyline solution	507,749	Oct. 31	3323		65	676
Paget, Leonard, New York, N. Y., assignor to Egyptian Lacquer Manufacturing Company, of New Jersey. Making pyroxyline solvents	494,790	Apr. 4	426		63	83
Paget, Leonard, New York, N. Y., assignor to Egyptian Lacquer Manufacturing Company, of New Jersey. Making pyroxyline compounds and their products	494,791	Apr. 4	427		63	88
Paget, Leonard, New York, N. Y., assignor to Egyptian Lacquer Manufacturing Company, of New Jersey. Pyroxyline compound	494,792	Apr. 4	428		63	83
Paget, Leonard, New York, N. Y., assignor to Egyptian Lacquer Manufacturing Company, of New Jersey. Pyroxyline compound	494,793	Apr. 4	430		63	83
Paget, Leonard, New York, N. Y., assignor to Egyptian Lacquer Manufacturing Company, of New Jersey. Preparing pyroxyline solvents and their products	495,263	Apr. 11	1197		63	240
Pagett, Charles H., Oxford, Ind. Pneumatic tire	499,574	June 13	1395	333	63	1648
Pague, Samuel S., U. S. Army. Gun-rack for tents	493,645	Mar. 21	1408	357	62	1664
Pahlman, John H., <i>et al.</i> (See Pieper, Vincenz T., assignor.)						
Paietta, Santino P., Chicago, Ill. Ventilated bed	505,250	Sept. 19	1541	402	64	1586
Paig, James H., Manchester, N. H. Lamp-filler	497,075	May 9	1103	283	63	836
Paige, Alonzo W., assignor to Paige Iron Works, Chicago, Ill. Railway-frog	497,456	May 16	1733	437	63	962
Paige, Charles F., assignor of two-thirds to J. C. Rice and J. P. Riley, Denver, Colo. Antifictional journal-bearing	490,867	Jan. 31	3017	775	62	666
Paige Iron Works. (See Meyer and Starkweather, assignors.)						
Paige Iron Works. (See Paige, Alonzo W., assignor.)						
Paigo Iron Works. (See Starkweather, Gleason F., assignor.)						
Pain, Albert C., Birmingham, England. System of lubrication	498,689	May 30	3741	924	63	1349
Pain, Henry J., New York, N. Y. Pyrotechnic device	503,383	Aug. 15	1915	475	64	944
Paine, Altemus I. (See Pratt and Paine.)						
Paine, Frances E., Boston, Mass. Egg-beater	504,112	Aug. 29	3079	770	64	1195
Paine, Halbert E., Washington, D. C. Solar heater	509,390	Nov. 28	2342	567 568	65	1241
Paine, Halbert E., Washington, D. C. Solar heater	509,391	Nov. 28	2347	569 570	65	1242
Paine, Halbert E., Washington, D. C. Solar heater	509,392	Nov. 28	2351	570 571	65	1242
Paine, Halbert E., Washington, D. C. Solar heater	509,393	Nov. 28	2353	571 572	65	1243
Paine, James E. (See Paine, Nathan A., assignor.)						
Paine, Nathan A., Cedar Falls, Iowa, assignor of one-half to J. E. Paine, Gandy, Nebr. Picket-barbing machine	507,687	Oct. 31	3235	792 793	65	658
Painter, John R. (See Doriot, Constant, assignor.)						
Painton, Richard B., assignor of one-half to W. G. Elliott, Williamsport, Pa. Ship	509,553	Nov. 28	2646	640	65	1299
Pairpoint Manufacturing Company. (See Smith, Walter F., assignor.)						
Pake, Edward G., Duluth, Minn. Band-saw guide and cooler	495,830	Apr. 18	2102	528	63	421
Paldi, Joseph D., Brockway, Mich. Fence-post	505,367	Sept. 19	1737	450	64	1622
Palfrey, Frederick, assignor of one-half to J. W. Patton, Macon, Mo. Axle-lubricating device for car-wheels	508,335	Nov. 7	577	142	65	865
Palica, Frank J., Racine, Wis. Telescopic trunk	497,811	May 23	2292	576	63	1079
Palm, George, Butler, Pa. Packer for Artesian wells	509,394	Nov. 28	2360	573	65	1244
Palm, George, assignor of one-half to M. H. Brooks, Butler, Pa. Gas regulator and cut-off	509,395	Nov. 28	2361	573	65	1244
Palm, Gottlieb F., Coshocton, Ohio. Box for preserving articles of food, &c	495,162	Apr. 11	1035	258	63	210
Palm, Gustav V., New York, N. Y. Device for producing optical illusions	498,524	May 30	3455	857	63	1299
Palm, Gustav V., New York, N. Y. Mirror maze	507,159	Oct. 24	2322	570 571	65	475
Palmatier, Frank S., Leeds, N. Y. Machine for setting up, crozing, and chining barrels	504,891	Sept. 12	956	247	64	1464
Palmer, Albert E., Owosso, Mich. Glue-press	495,054	Apr. 11	819	207	63	172
Palmer, Albert W. (See Brown, Julius C., assignor.)						
Palmer, Alfred, and F. E. Blackmore, Reading, England. Apparatus for grinding the point ends of drills, &c	490,588	Jan. 24	2548	650	62	559
Palmer, Arthur P., and H. L. Phelps, Athens, Pa. Clutch	503,984	Aug. 29	2868	719	64	1155
Palmer, Arthur P., and H. L. Phelps, Athens, Pa. Street-sweeper	511,543	Dec. 26	2927	712 713	65	1994
Palmer, Charles H., Worcester, Mass. Lunch-wagon	497,598	May 16	1963	492	63	1002
Palmer, Charles H., Jr., Amesbury, Mass. Sulky	501,656	July 18	1790	445 446	64	357
Palmer, Dennis W., Hermon, Me. Combined sofa, table, and bed	502,579	Aug. 1	553	132	64	667
Palmer, Edmund F., Syracuse, N. Y. Interfering-strap	500,209	June 27	2454	598	63	1859
Palmer, Frank H., Brooklyn, N. Y. Jar-closure	493,364	Apr. 11	1352	339	63	268
Palmer, Frank H., Brooklyn, N. Y. Jar-closure	497,812	May 23	2293	576	63	1079
Palmer, Frank H., Brooklyn, N. Y. Soldering-machine	503,159	Aug. 15	1547	379 380	64	878
Palmer, Frank H., Brooklyn, N. Y. Sheet-metal can	508,554	Nov. 14	947	233	65	949
Palmer, Frank H., Brooklyn, N. Y. Jar-closure	510,045	Dec. 5	347	74	65	1475

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Palmer, Fred S., Boston, Mass. Circuit-testing apparatus	502,889	Aug. 8	1089	268	64	781
Palmer, George I., <i>et al.</i> (See Beam, Jacob B., assignor.)						
Palmer, Helen L. (See Denison and Palmer.)						
Palmer, Isaac E., Middletown, Conn. Securing suspension-loops to the ends of hammock-bodies	510,087	Dec. 5	416	93	65	1488
Palmer, Israel Y., assignor of two-thirds to G. L. Campbell and B. Hooten, Columbia, Ala. Seed-planter	504,848	Sept. 12	894	230	64	1453
Palmer, James A., Philadelphia, Pa. Boiler-furnace	495,264	Apr. 11	1198	300	63	240
Palmer, John, Woburn, Mass. Means for lubricating rolls of leather-finishing machines	501,657	July 18	1790	446	64	358
Palmer, John F., Riverside, Ill. Bicycle and other tubing	489,714	Jan. 10	1117	289	62	247
Palmer, John F., Riverside, assignor to Palmer Pneumatic Tire Company, Chicago, Ill. Fabric	493,220	Mar. 7	691	177	62	1494
Palmer, John S., Providence, R. I. Plated wire stock for jewelry and making same	501,157	July 11	1007	256	64	197
Palmer, John S., Providence, R. I. Plated stock for manufacture of jewelry	503,983	Aug. 29	2866	719	64	1155
Palmer, Joshua C., Duffau, Tex. Wire-stretcher	502,498	Aug. 1	422	100	64	644
Palmer, Lucien W. (See Williams and Palmer.)						
Palmer Pneumatic Tire Company. (See Palmer, John F., assignor.)						
Palmer & Roy. (See Hoyt, George E., assignor.)						
Palmer, Stephen, Lansingburg, N. Y. Brush	500,719	July 4	305	82	64	57
Palmer & Taylor. (See Taylor, Henry B., assignor.)						
Palmer, Thomas C., Melbourne, Victoria. Means for locking nuts on bolts	492,829	Mar. 7	88	21	62	1375
Palmer, Urban H., St. James, Minn. Hay-stacker	495,831	Apr. 18	2103	528	63	422
Palmer, Wales L. (See Thompson, Isaac F., assignor.)						
Palmer, William D. (See Browne and Palmer.)						
Palmer, William H., Yale, Mich. Cutter-bar for harvesters	505,325	Sept. 19	1668	430	64	1610
Palmer, William H., and W. W. Davis, Warren, Pa. Mucilage-holder	506,539	Oct. 10	1287	322	65	258
Palmer, Winfield S., Glenburn, Pa. Bridge	501,534	July 18	1588	399	64	337
Palmer, Zenas L., assignor to H. H. Gould, Bay Port, Mich. Wagon-jack	500,940	July 4	627	165	64	115
Palmetto Fiber Company. (See Young, McClintock, assignor.)						
Palmleaf, Charles, Seattle, Wash. Dish-cleaner	499,031	June 6	506	118	63	1479
Palmros, Alexander, Lynn, Mass., assignor of one-half to V. J. Peirce, Hudson, Me. Electric-railway trolley	504,113	Aug. 29	3080	771	64	1195
Paproth, Ernst, and R. Aster, Kritz, Germany. Beer-saucer with registering attachment. Paquet, Frank, Hamilton, assignor of one-half to S. Obermayer Company, Cincinnati, Ohio. Steel-wire brush	493,646	Mar. 21	1409	357	62	1664
Paquette, George B., Fulton, N. Y. Axle-clamp for sleigh attachments for vehicles	511,356	Dec. 26	2617	636	65	1937
Paquin, Asarios. (See Tebo and Paquin.)	499,575	June 13	1396	334	63	1648
Parcell, James N. (See Cushman and Parcell.)						
Parcho, Giacomo, Sierra City, Cal. Cam	490,982	Jan. 31	3219	823	62	704
Pardee, William H., Antigo, Wis. Antirattler for thill-couplings	502,134	July 25	2552	640	64	510
Parentbous, Emile, Paris, France. Apparatus for recording the flexure of bridges	500,775	July 4	386	102	64	72
Parish, Frank J., New York, and H. B. Meyer, Brooklyn, assignors of one-half to J. R., F. W., and H. E. Floyd, New York, N. Y. Valve-operating mechanism	498,690	May 30	3743	924	63	1349
Parish, Leonard B., Olean, N. Y. Moistening attachment for bread boxes or receptacles	510,928	Dec. 19	1892	464	65	1789
Park, Andrew G., and W. A. Dexter, Wesley, N. Y. Machine for raking and cocking hay	504,088	Aug. 29	3032	757 } 64	1186	
Park, Charles S., Montague, Mass. Car-coupling	503,615	Aug. 22	2303	574	64	1029
Park, Edwin H. (See Knowles and Park.)						
Park, Harvey S. (See Herron, James B., assignor.) (Reissue.)						
Park, Harvey S., Chicago, Ill. Umbrella-stand	490,305	Jan. 24	2120	551	62	475
Park, Howard C., O. M. Evans, C. E. Turner, and C. E. Morris, Columbus, Ohio. Window-screen	497,801	May 23	2433	606	63	1104
Park, Lewis A., Townsburry, N. J. Elevator and conveyer	506,540	Oct. 10	1287	322	65	258
Park, William D., <i>et al.</i> (See Moore, Morris W., assignor.)						
Park, William R., Taunton, and B. T. Williston, Somerville, assignors to Hancock Inspirator Company, Boston, Mass. Inspirator	492,944	Mar. 7	271	69	62	1412
Parke, John Y., Philadelphia, Pa. Gas-heater	506,932	Oct. 17	1929	477	65	390
Parke, Richard J., and I. Goodman, New York, N. Y. Paint-filling composition	496,277	Apr. 25	2780		63	563
Parke, Robert A., New Brighton, assignor of one-half to J. B. Thacher, Albany, N. Y. Fluid-pressure engine	508,525	Nov. 14	904	222	65	941
Parke, Robert A., New York, N. Y., F. L. Clark, Wilkinsburg, and T. J. Hogan, assignors to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake	506,185	Oct. 3	630	161 } 65	192	
Parker, Abram H., Clinton, Ill. Hay-rack	491,442	Feb. 7	626	157	62	868
Parker, Ananias S., Moline, Ill. Corn-planter	493,781	Mar. 21	1629	415	62	1708
Parker, C. W., <i>et al.</i> (See Schofield, James D., assignor.)						
Parker & Co., W. F. (See Donaldson, Richard A., assignor.)						
Parker, Charles J., Havre de Grace, Md. Cooking-vessel	503,353	Aug. 15	1866	462	64	935
Parker, Charles W., <i>et al.</i> (See Schofield, James D., assignor.)						
Parker, Cornelius B. (See De Arden, Charles F., assignor.)						
Parker, Edmund A., Meriden, Conn. Salt or pepper holder	507,720	Oct. 31	3287	804	65	669
Parker, Edmund A., Meriden, Conn. Wine-cooler	511,209	Dec. 19	2359	576	65	1876
Parker, Edward B., Delmar, Iowa. Draft apparatus for corn-plows	502,751	Aug. 8	864	211	64	740
Parker, Frank. (See Hamel, William J., assignor.)						
Parker, G. A. F. (See Dysart, Marby P., assignor.)						
Parker, George B., assignor of one-half to G. W. Livesay, Chillicothe, Ohio. Vapor-bath cabinet	507,078	Oct. 17	2155	534	65	431
Parker, George P., <i>et al.</i> (See Forbes, George H., assignor.)						
Parker, George S., Janesville, Wis. Fountain-pen	510,439	Dec. 12	986	236	65	1611
Parker, Gilbert L. (See Grantland, John W., assignor.)						
Parker, Harry W., Cleveland, Ohio, assignor to F. W., W. L., and C. I. Peck, Chicago, Ill. Hydrocarbon-burner	508,045	Nov. 7	96	27, 28 } 65	776	
Parker, Henry F., New York, N. Y. Machine for molding plastic material	495,228	Apr. 11	1135	283 } 63	228	
Parker, Herbert L., and A. W. Meston, St. Louis, Mo. Revolving motor	501,482	July 11	1508	379 } 64	290	
Parker, Homer N., assignor of one-half to O. Mason, Winchendon, Mass. Pawl-and-ratchet coupling for rotating tools	510,046	Dec. 5	348	78	65	1475
Parker, Howard, G. F. Cushman, and H. Fairbanks, St. Johnsbury, Vt. Pulp-drying or paper-making machine	491,717	Feb. 14	1065	270	62	978
Parker, James C., Woodston, assignor of one-half to W. Rosegrant, Alton, Kans. Syringe-tube holder	489,544	Jan. 10	878	229	62	199
Parker, James J., and W. M. Moffit, Fulton, N. Y. Hose-nozzle	494,646	Apr. 4	185	46, 47 } 63	38	
Parker, John N., Coldwater, Mich. Combination-tool	495,055	Apr. 11	821	207	63	172
Parker, Joseph A., Morrisville, N. C. Cultivator	502,135	July 25	2533	640	64	511

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Parker, Josiah A., St. Louis, Mo., and L. L. Summers, Chicago, Ill. System of telegraphy.	510,929	Dec. 19	1893	{ 464 465	{ 65	1789
Parker, Mahlon C., Waverly, Pa. Thill-coupling.	509,485	Nov. 28	2542	613	65	1279
Parker, Robert. (See Armstrong, Parker, and Vernon.)						
Parker, Robert, Pekay, Iowa. Axle-lubricator for vehicle-hubs.	504,816	Sept. 12	841	216	64	1441
Parker, Russell, and B. F. Sutton, Brooklyn, N. Y. Closed conduit for electric railways.	490,306	Jan. 24	2122	552	62	475
Parker, Samuel J., Rochester, N. Y. Automatic elevator-lock.	501,658	July 18	1792	446	64	358
Parker, Simon B., Springfield, Mass. Can-filler.	496,617	May 2	354	96	63	684
Parker & Whipple Company. (See Richards, Francis H., assignor.)						
Parkes, Henry, London, England, and J. C. Montgomerie, Dalmore, Stair, Scotland. Extracting gold or silver.	496,950	May 9	914		63	803
Parkes, Henry, London, England, and J. C. Montgomerie, Dalmore, Stair, Scotland. Extracting gold or silver from ores or compounds containing same.	496,951	May 9	915		63	803
Parkhurst, Edward B., Woburn, Mass. Attachment for boilers.	497,725	May 16	2157	{ 539 540	{ 63	1039
Parkin, Joseph. (See Born and Parkin.)						
Parkin, Joseph, and H. Born, Cleveland, Ohio. Smoke-arrester.	489,715	Jan. 10	1120	289	62	246
Parkinson, George M. (See Parkinson, Tom and G. M.)						
Parkinson, John, assignor of one-half to J. Parkinson, Jr., and G. Schmidt, Philadelphia, Pa. Manufacture of car or other wheels.	508,180	Nov. 7	324	80, 81	65	818
Parkinson, Joseph G. Chicago, Ill. Package-carrier.	501,023	July 4	763	200	64	136
Parkinson, Tom and G. M., Doncaster, England. Dust-collector.	499,799	June 20	1761	426	63	1725
Parkinson, William, Philadelphia, Pa. Converting cast-steel into wrought-iron.	511,648	Dec. 26	3098		65	2024
Parkinson, William J., assignor of one-half to D. C. Ralph, Buffalo, N. Y. Carpet-tack.	504,133	Aug. 29	3109	778	64	1200
Parks, Anna M., Albany, N. Y. Punching-machine.	509,761	Nov. 28	2972	719	65	1361
Parks, Charles E., Watertown, Wis. Compound lumber.	509,180	Nov. 21	1965	479	65	1159
Parks, Charles W., et al. (See Derrick, William E., assignor.)						
Parks, Charles W., Lansingburg, N. Y. Brush.	492,584	Feb. 28	2431	605	62	1283
Parks, Clarence W., Lowell, Mich. Combined mantel-shelf and clothes-rack.	509,242	Nov. 21	2078	501	65	1180
Parks, Edward H., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Gear-cutting machine.	505,606	Sept. 26	2179	551	64	1720
Parks, Jable F., Sandhill, Tenn. Seeding-machine.	504,362	Sept. 5	72	19	64	1284
Parks, Nathaniel, Deansville, N. Y. Telephone-transmitter.	504,454	Sept. 5	226	60	64	1313
Parks, Stephen, et al. (See Derrick, William E., assignor.)						
Parks, Thomas G. (See Delfs, Arnold, assignor.)						
Parman, William S., Sedan, Kans. Bit-stock.	500,153	June 27	2358	570	63	1842
Parmelee, Addella A., administratrix. (See Parmelee, Wolcott J.)						
Parmelee, George H. (See Cardy, Joseph, assignor.)						
Parmelee, Hoyt P., Des Moines, Iowa. Book.	494,382	Mar. 28	2631	660	62	1910
Parmelee, Leander. (See Van Patten and Parmelee.)						
Parmelee, Wolcott J., deceased, Scranton, Pa.; A. A. Parmelee, administratrix. Car-wheel.	489,496	Jan. 10	810	212	62	185
Parmenter, George A., Cambridge, Mass. Automatic life-guard for street-cars.	489,716	Jan. 10	1121	289	62	248
Parmenter, James S., Woodstock, Canada. Compound engine.	494,075	Mar. 21	2120	541	62	1800
Parmenter, Robert W., Yutan, Nebr. Elevator.	507,837	Oct. 31	3487	857	65	705
Parneley, Lemuel, Mokense, Ill., assignor of one-third to W. B. Brown, Crown Point, Ind. Car-coupling.	489,659	Jan. 10	1081	209	62	230
Parnelli, Antonio, Boston, Mass. Baby-walker.	499,032	June 6	507	119	63	1479
Parr, James A., Amsterdam, N. Y. Stripping attachment for circular-knitting machines.	509,243	Nov. 21	2080	502	65	1181
Parraore, Reddin W., Asbury Park, N. J. Corset-shield.	490,495	Jan. 24	2419	624	62	533
Parrell, Marguerite M., New York, N. Y. Bust-pad.	498,512	June 6	109	25	63	1410
Parrish, Homer A., assignor of one-tenth to E. J. Weeks, Jackson, Mich., and G. A. W. Dodge, New Haven, Conn. Electrical apparatus for controlling signal or other circuits.	509,244	Nov. 21	2084	503	65	1181
Parrish, Rob E., Portland, Oreg. Fanning-cover for beds, &c.	494,486	Mar. 28	2783	698	62	1937
Parrish, Stephen E., Ithaca, A. and C. E. Linton, Saginaw, Mich. Packing-box for jars, bottles, &c.	498,567	May 30	3529	873	63	1312
Parrish, Washington B., Oral Oaks, Va. Windlass water-elevator.	493,180	Mar. 7	634	{ 160 161	{ 62	1483
Parrish, Washington B., Oral Oaks, Va. Car-coupling.	506,933	Oct. 17	1931	478	65	391
Parrish, William N., Richmond, Ind. Wire-fence machine.	511,059	Dec. 19	2104	520	65	1827
Parrot, Gabriel V. M. A., and A. C. Reigner, Paris, France. Dynamo-electric machine.	491,294	Feb. 7	390	{ 99 100	{ 62	821
Parry, Augustus N., Amesbury, Mass. Shifting seat for carriages.	494,794	Apr. 4	431	106	63	83
Parry, Edward G. (See Bye and Parry.)						
Parry, John A., Luzerne, assignor of one-half to E. B. Vandyke, Wilkes-Barré, Pa. Corset-fastening.	501,098	July 11	905	232	64	180
Parry, William K. (See Adeney and Parry.)						
Parsells, William C., Waterville, N. Y. Grinding globe-valve seats.	502,932	Aug. 8	1175	290	64	797
Parshall, Horace F., Lynn, assignor to Thomson-Houston Electric Company, Boston, Mass. Armature for dynamo-electric machines.	493,337	Mar. 14	897	229	62	1549
Parshall, Horace F., Lynn, Mass., assignor to General Electric Company, of New York. Commutator for dynamo-electric machines.	499,350	June 13	1018	445	63	1582
Parshall, Horace F., Lynn, assignor to General Electric Company, Boston, Mass. Armature and constructing same.	502,988	Aug. 8	1274	311	64	814
Parshall, Horace F., Lynn, assignor to General Electric Company, Boston, Mass. Compounding dynamo-electric machines.	509,486	Nov. 28	2543	614	65	1280
Parshall, Horace F., Lynn, Mass., and J. W. Darley, Jr., Baltimore, Md., assignors to General Electric Company, Boston, Mass. Fluid-pressure device for controlling electric motors.	508,630	Nov. 14	1064	264	65	973
Parsons, Albertus A., Eureka, Wis. Hame-coupling.	500,603	July 4	98	28	64	20
Parsons, Calvin W., Scranton, Pa. Crane-operating mechanism.	504,937	Sept. 12	1034	266	64	1479
Parsons, Charles H. (See Smith, Roswell T., assignor.)						
Parsons, Charles O., Milwaukee, Wis. Piano-stool.	493,111	Mar. 7	529	132	62	1463
Parsons, Francis W. (See Jessen, Jacob, assignor.)						
Parsons, Fred W., Elmira, N. Y. Micrometer-calipers.	498,813	June 6	110	29	63	1410
Parsons, George W., assignor of one-half to W. C. Bergman, Newton, Iowa. Band-cutter and feeder for thrashing-machines.	493,367	Mar. 14	944	242	62	1559
Parsons, George W., assignor of one-half to W. C. Bergman, Newton, Iowa. Folding straw-carrier for thrashers.	493,368	Mar. 14	946	243	62	1560
Parsons, John, Syracuse, N. Y. Hat-fastener.	503,771	Aug. 22	2543	633	64	1075
Parsons, John F., Bristol, England. Photographic camera.	500,348	June 27	2676	656	63	1898
Parsons, John H. (See Gay and Parsons.)						
Partlow, Columbus N., Moonshine, Ill. Adjustable hinge.	507,242	Oct. 24	2469	608	65	501
Partridge, Charles C., Hyde Park, Mass. Ticket-case.	508,046	Nov. 7	93	28	65	777

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Partridge, George W. (See Bazille and Partridge.)						
Partridge, James A., Tenbury, England. Contrivance for training growing hop-plants	492,516	Feb. 28	2326	577	62	1259
Partyka, Edmund, Buffalo, N. Y. Metal-bending machine	491,187	Feb. 7	207	53	62	787
Parvin, Albert B., assignor to K. V. Parvin, Philadelphia, Pa. Photographic objective	492,335	Feb. 21	2021	503	62	1185
Parvin, Katie V. (See Parvin, Albert B., assignor.)						
Paschall, John W., Galveston Ind. Music-leaf turner	495,599	Apr. 18	1732	436	63	357
Pasquith, Gomer S., Chase's Wharf, Va. Machine for making barrels	494,260	Mar. 28	2434	613	62	1873
Passburg, Emil, Breslau, Germany. Vacuum drying apparatus for explosives	497,683	May 16	2092	522 523	63	1026
Passburg, Emil, Breslau, Germany. Vacuum-pan	509,045	Nov. 21	1735	429 430	65	1115
Passick, Charles J., Seward, Nebr. Cash-register	502,580	Aug. 1	555	132 133	64	668
Passmore, Benjamin H., Belmont, Tex. Meat-tenderer	504,892	Sept. 12	958	247	64	1465
Passmore, Charles L., Erie, assignor of one-half to E. L. Passmore, Fulton, Ill. Harness	503,725	Aug. 22	2470	614	64	1061
Passmore, Edwin L. (See Passmore, Charles L., assignor.)						
Passmore, Edwin, Somerville, assignor of five-eighths to A. H. Pray and E. B. Cox, Brookline, Mass. Apparatus for cutting and polishing precious stones	510,817	Dec. 12	1660	412	65	1735
Passover, Konon I., Philadelphia, Pa. Earth-closet	499,033	June 6	508	119	63	1479
Paster, Ellsworth G. (See Cell and Paster.)						
Pasteur-Chamberland Filter Company. (See Way, Frank K., assignor.)						
Pasteur-Chamberland Filter Company. (See Way and Waters, assignors.)						
Pásztor, David, assignor of one-half to P. Zacharias, Berlin, Germany. Belt-fastener	508,970	Nov. 21	1623	398	65	1094
Patchett, Frank R., Reddick, Ill. Hog-trap	491,810	Feb. 14	1212	303	62	1006
Patchin, William E., Rochester, N. Y. Register	504,239	Aug. 28	3287	821	64	1233
Pate, Daniel W., McColl, S. C. Cotton-chopper	496,383	Apr. 25	2974	742	63	601
Patee, Theodorus H., Chicago, Ill. Portable static electric machine	504,740	Sept. 12	708	177 178	64	1417
Patenall, Thomas H. (See Johnson and Patenall.)						
Patenall, Thomas H., Rahway, N. J. Electro-mechanical slot mechanism for railway-signals	509,093	Nov. 21	1835	449	65	1134
Patent Title Company. (See Peck, Orrin B., assignor.)						
Patent Title Company. (See Peck, Orrin B., assignor.) (Reissue.)						
Paterson, Buchanan S., assignor to Clarke, Chapman & Co., Gateshead, England. Commutator for dynamo-electric machines or motors	495,561	Apr. 18	1670	421	63	346
Paterson, James H., Ingersoll, Canada. Screw-cutting lathe	506,068	Oct. 3	414	109 110	65	81
Paterson, James W., Chicago, Ill., assignor to Adams & Westlake Company, of Illinois. Foot-rest	502,752	Aug. 8	865	211	64	740
Paterson, William A., Flint, Mich. Fifth-wheel	490,452	Jan. 24	2338	606	62	517
Patin, Octave, Paris, France. Alternating-current generator	491,811	Feb. 14	1213	303 304	62	1007
Paton, William E. (See Robinson and Conley, assignors.)						
Patrick, John, East Wheatland, Ill. Wire-fence gate	496,485	May 2	143	40	63	645
Patrie, Aristide. (See Boucher, Louis, assignor.)						
Pattberg, Henry. (See Jacob, Frederick, assignor.)						
Pattee, Henry H., Monmouth, Ill. Electric-current time-meter	498,021	May 23	2632	658 659	63	1138
Pattee, Henry H., Monmouth, Ill. Electric-current time-meter	498,022	May 23	2636	659 660	63	1138
Pattee, Joseph O., and H. H. Vaughan, St. Paul, Minn. Car-coupling	501,575	July 18	1654	414	64	334
Patten, Clinton A. (See Leavitt, John E., assignor.)						
Patten, Clinton A., Somerville, Mass. Car	503,707	Aug. 22	2439	607 608	64	1055
Patten, Enos, assignor to A. J. Hoyt, trustee, Lynn, Mass. Mechanical movement	502,828	Aug. 8	998	243	64	765
Patten, Frank C., assignor to himself and M. D. Shipman, De Kalb, Ill. Harrow	496,440	May 2	84	21	63	634
Patten, James S., Baltimore, Md. Vegetable-cutter	492,967	Mar. 7	309	79	62	1420
Patten, James S., assignor to himself and M. Schaeffer, Baltimore, Md. Door-check	493,112	Mar. 7	530	133	62	1464
Patten, James S., assignor to himself and M. Schaeffer, Baltimore, Md. Cable-grip	493,514	Mar. 14	1169	299	62	1601
Patten, James S., assignor to himself and M. Schaeffer, Baltimore, Md. Thill-coupling	494,884	Apr. 4	572	141	63	111
Patten, Jefferson, Brooklyn, N. Y., assignor to N. Burgess, Highlands, N. J. Stage apparatus	501,099	July 11	907	232	64	181
Patten, Thomas W., et al. (See Spencer, Charles R., assignor.)						
Patterson, Benjamin, et al. (See Roberts, John W., assignor.)						
Patterson, Benjamin E., New York, N. Y. Gas-governor	489,324	Jan. 3	520	142	62	112
Patterson, Charles H. (See Garman, John G., assignor.)						
Patterson, Charles M., et al. (See Tatro, Charles P., assignor.)						
Patterson, David S., North Platte, Nebr. Driving-gear for locomotives	499,034	June 6	509	119	63	1480
Patterson, Elma H., Stillman Valley, Ill. Picture-frame attachment	509,626	Nov. 28	2761	665	65	1322
Patterson, George H., Cañon City, Colo. Dry-mineral separator	504,240	Aug. 29	3289	821	64	1233
Patterson, James, Jr., Albany, N. Y. Ice-runway	501,659	July 18	1793	447	64	352
Patterson, James D., Lebanon, Mo. Combination-tool	489,390	Jan. 3	622	168	62	134
Patterson, James K., Crete, Nebr. Ice-cream freezer	504,363	Sept. 5	73	19	64	1284
Patterson, James M., et al. (See Green, Ira L., assignor.)						
Patterson, John A. (See Connell and Patterson.)						
Patterson, Warren A. (See Bessonet, William T., assignor.)						
Patterson, William B., Secor, Ill. Car-coupling	501,576	July 18	1656	414	64	334
Patterson, William D., Keokuk, Iowa. Overhead electric railway	497,337	May 16	1547	389 390	63	929
Patterson, William R. (See Scribner and Patterson.)						
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Manufacture of telephone-cables	497,335	May 16	1544	389	63	928
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Insulating-tape	497,336	May 16	1546	389	63	929
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Telephone-cable	502,262	July 25	2780	702	64	553
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Electric door-register for watchmen	504,741	Sept. 12	713	178	64	1417
Pattinson, Thomas. (See Cooper and Pattinson.)						
Patton, Charles W., Clarksville, Ind. Churn-power	493,288	Mar. 14	817	209	62	1535
Patton, Charles W., Ohio Falls, Ind., assignor of two-thirds to J. J. and T. J. Ramsey, Shelbyville, Ky. Car-coupling	502,499	Aug. 1	423	100	64	644
Patton, Frank S., Kansas City, Mo. Foldable stool	504,241	Aug. 29	3290	822	64	1233
Patton, John T., Highland, Ohio. Fence	500,033	June 20	2132	517	63	1780

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Patton, John W. (See Palfrey, Frederick, assignor.)						
Patton, William P., New York, N. Y. Closed-conduit electric railway	495,996	Apr. 25	2348	593	63	483
Patty, Thomas S., Cooper, Iowa. Electric burglar-alarm	507,925	Oct. 31	3622	594	65	730
Patureau, Gabriel. Levallois-Perret, France. Machinery for pasting strips of paper on pasteboard boxes	507,035	Oct. 17	2087	516 517 518	65	420
Paugh, Samuel. (See Van Slyke, Stephen, assignor.)						
Paugh, Samuel, Indianapolis, Ind. Electric motor or dynamo	502,377	Aug. 1	214	51	64	605
Paul, Charles, Sidney, Ohio. Grain-binder's needle	508,745	Nov. 14	1231	307	65	1006
Paul, Charles R. (See Barlow, John E., assignor.)						
Paul, James. (See Paul, John T. and J.)						
Paul, John A. (See Paul, William C. and J. A.)						
Paul, John T. and J., Edinburgh, Scotland. Automatic lamp-extinguisher	494,935	Apr. 4	640	164	63	123
Paul, John T. and J., Edinburgh, Scotland. Lantern	507,838	Oct. 31	3488	858	65	706
Paul, William C. and J. A., Jersey City, N. J. Thrust-block for shafts	491,584	Feb. 14	855	216	62	935
Paull, Gueva G., and W. F. Brown, Wilson, Kans. Heater and condenser	507,385	Oct. 24	2711	666	65	547
Pauls, August, Brooklyn, N. Y. Knife-handle	509,762	Nov. 28	2974	720	65	1361
Paulson, Hans, Sumner, Wash. Post-hole digger	509,487	Nov. 28	2544	614	65	1280
Paulus, Eustachinsz, Graetz, Germany. Potato-digging machine	505,954	Oct. 3	233	61.62	65	46
Paulus, Peter, Milwaukee, Wis. Pipe-tongs	506,372	Oct. 10	995	247	65	201
Pauly, Melvin A., Eau Claire, Wis. Fire apparatus	490,496	Jan. 24	2420	625	62	534
Pauly, Peter J., Jr., St. Louis, Mo. Flexible cover for file-cases	500,419	June 27	2778	684	63	1916
Pauly, Peter J., Jr., St. Louis, Mo. Shelf-roller	510,088	Dec. 5	417	93	65	1488
Paumgarten-Frauenstein, Johanna, Bernstadt, Germany. Adjustable lamp-bracket	502,011	July 25	2353	590	64	472
Pavyer, James G., St. Louis, Mo. Type-machine	495,703	Apr. 18	1901	477 478 479	63	384
Pavyer, James G., St. Louis, Mo. Type-casting machine	495,704	Apr. 18	1906	480	63	385
Pavyer, James G., St. Louis, Mo. Mold for type-machines	495,705	Apr. 18	1908	480	63	385
Pawolowski, Jacob, Cincinnati, Ohio. Cleat for electric wires	503,384	Aug. 15	1916	475	64	945
Pawolowski, Jacob, Cincinnati, Ohio. Conduit electric railway	508,236	Nov. 7	421	102	65	836
Paxon, Theodore P., Canton, Ohio. Overshoe	505,885	Oct. 3	132	34	65	27
Paxton, James A., Ellsworth, Ill. Revolving rake for cornstalks	504,242	Aug. 29	3293	822	64	1234
Payne, Clarence Q., Stamford, Conn. Method of and apparatus for separating ores	500,604	July 4	99	28, 29	64	20
Payne, Clarence Q., Stamford, Conn. Magnetic ore-separator	500,605	July 4	106	29	64	21
Payne, Clarence Q., Stamford, Conn. Device for and method of adjusting and equalizing the magnetic density in the pole-pieces of magnetic separators	500,606	July 4	110	30	64	22
Payne, Darius W. (See Disbrow, Reuben B., assignor.)						
Payne, Henry L. (See Daly, Daniel, assignor.)						
Payne, Howard B., assignor of one-half to D. B. Van Slyke, Chicago, Ill. Telethermometer	490,882	Jan. 31	3046	782	62	672
Payne, Howard B., assignor of one-half to D. B. Van Slyke, Chicago, Ill. Telethermometer	490,883	Jan. 31	3048	783	62	672
Payne, Martin, Troy, N. Y. Trotting-sulky	506,186	Oct. 3	635	162	65	123
Payne, Martin, Troy, N. Y. Sulky	507,839	Oct. 31	3491	858	65	706
Payne, Martin, Troy, N. Y. Sulky	508,336	Nov. 7	579	142	65	865
Payne, R. L., Sr., et al. (See Trexler, David L., assignor.)						
Payne, Thomas O., Vicksburg, Miss. Ash-sifter	510,930	Dec. 19	1901	465	65	1790
Payne, William H., Philadelphia, Pa. Atomizer	507,160	Oct. 24	2325	571	65	475
Payne, William H., assignor of one-half of G. G. Altorfer, Philadelphia, Pa. Electric body-wear	502,753	Aug. 8	865	211	64	740
Payne, William J., assignor to Bohls Cigarette Machine Company, Richmond, Va. Device for dressing and feeding tobacco	493,181	Mar. 7	635	161 162	62	1483
Payson, Edward. (See Payson, Joseph R., Jr., assignor.)						
Payson, Joseph R., Jr., assignor to E. Payson, Chicago, Ill. Sliding-door support	506,013	Oct. 3	329	86, 87	65	64
Peabody, Charles E., et al. (See Derrick, William E., assignor.)						
Peabody & Co., Henry W. (See Hawkins, Gardner C., assignor.)						
Peabody, William W., et al. (See Schenck, John D. P., assignor.)						
Peach, Henry A. (See Brown, Otis E., assignor.)						
Peach, Henry A. (See Moody, Emery C., assignor.)						
Peachy, Levi J., near Huntsville, Ohio. Butchering appliance	501,691	July 18	1846	459	64	367
Peacock, Albert F., Buchanan, Mich. Coin-controlled vending apparatus	502,754	Aug. 8	867	211 212	64	740
Peacock, Benjamin F., Anniston, Ala., and F. T. Peacock, Sparrow's Point, Md. Rolling-machine	503,616	Aug. 22	2304	574 575	64	1029
Peacock, Benjamin F., Anniston, Ala., and F. T. Peacock, Sparrow's Point, Md. Metal forging and shaping press	505,955	Oct. 3	235	62, 63	65	46
Peacock, Edward F., Philadelphia, Pa. Steam-engine	497,987	May 23	2581	646	63	1129
Peacock, Edward M., Brooklyn, N. Y. Attaching handles to vessels	503,673	Aug. 22	2385	595	64	1044
Peacock, Edward M., Brooklyn, N. Y. Attaching handles to vessels	503,674	Aug. 22	2386	595	64	1044
Peacock, Francis T. (See Peacock, Benjamin F. and F. T.)						
Peacock, Jacob S., Lancaster, Pa. Padlock	496,698	May 2	485	129 130	63	707
Peacock, Margaret. (See Newell, Sarah, assignor.)						
Peacock, Thomas S., Paxton, Ill. Bread or cake pan	493,835	Mar. 21	1714	437	62	1723
Pearce, Charles E. (See Creclius, Louis J., assignor.) (Reissue.)						
Pearce, Frederick, New York, N. Y. Electric signaling apparatus	494,345	Mar. 28	2568	647	62	1898
Pearce, Richard, Denver, Colo. Means for regulating the blast in ore-roasting furnaces	506,129	Oct. 3	516	134	65	100
Pearce, Thomas. (See Drohan and Pearce.)						
Peardon, Charles H., Smithshire, Ill. Dumping device for wagons	509,245	Nov. 21	2088	503	65	1182
Peare, George R., Lynn, assignor to Steam Heated Horn Company, Boston, Mass. Mechanical movement	511,357	Dec. 26	2618	636	65	1937
Peal, Azariah Y., West Lebanon, Me. Auger	505,844	Oct. 3	64	17	65	15
Pearl, Coroden E., North Bangor, N. Y. Vehicle-spring	490,677	Jan. 31	2733	704	62	609
Pearn, Frank. (See Pearn, William A. and F.)						
Pearn, William A. and F., Gorton, England. Machine for boring cylinders and turning the flanges thereof	504,742	Sept. 12	714	178 179	64	1418
Pearsall, James A., and C. M. Walker, Denver, assignors to Rocky Mountain Drill Company, Pueblo, Colo. Rock-drilling machine	510,517	Dec. 12	1113	269 813	65	1635
Pearson, Alfred N., Auburn, and R. Penn, South Melbourne, Victoria. Method of and apparatus for manufacturing rectangular-meshed wire-netting	507,750	Oct. 31	3325	814 815 816	65	676
Pearson, Frank P., assignor to Arnold Print Works, North Adams, Mass. Printing colors with aniline-black	491,951	Feb. 14	1430		62	1050

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Pearson, Gardner W., Lowell, Mass. Sleeping-car.....	497,457	May 16	1734	{ 437 } 438	63	963
Pearson, George F., Lowell, Mass. Street-car jack.....	502,200	July 25	2665	673	64	532
Pearson, Henry, Brightwood, and C. J. Rose, Chicopee, Mass. Sleeping-car.....	489,089	Jan. 3	159	44	62	38
Pearson, James L., Lodi, Cal. Plow.....	507,282	Oct. 24	2538	625	65	512
Pearson, James, W. Stead, and W. J. Monk, Saltaire, England. Plush-shearing machine.....	496,532	May 2	218	57, 58	63	658
Pearson, John, Chicago, Ill. Car-door lock.....	509,939	Dec. 5	155	36	65	1438
Pearson, Lewis F., Medicine Lodge, Kans. Hose-holder.....	491,443	Feb. 7	627	157	62	868
Pearson, Paul, and J. Robinson, Chicago, Ill. Railway-rail joint.....	494,223	Mar. 28	2377	600	62	1863
Pearson, Walter, <i>et al.</i> (See Porter, Wallace N., assignor.)						
Pearson, William A., Scranton, Pa. Steam forging-machine.....	503,354	Aug. 15	1867	{ 462 } 463	64	936
Pearson, William A., Schenectady, N. Y. Expansion-joint for pipes.....	506,335	Oct. 10	930	{ 231 } 232	65	189
Pearson, William H., Jr. (See Merrifield, Westcott, and Pearson.)						
Pearsons, William B. C., <i>et al.</i> (See Holly, Edgar P., assignor.)						
Peartree, Joseph R., assignor of one-half to P. Zink, Rochester, N. Y. Piano-stool.....	504,683	Sept. 5	607	155	64	1324
Pease, Charles, Hillsborough, N. H., assignor to Hoyt Brothers & Co., Lynn, Mass. Bot- tlo-washer.....	498,725	May 30	3819	942	63	1362
Pease, Charles F., assignor to Ames & Frost Company, Chicago, Ill. Velocipede.....	492,988	Mar. 7	343	86	62	1427
Pease, Charles F., assignor to Ames & Frost Company, Chicago, Ill. Pedal.....	492,989	Mar. 7	344	87	62	1427
Pease, Charles F., assignor to Ames & Frost Company, Chicago, Ill. Velocipede-pedal.....	492,990	Mar. 7	345	87	62	1427
Pease, Charles F., assignor to Ames & Frost Company, Chicago, Ill. Latch.....	497,813	May 23	2294	577	63	1079
Pease, Charles F., assignor to Derby Cycle Company, Chicago, Ill. Pneumatic tire.....	508,746	Nov. 14	1232	307	65	1006
Pease, Franklin B., Rochester, N. Y. Fruit or vegetable sorting machine.....	497,599	May 16	1964	492	63	1003
Pease, Henry W. (See Crittenden and Pease.)						
Pease, Henry W. (See Smith and Pease.)						
Pease, Joseph N., Denver, Colo. Measuring device.....	499,576	June 13	1399	334	63	1649
Pease, Lovenia E., Saginaw, Mich. Hair-curler.....	499,439	June 13	1176	281	63	1610
Pease, Robert R., assignor to H. Roberts, Hartford, Conn. Car-seat.....	506,373	Oct. 10	996	248	65	201
Pease, William F., <i>et al.</i> (See George, Albert F., assignor.)						
Peaslee, Edwin J., Ashland, assignor of one-half to G. W. Cole, Lakeport, N. H. Needle- depressing slide for knitting-machines.....	498,023	May 23	2640	660	63	1139
Peat, Nelson, Cohoes, N. Y. Railway-switch.....	501,660	July 18	1795	417	64	358
Peckin, Mason J., assignor of one-half to C. T. Stagg, Jr., Philadelphia, Pa. Rail-joint.....	507,751	Oct. 31	3330	816	65	676
Peck, Adelbert H., and C. E. Allshouse, Chicago, Ill. Attachment for dental engines.....	493,289	Mar. 14	819	210	62	1535
Peck, Arthur E., Minneapolis, Minn. Dental plugger.....	492,850	Mar. 7	90	22	62	1375
Peck Bros. & Co. (See Peck, John M., assignor.)						
Peck, Caid H., Elmira, N. Y. Portable drilling-machine.....	507,752	Oct. 31	3331	816	65	677
Peck, Cassius C., Warsaw, N. Y. Steam-boiler.....	498,941	June 6	336	79, 80	63	1451
Peck, Clarence L., <i>et al.</i> (See Parker, Harry W., assignor.)						
Peck, Eugene F., Napa, Cal. Mining apparatus.....	507,926	Oct. 31	3623	896	65	731
Peck, Ezra A., assignor to C. F. Craver, Harvey, Ill. Harvesting-machine.....	502,861	Aug. 8	1045	{ 256 } 257 258	64	774
Peck, Francis C., Shannondale, Ind. Check-row corn-planter.....	505,251	Sept. 19	1542	402	64	1587
Peck, Frank E., Cleveland, Ohio. Water-heater.....	507,633	Oct. 31	3155	773	65	644
Peck, Fred C., Buffalo, N. Y. Soda-water apparatus.....	504,849	Sept. 12	896	230	64	1453
Peck, Fred W., <i>et al.</i> (See Parker, Harry W., assignor.)						
Peck, George W., New Haven, Conn. Manufacturing spoons, forks, knives, or similar ar- ticles.....	509,094	Nov. 21	1836	449	65	1134
Peck, Homer P. K., and W. McPherson, New York, N. Y., assignors to W. H. Jackson & Co. Machine for making metal timber-hangers.....	498,960	June 6	372	89, 90	63	1457
Peck, Horace B. (See Campany, Milton E., assignor.)						
Peck, Horace B., <i>et al.</i> (See Harris, Levi, assignor.)						
Peck, John M., assignor to Peck Bros. & Co., New Haven, Conn. Basin-cock.....	505,634	Sept. 26	2228	565	64	1729
Peck, Melinda. (See Peck, Orrin B., assignor.)						
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,090	Jan. 3	163	45	62	39
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,197	Jan. 3	331	91	62	75
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,198	Jan. 3	334	92	62	75
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,199	Jan. 3	335	92, 93	62	76
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,200	Jan. 3	336	93	62	76
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,201	Jan. 3	337	93, 94	62	76
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,202	Jan. 3	339	94	62	77
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,203	Jan. 3	340	95	62	77
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,204	Jan. 3	342	95, 96	62	78
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	489,205	Jan. 3	343	96	62	78
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	490,040	Jan. 17	1667	433	62	372
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal amalgamator.....	490,041	Jan. 17	1668	{ 433 } 434	62	372
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	490,084	Jan. 17	1733	{ 451 } 452	62	3-5
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Machine for centrifugally treating mol- ten materials.....	491,131	Feb. 7	102	28, 29	62	768
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-pulverizer.....	497,204	May 9	1291	329	63	869
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	499,346	June 13	994	242	63	1577
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator.....	499,347	June 13	999	243	63	1578
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal separation.....	499,348	June 13	1005	{ 243 } 244	63	1580
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal separation.....	499,349	June 13	1012	{ 244 } 245	63	1581
Peck, Orrin B., assignor, by mesne assignments, to Patent Title Company, Chicago, Ill. } Centrifugal ore-separator.....	495,681	Apr. 18	1863	{ 466 } 467 468	63	378
Peck, Orrin B., assignor, by mesne assignments, to Patent Title Company, Chicago, Ill. } Centrifugal ore-separator.....	499,342	June 13	985	{ 239 } 240	63	1576
Peck, Orrin B., assignor, by mesne assignments, to Patent Title Company, Chicago, Ill. } Centrifugal ore-separator.....	499,343	June 13	988	240	63	1576
Peck, Orrin B., assignor, by mesne assignments, to Patent Title Company, Chicago, Ill. } Centrifugal ore-separator.....	499,344	June 13	989	241	63	1576
Peck, Orrin B., assignor, by mesne assignments, to Patent Title Company, Chicago, Ill. } Centrifugal ore-separator.....	499,345	June 13	991	{ 241 } 242	63	1577
Peck, Orrin B., assignor, by mesne assignments, to Patent Title Company, Chicago, Ill. } Centrifugal ore-separator. (Reissue).....	11,367	Sept. 26	2513	{ 634 } 635	64	1782

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Peck, Richard W., Sparkill, assignor to G. H. Clarke, Brooklyn, N. Y. Grate-bar	498,024	May 23	2641	660	63	1139
Peck, Stow & Wilcox Company. (See Bayrer, William J., assignor.)						
Peck, Walter L., et al. (See Parker, Harry W., assignor.)						
Peckover, James, Harrisburg, Pa. Stone-sawing machine	500,034	June 20	2135	517	63	1791
Peddle, William H. (See Daves and Peddle.)						
Peddycord, Nathan T., Wilsey, Kans. Hoe	506,336	Oct. 10	932	232	65	190
Peden, Joseph S., Jersey City, N. J. Cable-grip	506,014	Oct. 3	330	87, 88	65	65
Pedersen, George, and A. Melin, assignors to Sholl Steel Whiffletree Manufacturing Com- pany, Hobart, Ind. Neck-yoke	509,346	Nov. 21	2090	504	65	1182
Pedersen, Hans C., Brooklyn, N. Y. Thrust-bearing for propeller-shafts	494,024	Mar. 21	2039	520	62	1785
Pedersen, Mikael. (See Lister and Pedersen.)						
Pederson, Ole, Aurora, Ill. Furniture-caster	493,297	May 30	3091	770	63	1234
Pederson, Rasmus, Dramman, Minn. Corn-harvester	494,023	Mar. 21	2035	519 520	62	1785
Peek, George W., Tacoma, Wash. School seat and desk	499,851	June 20	1852	451	63	1741
Peel, Albert, Avoca, Ark. Hub	501,158	July 11	1008	256	64	197
Peeples, George, Philadelphia, Pa., assignor to Thackara Manufacturing Company, of Pennsylvania. Attaching device for electric fixtures	496,792	May 2	638	170	63	733
Peeples, George, Philadelphia, Pa., assignor to Thackara Manufacturing Company, of Pennsylvania. Coupling for electric-light and gas fixtures	497,251	May 9	1371	348	63	884
Peers, Joseph. (See Boden, Peers, and Saxon.)						
Peet, Walter F., Philadelphia, Pa. Fastener for garments	490,921	Jan. 31	3119	800	62	685
Peet, Walter F., Philadelphia, Pa. Buckle	510,987	Dec. 19	2006	495	65	1209
Peeetz, Ludwig, Eschweileraue, near Aix-la-Chapelle, Germany. Skid-shoe for railway- cars	508,971	Nov. 21	1625	399	65	1094
Pegram, William M., Charlotte, N. C. Hat-rack	498,886	June 6	243	57	63	1435
Peirce, Almy L. (See Levassor, Louis E., assignor.)						
Peirce, Almy L., Cincinnati, Ohio. Cup holding and lifting attachment for public drinking- places	494,346	Mar. 28	2570	647	62	1899
Peirce, Almy L., Cincinnati, Ohio. Ephemeral drinking-cup and advertising medium	496,131	Apr. 25	2557	644	63	521
Peirce, Charles L., Milwaukee, Wis., assignor to Automatic Smoker Company, of Illinois. Toy	498,025	May 23	2642	660	63	1139
Peirce, Edgar T., Kansas City, Mo. Car-coupling	497,684	May 16	2095	523	63	1027
Peirce, Eugene E., Boston, Mass. Electrical indicator for elevators	503,315	Aug. 1	99	23, 24	64	584
Peirce, Horatio L., Olneyville, assignor to A. C. Tingley, Providence, R. I. Traveler-ring for spinning-machines	504,997	Sept. 12	1139	292	64	1499
Peirce, Isaac N., Folcroft, Pa. Signal for railway-trains	489,418	Jan. 3	662	179	62	142
Peirce, Varna J. (See Palmros, Alexander, assignor.)						
Pellas, Francis A. (See Elieson, Chaimsonovitz P., assignor.)						
Pellat, Joseph S. H., Paris, France. Train signaling apparatus	509,447	Nov. 28	2474	595 596 597	65	1266
Pelham, Walter O., Denison, Tex. Engineer's graduating-valve	503,551	Aug. 15	2173	543	64	991
Pellegrini, Jean E., Paris, France. Manufacture of crystallizable sugar by synthesis	508,747	Nov. 14	1233	307	65	1006
Pellet, Auguste, New York, N. Y. Wrench	491,222	Feb. 7	261	65	62	797
Pelletier, Frank D., et al. (See Reed, George J., assignor.)						
Pellingor, George, assignor to Goodrich Hard Rubber Company, Akron, Ohio. Penholder	492,102	Feb. 21	1657	412	62	1110
Pellow, John, assignor of one-half to G. B. Wilson, Grand Rapids, Mich. Combined water- heater and shower-bath	489,660	Jan. 10	1032	269	62	230
Peloquin, Jean B., Sault au Recollet, Canada. Wrist-turning machine	496,094	Apr. 25	2507	633	63	512
Peloubet, Jarvis, assignor to Lyon & Healy, Chicago, Ill. Feeder for organs	496,952	May 9	915	239 240	63	803
Peloubet, Jarvis, assignor to Lyon & Healy, Chicago, Ill. Reed-board for organs	501,535	July 18	1589	400	64	320
Pelsue, C. F., et al. (See West, John S., assignor.)						
Peltier, Peter V., Ottawa, Ill. Machinery for rolling glass	508,748	Nov. 14	1235	308	65	1007
Pelton, Phineas, Persia, Iowa. Combined car and air brake coupling	501,624	July 18	1737	432 433	61	348
Pelton Water Wheel Company. (See Hagmaier, Charles, assignor.)						
Pelzer, Friedrich, Dortmund, Germany. Centrifugal pump and ventilator	490,922	Jan. 31	3120	800	62	686
Pembroke, William K., Bethalto, Ill. Saddle-bag	495,908	Apr. 18	2222	560	63	443
Penberthy Injector Company. (See Downes, William A., assignor.)						
Pendleton, Gordon, Jr., Paterson, N. J., assignor of one-half to H. D. Klots, New York, N. Y. Bobbin	501,897	July 18	2177	540	64	424
Pendleton, John H., Brooklyn, and C. Tiers, New York, N. Y. Apparatus for shipping or unshipping cable-car grippers	492,103	Feb. 21	1658	412 413	62	1110
Pendleton, John H., Brooklyn, and C. Tiers, New York, N. Y. Curve device for cable railways	495,056	Apr. 11	822	208 209	63	172
Penfield, Raymond C., assignor to J. W. Penfield & Son, Willoughby, Ohio. Auger for brick-machines	508,337	Nov. 7	579	142	65	866
Penfield & Son, J. W. (See Johnson, Oliver W., assignor.)						
Penfield & Son, J. W. (See Penfield, Raymond C., assignor.)						
Penfield, William A., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Wick-carrier for central-draft lamps	492,585	Feb. 28	2432	606	62	1283
Penington, David F. (See Swain and Conner, assignors.)						
Peninsular Heater and Radiator Company. (See Howard, Charles A., assignor.)						
Peniston, Alonzo. (See Simmonds and Peniston.)						
Penman, John. (See Hammond, Frank, assignor.)						
Penman, Richard W. (See Wiebush, Charles, assignor.)						
Penn, Robert. (See Pearson and Penn.)						
Pennie, John C., administrator. (See Schmidt, Julius.)						
Pennell, Arthur, Kansas City, Mo., and G. Sullivan, Pocatello, Idaho. Water-tank	498,568	May 30	3530	873	63	1312
Penner, Herman, Milwaukee, Wis. Pen or pencil case	497,338	May 16	1550	390	63	929
Penney, William L., Perryville, Ky. Sash-fastener	492,427	Feb. 28	2169	542	62	1227
Pennington, Henry, Philadelphia, Pa. Soldering tin cans	510,931	Dec. 19	1903	465	65	1791
Pennington, Isaac, Tiffin, Ohio. Hame-fastener	502,862	Aug. 8	1051	258	61	775
Pennington, John C., Paterson, N. J. Retting-bath	509,396	Nov. 28	2363		65	1244
Pennington, William E., Baker's Mill, Va. Clevis	508,117	Nov. 7	228	59	65	800
Penniston, Clara A., New York, N. Y. Food-warmer	497,600	May 16	1965	492	63	1003
Pennock, George B., Chicago, Ill. Electric-lighting system	510,188	Dec. 5	581	135	65	1519
Pennsylvania Iron Works Company. (See Grist, Benjamin W., assignor.)						
Pennsylvania Iron Works Company. (See Grist, James E., assignor.)						
Penny, William H., and W. A. Biggerstaff, Philadelphia, Pa. Fish-scoop	505,295	Sept. 19	1628	421	64	1603
Pennybacker, Morgan, assignor of one-half to R. T. Mitchell, Washington, D. C. Puzzle	495,997	Apr. 25	2352	504	63	483
Pennycuik, James G., Boston, assignor to C. G. Garland, Lowell, Mass. Skylight	492,363	Feb. 21	2067	516	62	1194

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Penquite, Samuel H. (See Wagner and Penquite.)						
Pentoney, William, assignor of one-half to F. L. McCauley, Ironton, Ohio. Curling-iron.	497,526	May 16	1851	467	63	983
Pentz, Edgar D., Danville, Pa. Fastening device.	497,102	May 9	1143	293	63	843
Pentz, James A. (See Reckenzaun, Anthony, assignor.)						
Pentz, Levi, assignor of two-thirds to C. L. Lehman, Canton, and I. J. Lehman, Cleveland, Ohio. Vehicle-spring	500,154	June 27	2359	570	63	1842
Peoples, Samuel C. (See Peoples and Cox.)						
Peoples, William B. and S. C., Milligan, and T. J. Cox, Johnson City, Tenn. Car-coupling.	500,420	June 27	2780	685	63	1916
Peple, Gustavus A. (See Mayo and Peple.)						
Pepper, John, Jr., Rome, N. Y. Trolling-hook	496,441	May 2	86	25	63	634
Pepperell Machine Company. (See Littlefield, Frank A., assignor.)						
Peppin, Arthur R., Maintongoon, Victoria. Umbrella-frame	508,436	Nov. 14	747	184	65	911
Peppier, Thomas, Hightstown, N. J. Portable spraying or sprinkling machine.	510,287	Dec. 5	746	181	65	1550
Percival, Herbert E., Oklahoma, Okla. Terr., assignor to E. Converse, Worcester, Mass. Chain clothes-line.	507,161	Oct. 24	2326	572	65	475
Percy, Sidney H., Chicago, Ill. Gear-case	501,626	July 18	1740	433	64	349
Percy, Sidney H., Chicago, Ill. Sprocket-chain	503,871	Aug. 22	2677	671	64	1102
Percy, Sidney H., Chicago, Ill. Welding-furnace	509,046	Nov. 21	1737	430	65	1116
Percy, Sidney H., assignor to Sunol Bicycle Company, Chicago, Ill. Driving-wheel adjustment	501,625	July 18	1739	433	64	348
Percy, Sidney H., and D. S. Hitchcock, assignors to Sunol Bicycle Company, Chicago, Ill. Means for attaching wheels to shafts	496,442	May 2	87	25	63	634
Perelli-Minette, Giuseppe, Barletta, Italy. Receptacle for carrying liquid goods.	500,773	July 4	385	100	64	72
Perew, Frank C., Buffalo, N. Y. Feed-water heater and purifier.	492,928	Mar. 7	249	63	62	1408
Perew, Louis P., Tonawanda, N. Y. Roundabout	499,800	June 20	1763	427	63	1726
Periolat, Napoleon J., Chicago, Ill. Range	498,298	May 30	3092	771	63	1234
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Cycle-hub	494,076	Mar. 21	2122	541	62	1800
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Shaft-bearing cone	494,885	Apr. 4	573	144	63	111
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Tubular frame construction	500,941	July 4	628	165	64	115
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Dust-proof cycle-pedal	500,942	July 4	628	166	64	115
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Cycle-wheel	502,500	Aug. 1	424	100	64	645
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Cycle-brake construction	505,776	Sept. 26	2467	622	64	1773
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Cycle-wheel	506,858	Oct. 17	1798	451	65	366
Perkins, Amos H., assignor to Western Paving and Supply Company, Chicago, Ill. Apparatus for repairing asphalt pavements	501,536	July 18	1591	400	64	321
Perkins, Amos H., assignor to Western Paving and Supply Company, Chicago, Ill. Repairing asphalt pavements	501,537	July 18	1592	401	64	321
Perkins, Charles G. (See Fryer, Richard, assignor.)						
Perkins, Charles G., Hartford, Conn. Socket for incandescent electric lamps	504,743	Sept. 12	718	179	64	1419
Perkins, Charles H., et al. (See Soverhill, Charles W., assignor.)						
Perkins, Charles P., Brockton, Mass. Inseam-trimming machine	492,991	Mar. 7	346	87, 88	62	1427
Perkins Electric Switch Manufacturing Company. (See Gibbs, Jacob S., assignor.)						
Perkins, Francis B., Boston, Mass. Electric elevator	509,821	Nov. 28	3075	743	65	1381
Perkins, Frank A., assignor to himself and A. C. Quick, Providence, R. I. Braid-frame	506,130	Oct. 3	518	134	65	101
Perkins, Frank C., Dunkirk, N. Y. Inclosed conductor for electric railways	491,132	Feb. 7	104	29	62	769
Perkins, Fred B. (See Robison and Perkins.)						
Perkins, George F., Kenton, Ohio. Toy parachute	494,261	Mar. 28	2436	614	62	1873
Perkins, George L., Brooklyn, N. Y. Loose-pulley lubricator	492,831	Mar. 7	91	22	62	1375
Perkins, Hazen H., Kewanee, Ill. End-gate for wagons	496,793	May 2	639	171	63	733
Perkins, James E., Brownwood, Tex. Corn-harvester	506,541	Oct. 10	1291	323	65	259
Perkins, John D., Kenton, Ohio. Latch and lock	491,742	Feb. 14	1103	279	62	985
Perkins, John D., Kenton, Ohio. Lock and latch	511,454	Dec. 26	2793	676	65	1968
Perkins, John R., Milford, N. H. Thill-coupling	508,526	Nov. 14	907	222	65	941
Perkins, Joshua, Danielsonville, Conn. Checkrein attachment	493,515	Mar. 14	1171	299	62	1601
Perkins, Robert, Rockaway, N. J. Crank-shaft bracket for bicycles, &c	496,132	Apr. 25	2558	644	63	522
Perkins, Robert, Rockaway, N. J. Pneumatic wheel	509,940	Dec. 5	156	36	65	1438
Perkins, Rufus E., et al. (See Abbott, Leonard G., assignor.)						
Perkins, Samuel C., Ottawa, Canada. Sink-trap	495,998	Apr. 25	2353	594	63	483
Perkins, Theodore. (See Brown, Tristram D., assignor.)						
Perky, Henry D., and W. H. Ford, Watertown, N. Y., assignors to Cereal Machine Company, of Colorado. Machine for the preparation of cereals for food	502,378	Aug. 1	215	51	64	605
Perrault, Samuel J., et al. (See Ketteringham, John P., assignor.)						
Perronet, Theodore F., Rockport, Tex. Caisson-driver	494,886	Apr. 4	574	145	63	111
Perret, Frank A., Springfield, Mass., assignor to Elektron Manufacturing Company, of New York. Field-magnet	495,562	Apr. 18	1671	421	63	347
Perret, Frank A., Brooklyn, N. Y., assignor to Elektron Manufacturing Company, of New York. Electric elevator	510,932	Dec. 19	1904	466	65	1791
Perrigo, Oscar E. (See Whiteley and Perrigo.)						
Perrigo, Oscar E., assignor to New Haven Manufacturing Company, New Haven, Conn. Engine-lathe	494,383	Mar. 28	2632	661	62	1910
Perrigo, Oscar E., assignor to New Haven Manufacturing Company, New Haven, Conn. Engine-lathe	499,929	June 20	1976	480	63	1763
Perrin, Charles, Dayton, Ohio. Harrow	503,675	Aug. 22	2386	595	64	1045
Perrin, Charles, Dayton, Ohio, assignor to C. La Dow, Albany, N. Y. Harrow	502,692	Aug. 1	758	183	64	705
Perrin, Frederic S., New York, N. Y., assignor to American Telephone and Telegraph Company, of New York. Visible signal	506,883	Oct. 17	1846	461	65	375
Perrin, Frederick S., Lynn, Mass. Electric-railway system	500,943	July 4	630	166	64	115
Perrine, John V. (See Credlebaugh, Henry S., assignor.)						
Perrody, Esprit, Geneva, Switzerland. Railway	505,478	Sept. 26	1916	493, 494	64	1671

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Perrôté, Eugène, Sandwich, Mass. Car-coupling.....	501,577	July 18	1658	414	64	334
Perry, Alonzo H., Louisville, Ky. Air-tight cover for vessels.....	497,057	May 9	1074	275	63	830
Perry, Alvy G., Coldwater, Miss. Cultivator.....	495,365	Apr. 11	1354	339	63	268
Perry, Dyer W., Keene, N. H. Identification receptacle-badge.....	507,036	Oct. 17	2093	518	65	421
Perry, E. E., <i>et al.</i> (See Schenerecker, Joseph, assignor.)						
Perry, Edward L., Paterson, N. J. Vestibule for cars.....	503,160	Aug. 15	1552	380	64	879
Perry, Edward L., Paterson, N. J. Hollow rubber article.....	504,612	Sept. 5	485	124	64	1360
Perry, Enoch W., Jr., New York, N. Y., assignor of one-half to E. Kipper, Adams, Mass. Photographic camera.....	492,696	Feb. 28	2606	645	62	1317
Perry, Erastus B., Gilman, Iowa. Coupling device for vehicle-eveners.....	506,250	Oct. 10	729	195	65	161
Perry, George H., Franklin, Tenn. Thill-coupling.....	502,989	Aug. 8	1275	312	64	814
Perry, George W., Peoria, Ill. Grain-car door.....	509,941	Dec. 5	158	37	65	1439
Perry, Giles O. (See McGregor and Perry.)						
Perry, Howard E., Chicago, Ill. Optical illusion.....	500,607	July 4	114	30, 31	64	22
Perry, James L., assignor to J. L. Perry Machine Company, Chicago, Ill. Wood-polishing machine.....	496,204	Apr. 25	2661	668	63	541
Perry, John. (See Ayrton and Perry.)						
Perry, John, London, England. Electric meter.....	509,095	Nov. 21	1838	450	65	1134
Perry, John F., Chicago, Ill. Quoin.....	502,990	Aug. 8	1276	312	64	814
Perry, John G., Wakefield, R. I. Nut-lock and bolt-tightener.....	491,718	Feb. 14	1069	270	62	979
Perry, Judson D., Detroit, Mich. Potato-digger.....	506,069	Oct. 3	419	110	65	81
Perry, Louis A., Middleborough, Mass. Spreader and canopy-support for hammocks.....	495,366	Apr. 11	1355	339	63	268
Perry, Nelson W., assignor of one-fourth to T. T. Gaff, Cincinnati, Ohio. Electric-distribution system for railways.....	496,533	May 2	219	58	63	658
Perry, Samuel R., Scranton, Pa. Piano-action.....	498,814	June 6	111	29	63	1411
Perry, Samuel R., Scranton, Pa. Piano-action.....	498,815	June 6	113	29	63	1411
Perry, Thomas O., Chicago, Ill. Windmill.....	492,104	Feb. 21	1659	413	62	1110
Perry, Thomas O., Chicago, Ill. Windmill.....	495,510	Apr. 18	1591	400	63	332
Perry, Thomas O., Chicago, Ill. Device for compressing air.....	492,989	June 6	425	99	63	1466
Perry, Thomas O., Chicago, Ill. Windmill-governing mechanism.....	499,394	June 13	1085	263	63	1594
Perry, Thomas O., Chicago, Ill. Windmill.....	499,395	June 13	1089	264	63	1595
Perry, Thomas O., Chicago, Ill. Windmill.....	502,526	Aug. 1	473	114	64	653
Persil, Eugène J. L., Paris, France. Vehicle-wheel.....	500,293	June 27	2575	629	63	1820
Persson, Otto F., Lynn, assignor of one-half to H. C. Schelin, Boston, Mass. Electric cut-out.....	499,930	June 20	1977	480	63	1763
Persson, Otto F., Saugus, assignor of one-half to H. C. Schelin, Boston, Mass. Pneumatic wheel-tire.....	503,565	Aug. 15	2196	548	64	995
Pertz, John W., Kokomo, Ind. Radiator.....	511,027	Dec. 19	2056	509	65	1818
Peschong, Peter, Alton, Iowa. Fire-lighter.....	502,136	July 25	2554	640	64	511
Petch, Arthur J., Aurora, Canada. Plow attachment.....	499,577	June 13	1400	334	63	1649
Petchaft, Bernard, New York, N. Y. Suspender-end.....	496,095	Apr. 25	2508	633	63	513
Peters, Edwin R. (See Peters, George B. and E. R.)						
Peters, Elijah, <i>et al.</i> (See Whiteley, Albert M., assignor.)						
Peters, George B. and E. R., Emporia, Kans. Manual recorder.....	506,720	Oct. 17	1571	392 393 394	65	324
Peters, George M., and H. K. Forbis, assignors to Columbus Buggy Company, Columbus, Ohio. Antirattler for thill-couplings.....	497,988	May 23	2583	646	63	1130
Peters, Henry. (See Chauncey, Charles T., assignor.)						
Peters, James H., Stowers, Ky. Corn-planter.....	497,339	May 16	1551	390 391	63	930
Peters, John. (See Gandee and Peters.)						
Peters, Otto. (See Fischer and Peters.)						
Peters, Robert D., assignor of one-half to C. L. Wait, Winamac, Ind. Railway block-signal.....	494,077	Mar. 21	2123	542	62	1801
Petersen, Christian. (See Welch, Travers, and Petersen.)						
Petersen, Edward A. C., Chicago, Ill. Baker's-oven door.....	503,872	Aug. 22	2677	671	64	1102
Petersen, Ernst H. L., Hamburg, Germany. Signaling-lantern for vessels, &c.....	508,972	Nov. 21	1625	399	65	1094
Peterson, Alexander, Berlin, Germany. Perforated sheet or plate for musical instruments.....	489,568	Jan. 10	912	238	62	206
Peterson, Andrew, Cleveland, Ohio. Apparatus for indicating the position of tows.....	493,113	Mar. 7	531	133	62	1464
Peterson, Carl, Brooklyn, N. Y. Trolley-wire support.....	499,143	June 6	669	161	63	1507
Peterson, Charles J., Milwaukee, Wis. Lid-holder.....	498,569	May 30	3531	873	63	1312
Peterson, Edward C. (See Watt and Peterson.)						
Peterson, Frank. (See Larsson, Johan, assignor.)						
Peterson, Frank, Chicago, Ill. Taper-gage.....	501,807	July 18	2038	502	64	399
Peterson, Godfrey P., and S. U. Stewart, Chicago, Ill. Map-case.....	490,884	Jan. 31	3050	783	62	672
Peterson, John H., Portland, Oreg. Sawing-machine.....	494,887	Apr. 4	576	145	63	112
Peterson, Karl. (See Holmes and Peterson.)						
Peterson, Lars P., Hooper, Nebr. Staple.....	506,721	Oct. 17	1575	395	65	325
Peterson, Lewis, San Rafael, assignor to Western Clock Advertising Company, San Francisco, Cal. Advertising-clock.....	499,931	June 20	1978	480	63	1764
Peterson, Ole, Hinsdale, Ill. Paper trimming and pasting machine.....	491,586	Feb. 14	858	217 218	62	935
Peterson, Peter K., Beloit, Wis. Stovepipe-rack.....	503,216	Aug. 15	1643	403	64	896
Peterson, Victor O. (See Bexell and Peterson.)						
Peterson, William, Sheboygan, Wis. Calcining machine.....	489,828	Jan. 10	1287	337	62	232
Petraeus, Carl V., assignor to O. H. Picher, Joplin, Mo. Making sublimated lead pigment.....	492,832	Mar. 7	92	22	62	1376
Petraeus, Carl V., assignor to O. H. Picher, Joplin, Mo. Manufacturing oxide-of-zinc pigments.....	496,205	Apr. 25	2662	669	63	541
Petrie, David, Philadelphia, Pa. Gag-martingale.....	499,578	June 13	1402	334	63	1649
Petrini, Edward, Upsala, Sweden. Velocipede-saddle.....	493,338	Mar. 14	897	230	62	1549
Petsch, Frank, assignor to Binsse & Hauschild, Newark, N. J. Work-holder for clamping devices.....	494,722	Apr. 4	305	77	63	62
Petsche, Gustav B. (See Good and Petsche.)						
Pettepher, Frank, Marshfield, assignor of one-fourth to G. Straight, Eau Claire, Wis. Axle-lubricator.....	503,124	Sept. 19	1350	348	64	1552
Pettersch, Ferdinand, Grand Rapids, Mich. Parlor game.....	501,844	July 18	2084	515	64	408
Petterson, Alfred, Baltimore, Md. Roller-bearing.....	491,585	Feb. 14	855	217	62	935
Pettersons, August, Eskilstuna, Sweden, assignor to H. Johnson, Duluth, Minn. Musical instrument.....	494,025	Mar. 21	2040	520	62	1725
Pettet, Robert S. (See Wiegand, S. Lloyd, assignor.)						
Petticrew, Algernon S., St. Louis, Mo. Automatic receding sawmill-networks.....	502,316	Aug. 1	102	24	64	584
Pettie, Charles A., assignor to E. C. Pettie, Brooklyn, N. Y. Combined collar and hames.....	497,386	May 16	1622	410	63	943

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Pettie, Emma C. (See Pettie, Charles A., assignor.)						
Pettijohn California Breakfast Food Company. (See Shamp, Henry B., assignor.)						
Pettit, David, Beverly, N. J., and J. R. Congdon, assignors to Common Sense Bicycle Manufacturing Company, Philadelphia, Pa. Ball-bearing for vehicles	494,384	Mar. 28	2634	661	62	1910
Pettitt, Elihu R., Philadelphia, Pa. Dental bracket	502,933	Aug. 8	1176	290	64	797
Pettitt, Horace, <i>et al.</i> (See Geise, Henry, assignor.)						
Petty, John, San Diego, Cal. Plumb-level	506,934	Oct. 17	1932	478	65	391
Petty, Jacob A. (See Klahr, Petty, and Foy.)						
Petty, William S., Spartanburg, S. C. Rotary engine	508,555	Nov. 14	948	233	65	950
Petway, Robert G., White Bluffs, Tenn. Vehicle-hub	495,367	Apr. 11	1356	339	63	269
Petway, Thomas W., and W. L. Mullins, White Bluffs, Tenn. Coffee-roaster	504,424	Sept. 5	3094	771	63	1335
Pevay, Charles K., Worcester, Mass. Corset-stiffener	498,299	May 30				
	494,078	Mar. 21	2125	542	62	1801
				543		
Peyton, William G., Red Springs, N. C. Sawmill attachment	499,246	June 13	828	197	63	1549
Pezzar, Oscar de, Paris, France. Surgical catheter	504,424	Sept. 5	186	48	64	1305
Pezzar, Oscar de, Paris, France. Catheter	504,744	Sept. 12	719	179	64	1419
Pfaff, Henry. (See Steinbarth, Carl, assignor.)						
Pfaff, Rudolf H., and F. K. Lewis, Ashtabula, Ohio. Covering bow-sockets	505,278	Sept. 19	1590	414	64	1596
Pfanne, Heinrich, Rixdorf, near Berlin, Germany. Manufacturing varnish and apparatus therefor	501,578	July 18	1659	415	64	334
Pfannkuche, Alfred. (See Pfannkuche, Gustav and A.)						
Pfannkuche, Gustav, Exeter, N. H., and A. Pfannkuche, assignors to Brush Electric Company, Cleveland, Ohio. Electric converter	499,852	June 20	1853	451	63	1742
Pfarr, Adolph. (See Niethammer and Pfarr.)						
Pfatscher, Mathias, assignor to Accumulator Company, Philadelphia, Pa. Apparatus for transferring secondary batteries	493,221	Mar. 7	693	177 178	62	1494
Pfautz, Daniel M., Philadelphia, Pa., assignor to Compound Spring Power Company, Camden, N. J. Spring-propelled vehicle	490,983	Jan. 31	3220	823	62	704
Pfefferkorn, Wilhelm, Johnstown, Pa., assignor, by mesne assignments, to Johnson Company, of Pennsylvania. Railway tie-plate	510,047	Dec. 5	349	78	65	1475
Pfeifer, Edmund I. and E. A., Austin, Tex. Chain-steamer	491,492	Feb. 7	701	178	52	883
Pfeifer, Edward A. (See Pfeifer, Edmund I. and E. A.)						
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Cash-register	491,587	Feb. 14	860	218 219	62	936
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Manual recorder	491,784	Feb. 14	1171	293 294	62	997
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	496,534	May 2	222	58, 59	63	659
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	496,535	May 2	228	60, 61	63	660
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	496,894	May 9	825	219 220	63	786
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Combined autographic register and cash-drawer	498,485	May 30	3380	842	63	1287
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register and cash-drawer	498,486	May 30	3383	843	63	1287
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Cash register, indicator, recorder, and check-printer	502,317	Aug. 1	103	24 25 26	64	585
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register and manipulating and storing the record-strip therein	506,131	Oct. 3	518	134 135	65	101
Pfeiffer, George E., Lyndhurst, N. J. Attachment for velocipedes	495,511	Apr. 18	1593	400	63	333
Pfeil, Grace, St. Louis, Mo. Stew-pan cover	496,278	Apr. 25	2781	696	63	564
Pfeil, Robert, assignor to Siemens & Halske, Berlin, Germany. Railway signaling apparatus	501,100	July 11	908	232 233	64	180
Pfenigar, Frank J., Bay City, Mich. Hand-wheel for car-brakes	509,448	Nov. 28	2476	507	65	1267
Pfenning, Carl A., Barmen, Germany. Glove-fastening	493,559	Mar. 14	1261	323	62	1619
Pfenning, Carl A., Barmen, Germany. Mustard-pot	500,035	June 20	2136	518	63	1791
Pfenning, Carl A., Barmen, Germany. Glove-fastening	507,927	Oct. 31	3624	896	65	731
Pfenning, Carl A., Barmen, Germany. Glove-fastening	507,928	Oct. 31	3625	896	65	731
Pfetsch, John. (See Sackett and Pfetsch.)						
Pfingst, Louis, Boston, Mass. Fender for street-cars	494,659	Apr. 4	254	64, 65	63	51
Pfingst, Louis, Boston, Mass. Street-car sign	503,552	Aug. 15	2176	543	64	991
Pfingsten, Carl G., New York, N. Y. Frame for pocket-books	502,137	July 25	2556	640	64	511
Pfitzinger, William, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Dyeing black	501,160	July 11	1010		64	198
Pfanz, John R., Louisville, Ky. Railway-crossing	492,328	Feb. 21	1865	466	62	1153
Pfeger, Johannes, Frankfort-on-the-Main, Germany. Extracting zinc by electrolysis	495,637	Apr. 18	1793		63	367
Pfeighar, Frank P., assignor to English & Mersick, New Haven, Conn. Brake-lever	503,385	Aug. 15	1917	475	64	945
Pfeiderer, Paul, London, England, and H. Werner, Cannstadt, Germany. Baking-oven	505,175	Sept. 19	1430	368	64	1565
Pfneger, Ernest F., Akron, Ohio. Trolling-spoon	501,436	July 11	1442	361	64	277
Pfing, Ludwig, Kiel, Germany. Ship's paint	496,895	May 9	829		63	787
Pfnger, Charles A., Chicago, Ill. Hanging device for electric-arc lamps	500,421	June 27	2781	685	63	1916
Pfnger, Charles A., Chicago, Ill. Electric-arc lamp	500,422	June 27	2782	685	63	1916
Pfnger, Charles A., Chicago, Ill. Double-pole switch	500,423	June 27	2783	686	63	1917
Pfingh, Albert, <i>et al.</i> (See Butler, William H., assignor.)						
Pfohl, Archie C., Washington, Ind. Ironing-board	511,250	Dec. 19	2423	590	65	1888
Pfouts, Leroy S., Canton, Ohio. Dental engine	510,484	Dec. 12	1060	255	65	1625
Pfouts, Leroy S., Canton, Ohio. Trolley-wire support	510,485	Dec. 12	1062	255	65	1626
Pfouts, Leroy S., and L. D. Ball, Canton, Ohio; said Pfouts assignor to G. Humphries. Boot or shoe sole	498,942	June 6	340	81	63	1452
Pharis, Charles S., <i>et al.</i> (See Van Wormer, Chauncey E., assignor.)						
Phegley, James, Harrisburg, Oreg. Churn	492,945	Mar. 7	274	70	62	1413
Phell, Abram C. (See Reid and Phell.)						
Phelan, John T., New London, Mo. Hedge-trimmer	508,749	Nov. 14	1237	308	65	1007
Phelps, Charles, Oskaloosa, Iowa. Steam or hot-water heater	506,859	Oct. 17	1799	452	65	366
Phelps, Charles, Oskaloosa, Iowa. Feeding air to furnaces	507,037	Oct. 17	2094	518	65	421
Phelps & Dingle Manufacturing Company. (See Phelps, Lucius J., assignor.)						
Phelps, Edward P., Scranton, Iowa. Car-window	504,170	Aug. 29	3172	791	64	1212
Phelps, Edwin S., Leavenworth, Kans. Time-lock. (Reissue)	11,355	Aug. 8	1464	360	64	849
Phelps, George L., Sycamore, assignor to McCormick Harvesting Machine Company, Chicago, Ill. Twine-binder	494,708	Apr. 4	284	72, 73	63	57
Phelps, George L., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder	496,096	Apr. 25	2508	633 634	63	513

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Phelps, George L., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder.....	500,608	July 4	118	31, 32	64	23
Phelps, Homer L. (See Palmer and Phelps.)						
Phelps, James R., San Francisco, Cal. Parlor-game.....	497,726	May 16	2159	540	63	1039
Phelps, John A., et al. (See Smith, George, assignor.)						
Phelps, John M., et al. (See Stevens, Alfred L., assignor.)						
Phelps, Lucius J., assignor to Phelps & Dingle Manufacturing Company, Passaic, N. J. Pneumatic tire.....	499,174	June 6	727	173	63	1516
Phelps, Smith P., assignor of one-half to E. O. McGowan, Greenville, N. C. Tobacco-curing furnace.....	498,858	June 6	190	46, 47	63	1426
Phelps, Walter J., Baltimore, Md. Blank for the manufacture of tin cans.....	495,706	Apr. 18	1909	481	63	385
Philadelphia Textile Machinery Company. (See Proctor, Josiah K., assignor.)						
Philadelphia Textile Machinery Company. (See Sykes, Walter T., assignor.)						
Philbrick, George E. (See McKinley, Franklin W., assignor.)						
Philbrick, Orris P., Somerville, Mass. Automatic regulator for dynamo-electric machines.....	505,207	Sept. 19	1480	386 } 387 }	64	1575
Philbrick, Stephen W., Woburn, Mass. Presser-foot for sewing-machines.....	494,224	Mar. 23	2378	600	62	1863
Philbrook, Emmeline W., Boston, Mass. Underwaist.....	503,436	Aug. 15	1987	493	64	957
Phillion, George, Mishawaka, Ind. Friction-clutch.....	498,300	May 30	3095	771	61	1235
Philipp, Henry, Baltimore, Md. Milk-can.....	502,025	July 25	2480	623	64	496
Philippot, Charles, Newark, N. J. Cooking utensil.....	504,243	Aug. 29	3294	822	64	1234
Philipps, John. (See Stone and Philipps.)						
Philps, Hattie L., Wisner, Mich. Top-prop for carriages.....	502,138	July 25	2557	641	64	511
Philips, James W., Pocatello, Idaho. Gate-latch.....	504,050	Aug. 29	2975	744	64	1174
Philipsborn, Alexander, assignor to Siemens & Halske, Berlin, Germany. Electric locomotive.....	493,942	Mar. 21	1890	481 } 482 }	62	1757
Philipsborn, Alexander, assignor to Siemens & Halske, Berlin, Germany. Electric locomotive.....	493,943	Mar. 21	1893	482 } 483 }	62	1758
Philipsborn, Alexander, and M. Schiemann, assignors to Siemens & Halske, Berlin, Germany. Electric locomotive.....	490,307	Jan. 24	2123	552	62	475
Phillips, Ambrose A., and R. A. Wallace, Chicago, Ill. Gas-stove.....	509,583	Nov. 28	2696	652	65	1309
Phillips, Andrew G., San Francisco, Cal. Saw-filer.....	494,487	Mar. 28	2785	699	62	1937
Phillips, Anna B. S., Salina, Kans. Abdominal supporter.....	500,609	July 4	121	32	64	24
Phillips, Anna B. S., Salina, Kans. Combined shawl-strap and traveling-companion.....	503,355	Aug. 15	1871	463	64	936
Phillips, Arthur J. (See Hutt and Phillips.)						
Phillips, Arthur J., et al. (See Chavassa, James J., assignor.)						
Phillips, Austin. (See McLaughlin and Phillips.)						
Phillips, Austin, and W. D. McLaughlin, Corunna, Mich. Low-water alarm.....	489,497	Jan. 10	811	213	62	185
Phillips, Benjamin E. (See Manuel, David, assignor.)						
Phillips, Bradley H., Fredonia, N. Y. Adding-machine.....	497,058	May 9	1075	276 } 277 }	63	830
Phillips, Charles, assignor of one-half to H. S. Durand, Rochester, N. Y. Pedal-motor. (Reissue).....	11,331	May 9	1466	369	63	899
Phillips, Charles F. (See McClure and Phillips.)						
Phillips, Charles O., Kalamazoo, Mich. Coffin-fastener.....	498,301	May 30	3096	772	63	1235
Phillips, Charles W., assignor to C. M. Cook and G. D. Rand, Keokuk, Iowa. Bridle-bit.....	493,339	Mar. 14	893	230	62	1549
Phillips, Cornelius J., New York, N. Y. Expansible bolt-fastening device.....	494,745	Apr. 4	346	88	63	66
Phillips, David E., Mahanoy City, Pa., assignor to Clinton Wire Cloth Company, Clinton, Mass. Revolvable screen.....	500,508	June 27	2907	714	63	1939
Phillips, Don C. (See Biegel and Phillips.)						
Phillips, Dunkin S., Florence, Ala. Animal-stall.....	502,829	Aug. 8	1000	243	64	765
Phillips, Edward J., and J. A. Linhard, Baltimore, Md. Cigar-pipe.....	502,992	Aug. 8	1278	312	64	815
Phillips, Elizabeth, London, England. Bed-pan or commode.....	494,079	Mar. 21	2127	543	62	1801
Phillips, Elwood C., assignor of two-thirds to A. J. Stone and W. W. Carland, Chicago, Ill. Folding umbrella.....	492,048	Feb. 21	1577	392 } 393 }	62	1093
Phillips, Elwood C., Chicago, Ill., assignor, by mesne assignments, to Columbus Cane Company. Cane stool.....	498,487	May 30	3386	843	63	1288
Phillips, Franklin, Newark, N. J. Governor for steam-engines.....	494,746	Apr. 4	347	88, 89	63	69
Phillips, Franklin, Newark, N. J. Valve for engines.....	500,271	June 27	2543	622	63	1875
Phillips, Fred B., Canaseraga, N. Y. Device for preventing noise in hot-water tanks.....	505,722	Sept. 26	2380	601	64	1756
Phillips, Frederick K. (See Brothwell and Phillips.)						
Phillips, Harry. (See Phillips, James S. and H.)						
Phillips, Harry L. (See Phillips, James S. and H. L.)						
Phillips, Isaac S. (See Oliver and Phillips.)						
Phillips, Jacob P., Yantley Creek, Ala. Hoe-handle.....	505,252	Sept. 19	1544	402	64	1587
Phillips, James M., assignor of one-third to S. P. Langsford, R. G. and J. F. Phillips, Waxahachie, Tex. Copy-holder.....	502,991	Aug. 8	1277	312	64	815
Phillips, James S. and H. Hopedale, Ill. Wire-fencing machine.....	510,704	Dec. 12	1464	362	65	1698
Phillips, James S. and H. L., Hopedale, Ill. End-gate for wagons.....	499,579	June 13	1402	335	63	1649
Phillips, Jesse W., Rose Creek, Minn. Reversing valve-gear.....	510,988	Dec. 19	2006	495	65	1809
Phillips, John K., South Orange, N. J. Combined stool and foot-rest.....	498,081	May 23	2723	681	63	1154
Phillips, John M., Baldwin, Pa. Latch for dumping-car doors.....	507,721	Oct. 31	3288	804	65	669
Phillips, Jonathan F., et al. (See Phillips, James M., assignor.)						
Phillips, Joseph, and J. Deurlam, Buffalo, N. Y. Combined bush and bung.....	499,932	June 20	1979	481	63	1764
Phillips, Leroy M. (See Mattison and Phillips.)						
Phillips, Ralph M., Watts Flats, N. Y. Seed-planter.....	494,592	Apr. 4	107	25	63	22
Phillips, Robert G., et al. (See Phillips, James M., assignor.)						
Phillips, Simeon G., Woodbridge, N. J. Shaft-bearing.....	504,049	Aug. 29	2973	743	64	1174
Phillips, Stephen P., Philadelphia, Pa. Whip-lock.....	499,933	June 20	1980	481	63	1764
Phillips, William A., U. S. Army. Type-writing machine.....	498,691	May 30	3745	924 } 925 }	63	1349
Phillips, William A., U. S. Army, assignor of one-half to T. J. Porter, Miles City, Mont. Electric-arc lamp.....	504,277	Aug. 29	3348	837	64	1245
Phillips, William A., Fort Keogh, assignor of one-half to T. J. Porter, Miles City, Mont. Carpet-stretcher.....	510,361	Dec. 5	848	204	65	1571
Phillips, William B., Crocker, Mo. Running-gear for vehicles.....	489,688	Jan. 10	1077	280	62	239
Phillips, William P. (See Cooke and Phillips.)						
Phillips, William P., Somerville, Mass. Relief-valve.....	492,168	Feb. 21	1765	441	62	1133
Philp, Andrew. (See Pollard, John H., assignor.)						
Phinney, Alfred H., Williams, Iowa. Whip-rack.....	509,675	Nov. 23	2840	686	65	1337
Phinney, William F., Standish, Me., and H. H. Whitney, Centerville, Idaho. Washstand.....	507,442	Oct. 24	2811	688	65	567
Phoenix Fire Proof Paint Company. (See Graf, Robert R., assignor.)						
Phoenix Manufacturing Company. (See Emerson, Charles M., assignor.)						
Photo-Litho Transfer Company. (See Schmalz, François, assignor.)						
Photo Materials Company. (See Milburn, Gustave D., assignor.)						
Pia, Peter F., New York, N. Y. Construction of baskets, &c.....	497,205	May 9	1293	330	63	870

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Piat, Albert, Paris, France. Smelting-furnace. (Reissue).....	11,379	Nov. 7	679	166	65	884
Piatt, William M., Mac-o-Cheek, near West Liberty, Ohio. Grain-binder.....	510,989	Dec. 19	2007	{ 496 497 }	65	1809
Piatt, William M., assignor of one-third to B. S. Leonard, West Liberty, Ohio. Corn-harvester.....	497,967	May 23	2547	636	63	1123
Piatt, William M., assignor of one-third to B. S. Leonard, West Liberty, Ohio. Corn-harvester.....	501,101	July 11	910	{ 233 234 }	64	181
Picher, Oliver H. (See Petraeus, Carl V., assignor.).....	507,327	Oct. 24	2616	644	65	529
Pickard, Birtran L., Centralia, Wash. Motor.....	500,944	July 4	631	167	64	116
Pickel, Georg, Berlin, Germany. Pneumatic tire.....						
Pickel, Joseph W., et al. (See Smith, Emery B., assignor.).....	508,834	Nov. 14	1364	337	65	1029
Pickens, William D., Portland, Oreg. Game apparatus.....	498,919	June 6	302	69, 70	63	1446
Pickering, Barton, Dayton, Ohio. Telephone.....	511,358	Dec. 26	2619	637	65	1937
Pickering, Benjamin A., assignor of two-thirds to J. Shambow and P. J. Buxton, Woonsocket, R. I. Rubber boot.....	494,262	Mar. 28	2437	614	62	1873
Pickering, Benjamin A., assignor of two-thirds to J. Shambow and P. J. Buxton, Woonsocket, R. I. Making boots or shoes.....	497,527	May 16	1853	467	63	984
Pickering, John, New York, N. Y. Disinfecting device.....	492,631	Feb. 28	2511	622	62	1298
Pickernell, Frank A. (See Carty and Pickernell.).....						
Pickernell, Frank A. (See Hall and Pickernell.).....						
Pickernell, Frank A. (See Larned and Pickernell.).....						
Pickernell, Frank A., Newark, N. J. Two-station telephone-circuit.....	511,276	Dec. 19	2468	602	65	1896
Pickernell, Frank A., Newark, N. J., assignor to American Telephone and Telegraph Company, of New York. System of combined telephony and telegraphy.....	492,471	Feb. 28	2242	561	62	1243
Pickernell, Frank A., Newark, N. J., assignor to American Telephone and Telegraph Company, of New York. Telephone signaling apparatus and circuit.....	501,102	July 11	912	234	64	181
Pickernell, Frank A., Newark, N. J., assignor to American Telephone and Telegraph Company, of New York. Electric switchboard-signal.....	503,252	Aug. 15	1694	417	64	905
Pickernell, Frank A., Newark, N. J., assignor to American Telephone and Telegraph Company, of New York. Apparatus for suppressing telephone disturbing-currents.....	506,884	Oct. 17	1848	461	65	375
Pickernell, Frank A., Newark, N. J., and F. W. Dunbar, New York, N. Y., assignors to American Telephone and Telegraph Company, of New York. Telephone and signaling circuit.....	494,385	Mar. 28	2635	{ 661 662 }	62	1911
Pickett, Edward, Garland, Kans. Folding gate.....	508,750	Nov. 14	1238	308	65	1007
Pickhardt, Emile. (See Carpenter, Daniel A., assignor.).....						
Pickhardt, Emile, Islington, Mass. Dress-shield.....	495,512	Apr. 18	1594	401	63	333
Pickles, Charles K. (See O'Brien and Pickles.).....						
Pickles, Charles K., St. Louis, Mo. Street-roller.....	505,800	Sept. 26	2503	632	64	1780
Pickles, Charles K., assignor to D. P. Slattery, St. Louis, Mo. Brake-beam.....	492,747	Feb. 28	2683	666	62	1332
Pickles, Charles K., assignor to D. P. Slattery, St. Louis, Mo. Brake-beam.....	492,748	Feb. 28	2684	666	62	1332
Pickles, Charles K., assignor of two-thirds to J. O'Brien and S. J. Weaver, St. Louis, Mo. Clutch.....	491,444	Feb. 7	623	157	62	868
Pickles, Charles K., assignor to W. B. Knight & Co., St. Louis, Mo. Exercising apparatus.....	511,251	Dec. 19	2424	590	65	1888
Pickles, Frederick H., Fairfield, and R. H. Pickles, Marple, England. Purifying pyrolignites.....	490,497	Jan. 24	2424		62	534
Pickles, Robert H. (See Pickles, Frederick H. and R. H.).....						
Pictet, Raoul P., Berlin, Germany. Purifying chloroform.....	489,592	Jan. 10	947	247	62	212
Pidd, Thomas. (See Moehn, John N., assignor.).....						
Piddington, George, Caversham, New Zealand. Lock.....	499,580	June 13	1401	335	63	1649
Pieczka, August, Philadelphia, Pa. Pin-gage.....	499,035	June 6	510	120	63	1480
Piepenbring, Rudolph L., Washington, D. C. Railway-car.....	508,835	Nov. 14	1366	338	65	1050
Pieper, Henri, Jr., Liege, Belgium. Lamp-wick.....	504,501	Sept. 5	321	82	64	1329
Pieper, Henri, Fils, Liege, Belgium. Reciprocating electric motor.....	507,449	Oct. 24	2813	{ 688 689 }	65	567
Pieper, Herman H., assignor to G. F. Staats and T. Klein, St. Louis, Mo. Vehicle-spring.....	502,318	Aug. 1	111	26	64	586
Pieper, Oscar H., San José, Cal. Electrical apparatus for operating dental implements.....	510,048	Dec. 5	350	79	65	1476
Pieper, Vincenz T., assignor of two-thirds to J. H. Pahlman and E. Thurnan, Marine, Ill. Window.....	511,544	Dec. 26	2928	713	65	1994
Pierce, Charles E., Cambridge, Mass. All-metal seam for sheet-metal vessels.....	508,237	Nov. 7	424	102	65	837
Pierce, Edward A., et al. (See Campbell, John S., assignor.) (Reissue.).....						
Pierce, George C., et al. (See Erickson, Edward, assignor.).....						
Pierce, George N., et al. (See Newton, Oscar C., assignor.).....						
Pierce, James M., et al. (See McCain, Benjamin H., assignor.).....						
Pierce, Kent B., Manistee, Mich. Music-leaf turner.....	494,690	Apr. 4	255	65	63	51
Pierce, Robert, Jr., et al. (See Moe, George T., assignor.).....						
Pierce, Theodore S., St. Joseph, Mich., assignor to Michigan Sand Brick Company, Chicago, Ill., and Grand Rapids, Mich. Building-block and making same.....	509,822	Nov. 28	3077		65	1382
Pierce, Thomas J., Philadelphia, Pa. Insulated pipe joint or coupling.....	495,513	Apr. 18	1595	401	63	333
Pierce, Thomas M., Concord, Mass. Fireworks-torch.....	494,438	Mar. 28	2715	680	62	1925
Pierce, Thomas M., Concord, Mass. Fireworks-torch.....	494,439	Mar. 28	2716	680	62	1925
Pierce, Thomas M., Concord, Mass. Fireworks-torch.....	494,440	Mar. 28	2716	681	62	1925
Pierce, Thomas M., Concord, Mass. Fireworks-torch.....	494,488	Mar. 28	2787	699	62	1938
Pierce, Thomas M., Concord, Mass. Fire-balloon.....	498,692	May 30	3747	925	63	1350
Pierce, Thomas M., Concord, Mass. Cartridge implement.....	504,789	Sept. 12	793	200	64	1432
Pierce, Thomas M., Concord, Mass. Fireworks-torch.....	510,440	Dec. 12	987	236	65	1611
Pierce, Walter S., New York, N. Y. Calcining apparatus.....	505,956	Oct. 3	237	63	65	47
Pierce, Ward E., Pulaski, N. Y. Keg or tool rack.....	493,896	Mar. 21	1808	460	62	1741
Pierce, William C., Providence, R. I. Winding-machine.....	492,613	Feb. 28	2484	616	62	1292
Pierce, William H., Anderson, Ind. Steam or gas regulator.....	501,437	July 11	1443	361	64	278
Pierpoint, James, Pittsburg, Pa. Water-tube boiler.....	490,923	Jan. 31	3121	801	62	686
Pierpoint, James, Pittsburg, Pa. Water-tube boiler.....	492,556	Feb. 28	2392	594	62	1274
Pierpoint, James, Pittsburg, Pa. Water-tube boiler.....	492,557	Feb. 28	2392	594	62	1274
Pierpont, Wallace J., Galesburg, Ill. Strap for packing-boxes.....	506,337	Oct. 10	933	232	65	190
Pierson, Henry M., Brooklyn, N. Y. Apparatus for the manufacture of gas.....	500,424	June 27	2785	{ 586 587 }	63	1917
Pierson, Silas S., et al. (See Soverhill, Charles W., assignor.).....						
Piester, Harmon C., Petoskey, Mich. Latch.....	508,973	Nov. 21	1636	399	65	1094
Pietschmann, Ferdinand, Berlin, Germany. Mechanical musical instrument.....	491,223	Feb. 7	262	65, 66	62	798
Piffard, Nina H., Piffard, N. Y. Sewing machine needle.....	497,926	May 23	2487	621	63	1113
Pifre, Abel, Paris, France. Elevator.....	500,241	June 27	2500	611	63	1867
Pigraus, Charles R., Racine, Wis. Electric signal device.....	504,745	Sept. 12	720	180	64	1419
Piggins, Harry S., Milwaukee, Wis. Hook.....	502,529	Aug. 1	475	114	64	654
Pigman, James R., et al. (See Gage, James L., assignor.).....						
Pigott, Michael A., Hamilton, Canada. Stone-cutting machine.....	490,721	Jan. 31	2795	717	62	622

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Pigott, Ralph, Straits, N. C. Centerboard	498,082	May 23	2724	681	63	1154
Pihl, Karl J., and O. W. Hult, Brooklyn, N. Y. Car-starter	494,026	Mar. 21	2011	520	62	1786
Pike, Charles F. (See Cheney, Henry O., assignor.)						
Pike, Charles F. (See Morford and Pike.)						
Pike, Charles F., assignor to W. A. Pike, trustee, Philadelphia, Pa. Ore washer and concentrator. (Reissue)	11,377	Oct. 24	2942	{ 721 722 }	{ 65 65 }	{ 590 548 }
Pike, Edwin B., Haverhill, N. H. Saw-jointer	507,386	Oct. 24	2713	666	65	548
Pike, Grant S. (See Pike, Orville S. and G. S.)						
Pike, Joseph H., Ypsilanti, Mich. Equestrienne tights	504,402	Sept. 5	142	37, 38	64	1297
Pike, Louis E. (See Morford and Pike.)						
Pike, Orville S. and G. S., Greensburg, Pa. Fence-wire tension device	504,051	Aug. 29	2976	744	64	1174
Pike, William A., trustee. (See Pike, Charles F., assignor.) (Reissue.)						
Pike, William L., Groton, N. Y. Vehicle-pole	497,387	May 16	1623	410	63	943
Pike, William L., Groton, N. Y. Wrench	510,441	Dec. 12	988	236	65	1611
Pilbeam, George, assignor to Gordon Hotels, Limited, London, England. Detachable button-cover	502,201	July 25	2666	673	64	532
Pilchau, Georges P. de, St. Petersburg, Russia. Melograph or music-recording attachment for pianos	507,840	Oct. 31	3491	{ 858 859 860 }	{ 65 65 65 }	{ 706 706 706 }
Pilcher, George M., Logansport, Ind. Brace	503,437	Aug. 15	1988	493	64	957
Pilcher, John V., Louisville, Ky. Cuff-holder	492,968	Mar. 7	311	79	62	1421
Pilcher, John V., Louisville, Ky. Organ stop-action	497,206	May 9	1294	330	63	870
Pilcher, John V., Louisville, Ky. Pneumatic organ-action	498,362	May 30	3197	796	63	1252
Pilcher, John V., Louisville, Ky. Cuff-holder	502,581	Aug. 1	538	133	64	668
Pilcher, Robert E., Louisville, Ky. Church-organ	494,593	Apr. 4	108	26	63	23
Pilkington, Thomas, San Francisco, Cal. Stamp-stem guide	510,990	Dec. 19	2012	497	65	1809
Pilling, Charles J., Philadelphia, and A. J. McKee, Moore, Pa. Hypodermic syringe	509,676	Nov. 28	2841	686	65	1337
Pilling, George P., Philadelphia, Pa. Skewer-puller	507,450	Oct. 24	2815	689	65	567
Pinault, Marie J., Boston, Mass. Face-mask for treating the skin	495,265	Apr. 11	1199	300	63	240
Pincus, Walter, Philadelphia, Pa. Cigar-box	499,645	June 13	1504	361	63	1667
Pindar, James H., et al. (See Ring, John H., assignor.)						
Pine, Leighton, South Bend, Ind. Drying-kiln	489,717	Jan. 10	1123	290	62	248
Pine, Norton H., Eureka, Cal. Rope-leader for winding-drums	490,984	Jan. 31	3222	824	62	704
Pine, Norton H., Eureka, Cal. Rope-leader for winding-drums	499,934	June 20	1981	481	63	1764
Pink, Thomas, London, England. Cash-recorder and check-printer	499,309	June 13	927	{ 224 225 }	{ 63 63 }	{ 1566 1566 }
Pinkham, Delmar D., and F. E. Lewis, Longview, Tex. Lamp	505,326	Sept. 19	1669	430	64	1610
Pinkham, Edward H., Haverhill, Mass. Sanding device for cars	494,080	Mar. 21	2128	544	62	1801
Pinkney, Charles W., Smethwick, assignor to Tangyes, Limited, Soho, England. Gas-engine	499,935	June 20	1982	{ 481 482 }	{ 63 63 }	{ 1764 1764 }
Pinkney, Charles W., Smethwick, assignor of two-thirds to G. Tangye and G. H. Haswell, Birmingham, England. Apparatus for governing gas, steam, or other motive power engines	504,613	Sept. 5	485	{ 124 125 }	{ 64 64 }	{ 1361 1361 }
Pinkney, Charles W., Smethwick, assignor of two-thirds to G. Tangye and G. H. Haswell, Birmingham, England. Gas-engine	504,614	Sept. 5	487	125	64	1361
Pinkney, Charles W., Smethwick, assignor of two-thirds to G. Tangye and G. H. Haswell, Birmingham, England. Gas-engine	505,327	Sept. 19	1670	431	64	1610
Pinkney, Charles W., Smethwick, assignor of two-thirds to G. Tangye and G. H. Haswell, Birmingham, England. Gas-engine	511,158	Dec. 19	2275	557	65	1861
Pinkston, Lucien A., assignor of one-half to F. S. Brooks, Corsicana, Tex. Air-brake	501,359	July 11	1326	{ 331 332 333 }	{ 64 64 64 }	{ 254 254 254 }
Pioneer Thresher Company. (See Wilson, James N., assignor.)						
Piontkowski, Gustav v. (See Sczenziowski and Piontkowski.)						
Piper, Charles E., assignor of one-half to A. L. Sargent, Lakeport, N. H. Sprinkler	499,144	June 6	671	161	63	1508
Piper, Charles E., assignor of one-half to L. M. Gould, Lakeport, N. H. Carpet-fastener	510,089	Dec. 5	418	93	65	1489
Piper, Edmund J., et al. (See MacRae, Charles J., assignor.)						
Piper, Edward E., and G. H. Davis, Portland, Me. Curtain-holding device	491,588	Feb. 14	868	220	62	937
Piper, Edward S., Toronto, Canada. Railway signal-flag	492,229	Feb. 21	1466	466	62	1153
Piper, Gustav A., Sheboygan, Wis. Mechanical motor	495,364	Apr. 11	1757	340	63	269
Piper, John S., Winters, Tex. Wagon attachment	492,049	Feb. 21	1579	393	62	1094
Piper, Robert, Toledo, Ohio. Folding bed	493,043	Mar. 7	426	107	62	1443
Piper, Samuel A., Newton, Mass. Centering-tool	506,722	Oct. 17	1576	395	65	325
Pipes, Joseph, Arcadia, La. Combined planter and fertilizer-distributor	502,739	Aug. 1	216	51	64	605
Pipes, Joseph, Arcadia, La. Combined planter and fertilizer-distributor	506,251	Oct. 10	790	195	65	162
Pirch, August, Los Angeles, Cal. Reversible plow	499,853	June 20	1859	{ 451 452 }	{ 63 63 }	{ 1742 1742 }
Pirrie, William J. (See Wilson and Pirrie.)						
Pisko, Emanuel, assignor of five-eighths to J. Seidenberg and F. A. Schleiff, Jr., New York, N. Y. Cigar-bunching machine	503,293	Aug. 15	1763	{ 436 437 438 }	{ 64 64 64 }	{ 917 917 917 }
Pitceathly, David, Fenelon Falls, Canada. Reversing-gear	490,308	Jan. 24	2125	{ 552 553 554 }	{ 62 62 62 }	{ 476 476 476 }
Pitcher, Henry A., Neillsville, Wis. Magazine bolt-gun	501,192	July 11	1051	{ 267 268 269 }	{ 64 64 64 }	{ 206 206 206 }
Pitkin, Albert J., Schenectady, N. Y. Throttle-valve	493,836	Mar. 21	1715	437	62	1724
Pitkin, Irving L. (See French, Lafayette, assignor.)						
Pitman, Aaron, Matawan, N. J. Glass-blowing tube	503,676	Aug. 22	2388	596	61	1045
Pitman, James H., Neola, Iowa. Cistern-filter	506,723	Oct. 17	1577	395	65	325
Pitman Manufacturing Company. (See Huse, Leon C., assignor.)						
Pitner, Henry B., Princeton, Ill. Upholstering device	511,649	Dec. 26	3098	756	65	2024
Pitt, Walter H., and G. Sittmann, Brooklyn, N. Y. Card-exhibiting machine	489,262	Jan. 3	436	121	62	96
Pitt, William R., New Rochelle, N. Y. Folding gate	494,823	Apr. 4	480	121	63	92
Pitt, William R., New Rochelle, N. Y. Folding gate	494,824	Apr. 4	481	{ 121 122 }	{ 63 63 }	{ 93 93 }
Pittler, Wilhelm von, Leipzig-Gohlis, Germany. Turning-lathe	507,283	Oct. 24	2539	625	65	512
Pittman, Edward F., Cantril, Iowa. Device for applying wires to fence-posts	510,933	Dec. 19	1906	466	65	1791
Pittman, Fred R. (See Johansen, Rudolph L., assignor.)						
Pittman, Harrison, Industry, Ill. Cloth-line holder	510,991	Dec. 19	2013	497	65	1810
Pittman, Harrison L., assignor to himself and J. E. Vail, Industry, Ill. Refrigerator	505,368	Sept. 19	1738	450	64	1623
Pittman, William S., Pierceville, Kans. Spark-arrester	489,263	Jan. 3	440	121	62	97
Pitts Agricultural Works. (See Todd, Marquis J., assignor.)						
Pitts, Eli N., and H. D. Cowden, Oneonta, Ala. Car-coupling	508,527	Nov. 14	908	223	65	941
Pivonka, Jacob H., Ryan, Kans. Hand fence-machine	508,836	Nov. 14	1368	332	65	1030
Place, James F., Montclair, N. J. Central-draft lamp	509,334	Nov. 21	2221	536	65	1207

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Place, Robert, Fall River, Mass. Lubricator.....	502,139	July 25	2558	641	64	511
Placide, Navarre, Paris, France, assignor to A. Biardot, New York, N. Y. Machine for shelling peas.....	496,206	Apr. 25	2663	669 670	63	542
Plançon, Emile, Brooklyn, N. Y. Milk or other can.....	499,829	Jan. 10	1288	337	62	283
Plano Manufacturing Company. (See Coler, Peter P., assignor.)						
Plante, George, Lowell, Mass. Combined pipe wrench and cutter.....	506,070	Oct. 3	421	110	65	82
Planthaber, Newton J., Sterling, assignor of one-half to A. J. McNeil, Rock Falls, Ill. Eaves-trough protector.....	490,414	Jan. 24	2284	593	62	507
Plasters, Alpheus L., W. F. Rankin, and J. M. Wolfe, Tarkio, Mo.; said Rankin and Wolfe assignors to said Plasters. Reversible-draft brick-kiln.....	504,908	Sept. 12	1146	292	64	1499
Platnauer, Louis, Clifton, England, assignor, by mesne assignments, to Keystone Watch Case Company, of Pennsylvania. Watch-bow fastener.....	500,817	July 4	451	118	64	83
Platner, Adna D. (See Platner, Marshal D., assignor.)						
Platner, Marshal D., assignor of one-half to A. D. Platner, Elliston, Mont. Placer-mining apparatus.....	495,832	Apr. 18	2104	529	63	422
Platshek, Howard I., Philadelphia, Pa. Display-stand.....	511,060	Dec. 19	2105	520	65	1828
Platt, Albert L., assignor to J. H. Conklin and F. C. Davidson, Clinton, Ill. Nutmeg-grater.....	505,886	Oct. 3	132	34	65	27
Platt Brothers & Company. (See Platt and Fidler, assignors.)						
Platt, Charles C., Waverly, Kans. Weeder and cultivator.....	501,360	July 11	1330	333	64	255
Platt, Irving G., Waterbury, Conn. Machine for attaching buttons.....	495,753	Apr. 18	1980	500	63	399
Platt, Irving G., Waterbury, Conn. Button.....	495,754	Apr. 18	1982	501	63	400
Platt, James. (See Tweddell, Platt, and Fielding.)						
Platt, James E., and J. Fidler, deceased; C. L. Sturtevant, administrator, assignors to Platt Brothers & Company, Limited, Oldham, England. Apparatus for grinding the re-volving flats of carding engines.....	510,611	Dec. 12	1310	319 320	65	1669
Platt, James F., Sterling, Ill. Disk harrow.....	493,182	Mar. 7	637	162	62	1483
Platt, Joseph F., Waterbury, Conn. Button.....	505,479	Sept. 26	1918	494	64	1671
Platzen, John, Fort Howard, Wis. Road-bed.....	506,071	Oct. 3	422	110	65	82
Player, John, Dunkirk, N. Y. Reversing-lever.....	489,264	Jan. 3	441	122	62	97
Player, John, Topeka, Kans. Machine for cutting stay-bolts.....	501,296	July 11	1208	305 306	64	234
Player, John, Topeka, Kans. Refrigerator-car.....	503,772	Aug. 22	2544	633 634	64	1076
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Tandem compound engine.....	499,544	June 13	1409	336	63	1650
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Valve-motion for compound engines.....	499,585	June 13	1412	337	63	1651
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Valve-motion for tandem compound engines.....	499,586	June 13	1413	337	63	1651
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Boiler.....	499,587	June 13	1414	338	63	1651
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Reducing starting-valve.....	499,588	June 13	1415	338	63	1652
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Concentric compound engine.....	499,589	June 13	1416	338	63	1652
Playfair, David J., Glasgow, Scotland. Making cyanides.....	507,753	Oct. 31	3332		65	677
Pleckor, David A., Mount Crawford, Va. Fifth-wheel.....	495,833	Apr. 18	2107	530	63	422
Plecker, William J., Galesburg, Ill. Kettle.....	493,782	Mar. 21	1630	415	62	1708
Pless Dredging and Reclamation Company. (See Pless, William B., assignor.)						
Pless, William B., San Francisco, Cal., assignor to Pless Dredging and Reclamation Company, of Nevada. Dredging-machine.....	502,934	Aug. 8	1178	290	64	798
Pless, William B., Stockton, Cal., assignor to Pless Dredging and Reclamation Company, of Nevada. Mast for dredgers.....	505,176	Sept. 19	1431	368	64	1566
Pletcher, Levi L., McConnellsville, Ohio. Hinge.....	505,480	Sept. 26	1918	494	64	1671
Pletka, John. (See Simon and Pletka.)						
Pleukharp Barrel Machine Company. (See Pleukharp and Liggett, assignors.)						
Pleukharp, James, and W. K. Liggett, Columbus, Ohio, assignors to Pleukharp Barrel Machine Company. Barrel.....	496,953	May 9	917	241	63	803
Pleukharp, James, and W. K. Liggett, Columbus, Ohio, assignors to Pleukharp Barrel Machine Company. Hoop-making machine.....	501,730	July 18	1904	473 474	64	377
Pleukharp, James, and W. K. Liggett, Columbus, Ohio, assignors to Pleukharp Barrel Machine Company. Hoop-making machine.....	502,407	Aug. 1	262	62, 63	64	614
Pleukharp, James, and W. K. Liggett, Columbus, Ohio, assignors to Pleukharp Barrel Machine Company. Stave-jointing machine.....	503,493	Aug. 15	2077	518 519	64	973
Pleukharp, James, and W. K. Liggett, Columbus, Ohio, assignors to Pleukharp Barrel Machine Company. Stave rounding, crozing, and chamfering machine.....	511,028	Dec. 19	2057	509 510	65	1818
Plopper, James A., Minneapolis, Minn. Nut-tapping machine.....	498,186	May 23	2879	719	63	1182
Plotts, William, Mount Jewett, Pa. Bailor for oil or Artesian wells.....	496,323	Apr. 25	2863	714	63	579
Plouf, Felix F., Minneapolis, Minn. Folding baby-carriage.....	504,817	Sept. 12	842	216	64	1441
Plumb, Sanford G., New York, N. Y., assignor to Odorless Deodorizer Company, of New York. Disinfecting apparatus.....	495,563	Apr. 18	1672	432	63	347
Plume & Atwood Manufacturing Company. (See Atwood, Lewis J., assignor.)						
Plumley, William H., et al. (See Garrigus, Charles H., assignor.)						
Plummer, Micajah C., and O. O. Dinsmore, Paralta, Iowa; said Dinsmore assignor to said Plummer. Automatic door-opener.....	511,455	Dec. 26	2795	676	65	1968
Plyler, James V., Kosciusko, Miss. Planter.....	502,993	Aug. 8	1279	313	64	815
Plymouth Manufacturing Company. (See Farmer, Luther C., assignor.)						
Plympton, Arthur H. (See Plympton, Warren H., assignor.)						
Plympton, Warren H., assignor of one-half to A. H. Plympton, Providence, R. I. Weather-strip.....	491,952	Feb. 14	1431	356	62	1050
Pneumatic and Electric Tool Company. (See Drawbaugh, Daniel, assignor.)						
Pneumatic Tire and Cycle Company. (See Coningsby, Alfred, assignor.)						
Pneumatic Tyre and Booth's Cycle Agency. (See Welch, Charles K., assignor.)						
Poehlman, Henry E., San Francisco, Cal. Bumper or stop for cars of underground-cable-railway crossings.....	498,215	May 23	2934	730	63	1191
Poertner, Emil C. (See Poertner, Peter, assignor.)						
Poertner, Emil C. (See Poertner, Peter and E. C.)						
Poertner, Peter, assignor of one-half to E. C. Poertner, Milwaukee, Wis. Extension step-ladder.....	492,992	Mar. 7	348	88	62	1428
Poertner, Peter and E. C., Milwaukee, Wis. Extension step-ladder.....	499,751	June 20	1691	405	63	1713
Poff, Joseph A., Lawrence, Kans. Vending-machine.....	489,830	Jan. 10	1289	337 338	62	283
Poffenbarger, Josias. (See Dailey and Poffenbarger.)						
Pogodzinski, Jacob, Grand Rapids, Mich. Extension-table.....	510,362	Dec. 5	849	205	65	1571

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Pohl, Hermann. (See Riese and Pohl.)						
Pohlé, Julius G., Georgetown, Colo. Stove-polish.	501,254	July 11	1150		64	224
Pohlé, Julius G., Georgetown, Colo. Stove-polish.	501,845	July 18	2085		64	408
Poindexter, Robert E., Indianapolis, Ind. Corn-splitting machine.	498,887	June 6	244	57	63	1436
Poindexter, Robert E., Indianapolis, Ind. Post-base	503,804	Aug. 22	2586	645	64	1084
Poindexter, Robert E., Indianapolis, Ind. Corn-splitting machine.	506,440	Oct. 10	1124	280	65	227
Poirier, Camille, Duluth, Minn. Canvas cot	496,279	Apr. 25	2782	696	63	564
Poirier, Emile. (See La Rochelle, Ephrem, assignor.)						
Poirrier, Alcide F., and D. A. Rosenstiehl, Paris, France. Black azo dye.	502,912	Aug. 8	1133		64	790
Poland, Edward F. (See Poland, John C. and E. F.)						
Poland, John C. and E. F., Boston, Mass. Bearing for centrifugal extractors	509,677	Nov. 28	2842	687	65	1337
Polenoff, Konstantin, Nishue Taguilsk, Russia. Musical instrument	502,103	July 25	2504	628 629	64	500
Polgár, Emerich, Szegedin, Austria-Hungary. Manufacture of spirits from amylaceous materials.	497,814	May 23	2295		63	1080
Polhamus, Isaac, San Diego, Cal. Bicycle attachment.	499,581	June 13	1404	335	63	1650
Pollak, Carl, Frankfurt-on-the-Main, Germany. Manufacturing electrodes	505,125	Sept. 19	1352		64	1552
Pollard, John H., assignor of one-half to A. Philp, New York, N. Y. Stopper for boiler-tubes	509,678	Nov. 28	2843	687	65	1838
Pollard, Paxton, Norfolk, Va., assignor of one-half to R. B. Lawrence. Toy cart	494,967	Apr. 4	689	176	63	132
Polley, Joseph B., et al. (See Tiner, John F., assignor.)						
Polley, Walter W., et al. (See Tiner, John F., assignor.)						
Polleys, William H., Melrose, Wis. Alarm-bell	509,679	Nov. 28	2845	687	65	1338
Pollitt, William H., Chicago, Ill. Bib.	497,340	May 16	1554	391	63	930
Pollock, George W. R., Lynn, Mass. Radiator.	494,888	Apr. 4	577	145	63	112
Pollock, James, Wilkes-Barré, Pa. Conveyor-chain.	505,296	Sept. 19	1629	421	64	1604
Pollock, James, Wilkes-Barré, Pa. Separator and screen.	505,723	Sept. 26	2381	601	64	1756
Pollock, James R., Mansfield, Ohio. Store-service apparatus	502,012	July 25	2354	590	64	472
Pollock, James R., Mansfield, Ohio. Store-service apparatus	506,072	Oct. 3	423	111	65	82
Polly, Jonathan. (See Goodwin and Polly.)						
Polock, Solomon L., New Orleans, La. Suspensory appliance.	496,747	May 2	568	152	63	721
Polster, Tobias, St. Louis, Mo. Caster	503,438	Aug. 15	1989	493	64	957
Pölte, Eugen, Sudenburg, Magdeburg, Germany. Apparatus for spinning metal	491,188	Feb. 7	209	53, 54	62	787
Polukanis, Jerzy, Bloomfield, N. J. Organ	499,036	June 6	511	120	63	1480
Pomeroy, Daniel, Brooklyn, N. Y. Truss.	505,228	Sept. 19	1508	393	64	1580
Pomeroy, George M. D., and G. H. Webber, Lebanon, Ind. Potato-digger	490,924	Jan. 31	3122	801	62	686
Pomeroy, Le Dru R., Cleveland, Ohio, assignor to Van Wagoner & Williams Company, Jersey City, N. J. Spring-hinge	504,403	Sept. 5	144	38	64	1297
Pond, Charles F. (See Smith, George W., assignor.)						
Ponickau, Robert, Jersey City, N. J. Traveling-bag	504,850	Sept. 12	897	231	64	1454
Ponisi, James, New York, N. Y. Window-larder	499,037	June 6	513	120	63	1480
Ponsard, Auguste, Paris, France. Permanent way for railways, &c.	496,133	Apr. 25	2560	644	63	522
Pool, Anthony B., and J. J. Beals, Boston, Mass. Air-brake mechanism.	499,582	June 13	1405	335	63	1650
Pool, David P., Georgetown, Tex. Bed-brace	492,308	Feb. 21	1981	493	62	1178
Pool John, Milparinka, New South Wales. Vehicle-wheel.	495,755	Apr. 18	1983	501	63	400
Poole, Annie T. (See Poole, Garrett W., assignor.)						
Poole, Edward, Fordyce, Ark. Nut-lock	492,050	Feb. 21	1579	393	62	1094
Poole, Edward E., Fordyce, Ark. Nut-lock	504,999	Sept. 12	1142	292	64	1499
Poole, Garrett W., assignor to A. T. Poole, Newark, N. J. Adjustable book-support	510,090	Dec. 5	419	93	65	1489
Poole, Henry, Canton, Kans. Corn or cane harvester.	498,693	May 30	3748	925	63	1350
Poole, James K., Lytch, assignor to M. M. McKinnon, Laurinburg, N. C. Clevis-hook	508,338	Nov. 7	580	143	65	866
Poole, Robert A., Hoboken, Pa. Oscillatory chill.	503,994	Aug. 8	1280	313	64	815
Poole, Staley D., assignor to Deere & Company, Moline, Ill. Attachment to wheel-cultivators	510,091	Dec. 5	421	94	65	1489
Poole, Staley D., and B. Cross, Moline, Ill., assignors to Deere & Company, of Illinois. Sulky-plow	510,363	Dec. 5	851	205	65	1572
Poole, Thomas G., et al. (See Harper, Henry, assignor.)						
Pooler, Fred. C., Skowhegan, Me. Horse-boot	498,302	May 30	3097	772	63	1235
Pooley, Charles A., Buffalo, N. Y. Car-coupling	491,569	Feb. 14	869	220	62	937
Pooley, Frank D., Philadelphia, Pa. Desk	510,715	Dec. 12	1465	362	65	1699
Pooley, James B., Clementon, N. J. Device for operating the slides or rests of desks	500,610	July 4	122	32, 33	64	24
Poor, Charles E., C. E. Messenger, and A. Dallas, Fairbury, Nebr. Boiler-flue cleaner	493,290	Mar. 14	820	210	62	1536
Poore, Graydon, London, England. Coin-controlled electric call apparatus	505,724	Sept. 26	2382	601 602 603	64	1757
Poore, Graydon, Putney, England. Coin-controlled telegraphic call apparatus	506,132	Oct. 3	525	136	65	102
Poore, Henry F., assignor to E. C. Atkins, Indianapolis, Ind. Grooving-saw	489,206	Jan. 3	314	97	62	78
Poore, Townsend, Scranton, Pa. Lubricator	491,224	Feb. 7	265	66	62	798
Pope, Charles E., Millville, assignor to himself, and W. Scroggin, Bearden, Ark. Roofing	508,751	Nov. 14	1238	309	65	1007
Pope, Edward I. (See Pope, Richard C., assignor.)						
Pope, Edward I. (See Pope, Richard C., assignor.) (Reissue.)						
Pope, Everett M., Quincy, Mass. Rivet-setting machine	509,554	Nov. 28	2648	640 641	65	1299
Pope, George W., Jr. (See Jennings, George W., assignor.)						
Pope, John C., Fox, Ill., assignor to A. L. and D. M. Kitzelman, Ridgeville, Ind. Wire-fabric machine.	505,607	Sept. 26	2181	552	64	1720
Pope, John L., Cleveland, Ohio. Automatic lock-joint for railway-rails.	492,558	Feb. 28	2393	594 595	62	1275
Pope, John L., Cleveland, Ohio. Rail-securing device.	502,830	Aug. 8	1002	244	64	765
Pope, John L., Cleveland, Ohio. Rail-securing device	508,047	Nov. 7	100	28, 29	65	777
Pope, John L., Cleveland, Ohio. Car for elevated railways.	508,631	Nov. 14	1068	264 265	65	974
Pope Manufacturing Company. (See Copeland, James S., assignor.)						
Pope, Richard C., St. Louis, Mo., assignor to E. I. Pope, Moreland, Ill. Street-roller	496,794	May 2	642	171	63	733
Pope, Richard C., St. Louis, Mo., assignor to E. I. Pope, Moreland, Ill. Street-roller. (Re-issue.)	11,347	June 27	2971	729	63	1951
Pope, Thomas E., San Francisco, Cal. Railway-car	504,615	Sept. 5	488	125 126	64	1361
Pope, Thomas E., San Francisco, Cal. Car	509,325	Nov. 21	2223	536 537	65	1207
Pope, Thomas E., Oakland, Cal. Railway-car	504,616	Sept. 5	490	126	64	1362
Pope, William R., assignor to National Electric Machine Company, New York, N. Y. Coin-controlled machine for administering electricity.	492,486	Feb. 28	2277	566 567	62	1249
Pope, William R., assignor to Automatic Manufacturing Company, New York, N. Y. Coin-controlled dice-machine	498,363	May 30	3202	796 797	63	1253

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Pope, William R., Baltimore, Md., assignor to National Electric Machine Company, New York, N. Y. Coin-operated induction-coil	500,776	July 4	390	103	64	73
Popkins, Edwin. (See Finlayson and Popkins.)						
Popp, Hermann S., assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Machine for casting type	510,288	Dec. 5	748	{ 181 182 }	65	1551
Popp, Victor, Paris, France. Rotary engine	496,954	May 9	918	241	63	803
Poppenburg, John von der, Charlottenburg, assignor to C. C. Lesenberg, Rostock, Germany. Galvanic dry battery	504,746	Sept. 12	721	180	64	1419
Poppert, George, Milwaukee, Wis. Window-blind	492,993	Mar. 7	350	88	62	1423
Poppellwell, William C., Eureka Springs, Ark. Movable clothes-pin	493,516	Mar. 14	1172	299	62	1601
Poppowitsch, Edward, Brooklyn, assignor of one-half to H. Wüstenfeld, New York, N. Y. Primary electric battery	511,159	Dec. 19	2376	557	65	1861
Porch, Robert F., Spiceland, Ind. Step-ladder	490,042	Jan. 17	1672	435	62	373
Porch, Robert F., Spiceland, Ind. Washing-machine	511,545	Dec. 26	2929	713	65	1994
Porcher, Joseph F. (See Whitten and Porcher.)						
Porstendorfer, Urbanus, Hartford, Conn. Ratchet-tool	505,535	Sept. 26	2040	521	64	1693
Porstendorfer, Urbanus, Hartford, Conn. Combined match-safe and cigar-cutter	509,942	Dec. 5	159	37	65	1439
Port, David and S., and C. V. Baird, near Dublin, Ind. Fence-post	505,672	Sept. 26	2296	582	64	1741
Port, Henry, Paris, France. Parallel vise	496,168	Apr. 25	2609	637	63	532
Port Huron Engine and Thresher Company. (See Chipman, De Yoe C., assignor.)						
Port, Samuel. (See Port and Baird.)						
Porter, Benjamin, Fullerton, N. D. Nut-lock	500,672	July 4	229	60	64	44
Porter, Benjamin F., Manchester, N. H. Umbrella-runner	492,586	Feb. 28	2434	606	62	1283
Porter, Charles F. (See Maechling and Porter.)						
Porter, Charles F., Brockton, Mass. Device for displaying boots or shoes	498,694	May 30	3750	925	63	1350
Porter, Cyrus H. (See Johnson and Porter.)						
Porter, Elbert B., Penn Yan, N. Y. Fishing-reel	497,341	May 16	1555	{ 391 392 }	63	930
Porter, George B., Coventry, assignor of one-half to J. I. and F. Barr, Afton, N. Y. Pitman.	497,815	May 23	2297	577	63	1080
Porter, George W., Parkersburg, W. Va. Pipe-wrench	492,834	Mar. 7	94	23	62	1376
Porter, Harry T., et al. (See Porter and Haas, assignors.)						
Porter, Harry T., and J. Haas, assignors to I. and H. T. Porter, Philadelphia, Pa. Attaching bail-ears to sheet-metal cans or pails	493,114	Mar. 7	532	133	62	1464
Porter, Henry B., New York, N. Y. Electrical bell	495,564	Apr. 18	1673	422	63	347
Porter, Isaac, et al. (See Porter and Haas, assignors.)						
Porter, James, Greenfield, Mass. Pipe-cutter	492,833	Mar. 7	93	23	62	1376
Porter, John C., Jr. (See Smith, John V., assignor.)						
Porter, John M., Boston, Mass. Sash-fastener	498,990	June 6	430	100	63	1467
Porter, Joseph E., Ottawa, Ill. Hay elevator and carrier	497,207	May 9	1296	330	63	870
Porter, Joseph Y., Cleveland, Ohio, assignor to J. W. Morrison, Detroit, Mich. Tramway-switch	492,472	Feb. 28	2245	561	62	1243
Porter, Lansing, Auburn, N. Y. Car-journal bearing	495,188	Apr. 11	1079	267	63	218
Porter, Lansing, Auburn, N. Y. Journal-bearing for car-trucks	495,189	Apr. 11	1081	{ 267 268 }	63	219
Porter, Louis H., Rockdale, Tex. Machine for forming wire articles	492,051	Feb. 21	1580	393	62	1094
Porter, Major D., Brooklyn, N. Y., assignor to National Ticker Company, of West Virginia. Printing-telegraph receiver	491,133	Feb. 7	105	29, 30	62	769
Porter, Major D., Brooklyn, N. Y., assignor, by mesne assignments, to National Electrical Manufacturing Company, of New Jersey. Electric reporter	496,207	Apr. 25	2666	{ 670 671 }	63	542
Porter, Rufus, Lewistown, Ill. Bee-escape	489,754	Jan. 10	1186	311	62	261
Porter, Stephen. (See Angell and Porter.)						
Porter, Stephen. (See Hipwood, Barrett, and Porter.)						
Porter, Sylvester K., Seneca, Mich. Windmill-regulator	509,763	Nov. 28	2975	720	65	1361
Porter, Thomas J. (See Phillips, William A., assignor.)						
Porter, Wallace N., assignor to O. A. Campbell, Jr., Brockton, and W. Pearson, Whitman, Mass. Heating device for shoe-sewing machines	509,823	Nov. 28	3078	744	65	1382
Porter, Wilson E., assignor to New Haven Clock Company, New Haven, Conn. Alarm-clock	496,667	May 2	441	118	63	699
Portheim, Emil von, Prague, Austria-Hungary. Glycine dye	498,303	May 30	3099		63	1235
Portland Amalgamator and Mining Company. (See Raber, Nathan L., assignor.)						
Portsmouth Stove and Range Company. (See Knauss, Frank V., assignor.)						
Portz, George, Hartford, Wis. Apparatus for drying malt	494,937	Apr. 4	643	{ 164 165 }	63	124
Posen, Sidney, Offenbach-on-the-Main, Germany. Leaf for photographic albums	499,936	June 20	1984	482	63	1764
Posey, Fair, Quincy, Miss. Hand baling-press	500,425	June 27	2791	687	63	1918
Possons, Minard A., and H. L. Carroll, Cleveland, Ohio. Reservoir	491,023	Jan. 31	3290	840	62	719
Post, Andrew D., Keyport, N. J. Oyster-dredge winder	496,061	Apr. 25	2457	620	63	503
Post, Charles C., Sioux City, Iowa. Gut-cleaning machine	495,514	Apr. 18	1596	{ 401 402 }	63	333
Post, Charles W., Fort Worth, Tex., assignor to Scientific Suspender Company, Limited, Battle Creek, Mich. Suspenders	508,048	Nov. 7	101	29	65	777
Post, Eugen, Ehrenfeld-Cologne, Germany. Grinding or polishing machine	497,477	May 16	1770	445	63	968
Post, George W., Fond du Lac, Wis. Thill-support	491,854	Feb. 14	1279	317	62	1020
Post, George W., Fond du Lac, Wis. Thill-coupling	502,380	Aug. 1	218	52	64	606
Post, Howard A. (See Chalk, William M., assignor.)						
Post, Mary J., Hoboken, N. J. Combined waist and suspenders	495,057	Apr. 11	824	209	63	173
Post, Woodruff, Olean, N. Y. Fountain-pen	510,145	Dec. 5	511	117	65	1506
Postal Improvement Company. (See Aldrich, Henry E., assignor.)						
Postal Improvement Company. (See Cushing and Mitchell, assignors.)						
Postel, Anthony F., and L. B. Morris, Chicago, Ill. Shoe	511,717	Dec. 26	3209	787	65	2044
Posz, Michael, Shelbyville, Ind. Sash-fastener	493,291	Mar. 14	821	210	62	1536
Potschinsky, Nicolaus, Odessa, Russia. Automatic bathometer and shoal-water indicator	507,590	Oct. 31	3078	{ 752 753 }	65	629
Potter, Abraham C., et al. (See Wallace, Victor, assignor.)						
Potter, Albert G., Lynn, Mass. Measuring device for box-covering machines	507,451	Oct. 24	2816	689	65	568
Potter & Buffington. (See Remlinger, John L., assignor.)						
Potter, Charles, Jr., et al. (See Brooks, John, assignor.)						
Potter, Elnathan. (See Cameron and Potter.)						
Potter, Elwood C., Vineland, N. J. Railway-crossing alarm or signal	501,438	July 11	1444	362	64	278
Potter, Erskine H., et al. (See Engelman, Harry H., assignor.)						
Potter, George L., Fort Wayne, Ind. Draft-rigging for cars	498,026	May 23	2644	661	63	1140
Potter, Gideon, Osceola, Ill. Measuring-vessel	509,488	Nov. 28	2545	614	65	1280
Potter, Helen, et al. (See Wallace, Victor, assignor.)						
Potter, Henry H., and N. J. Fortney, Kingwood, W. Va. Copy-holder	499,801	June 20	1765	428	63	1726

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Potter, Henry K., Somerville, Mass. Sprinkler	504,134	Aug. 29	3110	779	64	1200
Potter, Henry K. and J. L., Somerville, Mass. Sprinkler	504,069	Aug. 29	3000	750	64	1179
Potter, Robert B. (See Ward and Potter.)						
Potter, Howard C., Brockton, assignor to C. F. Atherton Boston, Mass. Superheating steam-coil	500,242	June 27	2502	612	63	1868
Potter, John A., Munhall, Pa. Apparatus for shaping steel	498,304	May 30	3101	772 773	63	1235
Potter, John L. (See Potter, Henry K. and J. L.)						
Potter, Maynes, Orange, N. J. Thill-tug	493,837	Mar. 21	1716	438	62	1724
Potter, Maynes, Orange, N. J. Hame-fastener	493,838	Mar. 21	1717	438	62	1724
Potter, Richard, Ardsley, near Barnsley, England. Air-heating device for furnaces	492,428	Feb. 28	2170	542 543	62	1238
Potter, Whipple W., Jr. (See Baldwin, Charles E., assignor.)						
Potter, William B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric cut-out	489,983	Jan. 17	1566	410	62	352
Potter, William B., Lynn, assignor to General Electric Company, Boston, Mass. Electric-arc disrupter	508,632	Nov. 14	1069	265	65	974
Potter, Wilson L., Hartford, Conn. Sanitary ventilator	502,995	Aug. 8	1281	313	64	815
Pottle, George F., Medford, Mass., assignor to J. Grant. Lock-hinge	509,047	Nov. 21	1738	430	65	1116
Potts, J. Thorpe. (See Rose, James R., assignor.)						
Potts, Joseph H. (See Potts, Mary F. and J. H.)						
Potts, Mary F. and J. H., Austin, Ill. Sad-iron	506,252	Oct. 10	792	195 196	65	162
Potts, Morell B., New Martinsville, W. Va. Tinsmith's tool	506,935	Oct. 17	1933	478	65	391
Potts, Samuel, Butler, Mo. Tongue-support for grain-binders	507,591	Oct. 31	3083	753	65	629
Pou, José, Havana, Cuba. Machine for attaching elastic bands to boxes	510,706	Dec. 12	1466	362 363	65	1699
Pougher, John T., assignor of one-half to A. Aufrichtig, St. Louis, Mo. Car-coupling	497,208	May 9	1299	331	63	870
Pouk, John B., Spring Valley, Ill. Thill-coupling	511,061	Dec. 19	2106	521	65	1828
Poulin, Hedwidge, Augusta, Me. Dress-chart	510,364	Dec. 5	855	206	65	1572
Poulik, William H., Cairo, Ga. Pump	490,985	Jan. 31	3224	824	62	705
Poulson, Britton, Fort Wayne, Ind. Combined chair and table	491,590	Feb. 14	873	220	62	938
Poulson, John, Phillipsburg, N. J. Bone-cutting mill	508,528	Nov. 14	909	223	65	942
Poulson, Niels, Fort Hamilton, N. Y. Fireproof floor or roof	493,839	Mar. 21	1718	438 439	62	1724
Poulson, Niels, Fort Hamilton, N. Y. Column	498,860	June 6	193	47	63	1427
Poulson, Niels, Fort Hamilton, and B. E. J. Eils, New York, N. Y. Wrought iron or steel column	498,859	June 6	192	47	63	1427
Powell, Anthony P., Huntington, Ind. Stock-car	495,909	Apr. 18	2223	560 561	63	444
Powell, Charles L., assignor to himself and P. F. Brannan, Weatherford, Tex. Snuff-box	498,695	May 30	3751	926	63	1350
Powell, Edward. (See Powell, John G., assignor.)						
Powell, George S., W. B. Williamson, and R. A. Havner, assignors of one-half to G. T. Davis, Asheville, N. C. Storm-front for railway-cars	495,369	Apr. 11	1358	340	63	269
Powell, James, Avondale, Ohio. Bath-tub fitting	494,160	Mar. 28	2271	576 577	62	1842
Powell, John G., Philadelphia, Pa. Straight-knitting machine	496,062	Apr. 25	2458	620	63	503
Powell, John G., assignor of one-half to E. Powell, Philadelphia, Pa. Web-holder-actuating mechanism for automatic knitting-machines	510,934	Dec. 19	1907	466 467	65	1792
Powell, John G., assignor of one-half to E. Powell, Philadelphia, Pa. Needle-picking mechanism for automatic knitting-machines	510,935	Dec. 19	1909	467	65	1792
Powell, Joseph C., Bayou La Chute, La. Car-coupling	489,391	Jan. 3	623	168	62	134
Powell, Joseph N., Elmwood, Ill. Hair-drying machine	494,889	Apr. 4	578	145	63	112
Powell, Noah M., assignor to United States Burglar Alarm Company, Galesburg, Ill. Galvanic battery	490,231	Jan. 17	1977	518	62	434
Powell, William A. (See McManus, Robert, assignor.)						
Powell, Winslow W., assignor of one-half to A. Brandt, Freeport, Ill. Combination-lock	489,091	Jan. 3	164	45, 46	62	39
Power, Martin J., Chicago, Ill. Extracting the contents of eggs	498,488	May 30	3388	843	63	1288
Powers, Homan R. (See McGregor, John A. K., assignor.)						
Powers, James F. (See Duffy, Patrick, assignor.)						
Powers, James J., Brooklyn, N. Y. Treating sewage	495,834	Apr. 18	2108	520	63	423
Powers, James J., Brooklyn, N. Y. Apparatus for treating sewage	499,583	June 13	1407	336	63	1650
Powers, James J., and R. Van Buren, Brooklyn, N. Y. Junction-box	497,601	May 16	1966	493	63	1903
Powers, James J., and R. Van Buren, Brooklyn, N. Y. Electrical conduit for buildings	503,873	Aug. 22	2578	671	64	1192
Powers, Jay W., Chicago, Ill. Steam or pneumatic engine	493,840	Mar. 21	1720	439	62	1725
Powers, Jay W., assignor to C. O. Brown, Chicago, Ill. Meat-preserving device	505,126	Sept. 19	1352	348	64	1552
Powers, John T., West Springfield, Mass. Locking-switch movement	504,502	Sept. 5	321	82	64	1330
Powers, Marion, Lexington, Ind. Garden-tool	492,364	Feb. 21	2068	516 517	62	1195
Powers, Melvin, Des Moines, Iowa. Traction-engine	510,707	Dec. 12	1470	363 364	65	1700
Prahar, Louis B., Brooklyn, N. Y. Buckle	508,752	Nov. 14	1239	309	65	1007
Prangey, Louis E. A., Paris, France. Apparatus for refining sugar	502,014	July 25	2356	591 592	64	473
Prangey, Louis E. A., Sannois, France. Apparatus for refining sugar	502,015	July 25	2361	593	64	474
Pratt, Henry L., Jr. (See Heatly, Isaiah S., assignor.)						
Pratt, Charles A. B. (See Munson and Haines, assignors.)						
Pratt, Charles H., Lancaster, Pa. Burglar-alarm	493,647	Mar. 21	1410	357	62	1664
Pratt, Charles R., New York, N. Y. Electric elevator	509,397	Nov. 28	2364	573 574	65	1244
Pratt, Eber W., Ipava, Ill. Flue-cutter	505,328	Sept. 19	1672	431	64	1611
Pratt, Edwin S., Parry Sound, Canada. Monkey-wrench	502,997	Aug. 8	1283	314	61	816
Pratt, Elias E., New Haven, Conn. Freight-car	503,874	Aug. 22	2679	671	64	1102
Pratt, Francis A., assignor to Pratt & Whitney Company, Hartford, Conn. Machine for cutting off bars of metal	504,171	Aug. 29	3173	791 792 793	64	1212
Pratt, Francis A., and J. Johnston, assignors to Pratt & Whitney Company, Hartford, Conn. Roll-grooving machine	504,172	Aug. 29	3175	793 794	64	1212
Pratt, George H., McLane, Pa. Mechanism for raising the cutter-bars of mowing-machines	500,945	July 4	632	167	64	116
Pratt, George H., and A. I. Paine, Newton, Mass. Clamp for holding printers' chases on beds of printing-presses	501,231	July 11	1111	282	64	217
Pratt, Henry C., Canandaigua, N. Y. Wire-stretching device	491,743	Feb. 14	1104	279	62	985
Pratt, Henry L., Brooklyn, N. Y., assignor to Miller's Falls Company, Miller's Falls, Mass. Hack-saw machine	502,996	Aug. 8	1282	314	61	816
Pratt, John C., Middletown, Conn., assignor of one-half to J. Morgan, Springfield, Mass. Puzzle	508,339	Nov. 7	581	143	65	866

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Pratt & Letchworth. (See Wiedrich, Charles L., assignor.)						
Pratt, Stephen A., Detroit, Mich. Water-tube boiler	495,682	Apr. 18	1866	468	63	378
Pratt, Stephen A., Detroit, Mich. Boiler	505,673	Sept. 26	2298	582 583	64	1742
Pratt, Warren E., Sageville, Mich. Broadcast seed-sower	506,542	Oct. 10	1292	323	65	259
Pratt & Whitney Company. (See Bemis, Edgar W., assignor.)						
Pratt & Whitney Company. (See Hays, George, assignor.)						
Pratt & Whitney Company. (See Pratt, Francis A., assignor.)						
Pratt & Whitney Company. (See Pratt and Johnston, assignors.)						
Pratt, William, Montreal, Canada. Can	492,105	Feb. 21	1663	413	62	1111
Pratt, Willis H., Stillwater, Minn. Distance and altitude instrument	508,556	Nov. 14	949	233	65	950
Pray, Arthur H., et al. (See Passmore, Edwin, assignor.)						
Pray, Hamilton, Clove, N. Y. Potato-digger	502,992	Aug. 8	1284	314	64	816
Pray, Joseph F., Boston, Mass. Sully	491,591	Feb. 14	874	220	62	938
Precht, Heinrich, Neu-Stassfurt, Germany. Obtaining meta or pyro phosphoric-acid combinations	502,424	Aug. 1	295		64	620
Preece, Arthur W., Boston, Mass. Printer's rule and lead cutter	509,764	Nov. 28	2976	720	65	1362
Prendergast, Michael, Chicago, Ill. Window-jack	503,217	Aug. 15	1644	403	64	896
Prendergast, Will. P., De Soto, Mo. Locomotive-coupling	491,719	Feb. 14	1070	270	62	979
Prendergast, Will. P., De Soto, Mo. Locomotive-pilot draw-bar coupling	506,724	Oct. 17	1578	395	65	325
Prentice, George W., Providence, R. I. Button-fastener	506,860	Oct. 17	1801	452	65	366
Prentice, George W., Providence, R. I. Shoe-fastening	506,861	Oct. 17	1802	452	65	366
Prentice, George W., Providence, R. I. Button-fastener	506,862	Oct. 17	1803	452	65	366
Prentice, George W., Providence, R. I. Buttonhole-stay	506,863	Oct. 17	1804	453	65	367
Prentice, Herbert N., Stowmarket, England. Electric cut-out	504,938	Sept. 12	1038	266 267	64	1420
Prentice, John, New York, N. Y. Cigar-mold	493,292	Mar. 14	822	210	62	1536
Prentiss, Henning W., St. Louis, Mo. Exhibit or file cabinet	506,073	Oct. 3	424	111	65	83
Prentiss, Charles W., San Francisco, Cal. Shirt	497,727	May 16	2160	540	63	1039
Prentiss, Henry S., Elizabeth, N. J. Electric synchronizer for clocks	496,134	Apr. 25	2560	644	63	522
Prentiss, Henry S., Elizabeth, N. J. Electric synchronizer for clocks	496,135	Apr. 25	2562	645	63	522
Prentiss, Henry S., Elizabeth, N. J. Electric synchronizer for clocks	502,381	Aug. 1	219	52	64	606
Prentiss, Henry S., Elizabeth, N. J. Electric synchronizer for clocks	506,936	Oct. 17	1933	478 479	65	391
Presby, Herbert B., Malden, Mass. Label-holder	505,924	Oct. 3	192	48	65	38
Prescott, John H., et al. (See Mitchell, William H., assignor.)						
Prescott, Mary E., San Francisco, Cal. Mop-wringer	493,340	Mar. 14	899	230	62	1549
Pressey, George W., Hammonton, N. J. Shaft-support for vehicles	497,602	May 16	1967	493	63	1003
Prest, John E., assignor to Whitin Machine Works, Whitinsville, Mass. Guide	492,749	Feb. 28	2685	666	62	1332
Prest, John E., assignor to Whitin Machine Works, Whitinsville, Mass. Stop-motion for drawing-frames	506,133	Oct. 3	527	136	65	102
Prest, John E., assignor to Whitin Machine Works, Whitinsville, Mass. Drawing-frame	507,079	Oct. 17	2157	534	65	432
Prestley, George H. (See Fisher and Prestley.)						
Preston, Albert F., Lynn, Mass., assignor, by mesne assignments, to Columbian Lasting Machine Company, Portland, Me. Lasting machine	502,236	July 25	2724	687 688	64	543
Preston, Albert F., Lynn, Mass., assignor, by mesne assignments, to Columbian Lasting Machine Company, Portland, Me. Machine for lasting boots or shoes	502,755	Aug. 8	868	312 313	64	711
Preston, Albert F., Lynn, Mass., assignor, by mesne assignments, to Columbian Lasting Machine Company, Portland, Me. Jack for boots or shoes	502,756	Aug. 8	873	213	64	741
Preston, Albert F., Lynn, Mass., assignor to Columbian Lasting Machine Company, Portland, Me. Hand nailing implement	510,442	Dec. 12	989	236 237	65	1612
Preston, Albert F., Boston, Mass., assignor to Columbian Lasting Machine Company, Portland, Me. Hand tacking-machine	510,443	Dec. 12	993	237 238	65	1612
Preston, Alexander, Goodfarm, Ill. Draft-equalizer	496,443	May 2	88	25	63	635
Preston, Charles W., San Francisco, Cal. Calipers for measuring distances	509,096	Nov. 21	1839	450	65	1135
Preston, Charles W., Brooklyn, assignor to Merz Universal Extractor and Construction Company, New York, N. Y. Extracting apparatus	494,647	Apr. 4	188	47	63	39
Preston, Charles W., assignor of one-half to W. C. Espey and W. E. Anderson, San Francisco, Cal. Stock for surface-gages or other implements	498,726	May 30	3820	942	63	1363
Preston, Charles W., assignor of one-half to W. C. Espey and W. E. Anderson, San Francisco, Cal. Combination-gage	504,278	Aug. 29	3350	837	64	1245
Preston, James F., A. F. Terrell, and H. Schiffbauer; said Preston assignor to S. A. and C. E. Schiffbauer, Arrington, Kans. Car-coupling	496,368	Apr. 25	2949	736 737	63	596
Preston, Leonard Z., Champion, assignor of one-third to S. C. McElroy, Imperial, Nebr. Seed dropping mechanism for corn-planters	498,727	May 30	3823	942 943	63	1363
Preston, Leonard Z., assignor of two-thirds to O. H. Wirsig, Champion, and A. Cunningham, Imperial, Nebr. Endless carrier-belt	491,953	Feb. 14	1431	357	62	1050
Preu, Bernhard. (See Reusch and Preu.)						
Prevatt, Simeon F., Sims, Ga. Roller cotton-gin	509,765	Nov. 28	2977	720 721	65	1362
Prevear, Charles M., San Francisco, Cal. Elevator-hatchway attachment	489,755	Jan. 10	1188	311	62	261
Prevost, George A., trustee. (See Hodges, Pliny F., assignor.)						
Prewitt, William Q., Lexington, Ky. Contact for underground electric railways	496,896	May 9	830	220	63	787
Prewitt, William Q., Chicago, Ill. Wire-stretcher	507,452	Oct. 24	2817	689	65	568
Prinbow, John F., Indianapolis, Ind. Saw-swage	508,118	Nov. 7	229	59	65	801
Price, Albert, Marysville, Mont. Powder and fuse warmer	511,160	Dec. 19	2777	558	65	1861
Price, Alexander, Cato, Miss. Car-coupling	494,691	Apr. 4	260	65	63	52
Price, Benjamin L., Denver, Colo. Eye-testing device	505,000	Sept. 12	1143	293	64	1500
Price, Bennett, Brooklyn, N. Y. Supplementary truck for street-cars	492,230	Feb. 21	1867	466	62	1153
Price, Cyrus W. (See Clouser, William, assignor.)						
Price, Daniel, assignor of one-half to P. Connolly, Providence, R. I. Animal-cleaning device	506,643	Oct. 10	1434	359	65	257
Price, Edwin F. (See Pursell and Price.)						
Price, George W. (See Covert and Price.)						
Price, George W., Baltimore, Md. Netting-machine	495,266	Apr. 11	1200	301 302 303	63	241
Price, George W., assignor to W. J. Hooper, Baltimore, Md. Machine for making nets	491,592	Feb. 14	875	221	62	932
Price, Henry S. (See Kent and Price.)						
Price, Ira L. (See Covert and Price.)						
Price, James, Jr., San Fructuoso, Uruguay. Dredging apparatus	500,818	July 4	452	118 119 120	64	83
Price, James M., Philadelphia, Pa., assignor to Price Railway Appliance Company, of Pennsylvania. Rail-joint	501,161	July 11	1012	257	64	198

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Price, James M., Philadelphia, Pa., assignor to Price Railway Appliance Company, of Pennsylvania. Metallic cross-tie and railway-support	503,253	Aug. 15	1698	418	64	905
Price, James M., Philadelphia, Pa., assignor to Price Railway Appliance Company, of Pennsylvania. Truss rail-joint	503,254	Aug. 15	1700	418	64	906
Price, James M., Philadelphia, Pa., assignor to Price Railway Appliance Company, of Pennsylvania. Metallic cross-tie and railway construction	504,540	Sept. 5	331	95	64	1341
Price, James M., Philadelphia, Pa., assignor to Price Railway Appliance Company, of Pennsylvania. Support and fastening for metallic ties	507,080	Oct. 17	2158	534	65	432
Price, James M., Philadelphia, Pa., assignor to Price Railway Appliance Company, of Pennsylvania. Railway support or substructure	507,688	Oct. 31	3239	793	65	659
Price, James S. (See McCutcheon, Joshua L., assignor.)						
Price, Jesse M. (See Maxim and Price.)						
Price, Joseph H., Chicago, Ill. Harness-saddle	501,024	July 4	766	201	64	140
Price, O. S., et al. (See Cunningham, Richard B., assignor.)						
Price Railway Appliance Company. (See Price, James M., assignor.)						
Price, Thomas J., Monroe, N. C. Churn-power	492,429	Feb. 28	2171	543	62	1228
Price, William, Philadelphia, Pa. Car-coupling	506,543	Oct. 10	1293	323	63	260
Price, William A., Iowa Falls, Iowa. Apparatus for electrically treating the eyes	490,678	Jan. 31	2734	704	62	609
Price, William A., Iowa Falls, Iowa. Apparatus for electrically treating the ear	490,679	Jan. 31	2735	704	62	609
Price, William G., Waterbury, Conn. Pencil-sharpener	492,336	Feb. 21	2024	503	62	1186
Price, William G., Waterbury, Conn. Pencil-sharpener	510,518	Dec. 12	1116	270	65	1635
Price, William H., Jr., assignor to Chandler & Price, Cleveland, Ohio. Machine for dressing chases for printing-presses	509,824	Nov. 28	3080	744	65	1382
Price, William H., Jr., assignor to Chandler & Price, Cleveland, Ohio. Inking-plate and attachment for printing-presses	509,825	Nov. 28	3081	744	65	1382
Price, William J. (See Rathbone, William, assignor.)						
Prickett, Brantly. (See Forbes and Prickett.)						
Prickett, Joshua, Marinette, Wis. Guard attachment for levels	502,202	July 25	2667	673	64	532
Pridmore, Edward, assignor to Johnston Harvester Company, Batavia, N. Y. Cultivator	500,349	June 27	2677	656 657	63	1898
Pridmore, Edward, assignor to Johnston Harvester Company, Batavia, N. Y. Disk harrow	503,773	Aug. 22	2546	634	64	1076
Pridmore, Edward, assignor to Johnston Harvester Company, Batavia, N. Y. Disk harrow	503,774	Aug. 22	2549	635	64	1077
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mower	497,816	May 23	2299	577 578	63	1080
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mower	497,817	May 23	2303	578 579	63	1081
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester	504,089	Aug. 29	3034	758	64	1186
Pridmore, William A., Ironwood, Mich. Spool-holder for sewing-machines	508,238	Nov. 7	424	103	65	837
Pridgen, Leonidas E., Snow Hill, N. C. Attachment for plows	508,119	Nov. 7	224	60	65	802
Prier, Anton, Kansas City, Mo. Illuminating vapor-burner	493,293	Mar. 14	824	211	62	1536
Priest, Edward D., Lynn, Mass., assignor to General Electric Company, of New York. Commutator-connector	495,058	Apr. 11	826	209	63	173
Priest, Edward D., Lynn, assignor to General Electric Company, Boston, Mass. Electric-railway motor	508,633	Nov. 14	1071	265	65	974
Priest, Edward D., Lynn, assignor to General Electric Company, Boston, Mass. Mounting armatures for dynamo-electric machines	508,634	Nov. 14	1072	266	65	975
Priest, George W., et al. (See Ralston, Matthew J., assignor.)						
Priest, Joseph K., Nashua, N. H. Power-transmitting flexible shaft	501,731	July 18	1908	475	64	377
Priestman, Albert. (See Drysdale, Bruce, assignor.)						
Prieto y Cubillos, Rodolfo, Bogota, Colombia. Cartridge-shell extractor	506,937	Oct. 17	1935	479	65	392
Prigge, William, Flushing, N. Y. Apparatus for cutting ice-cream, &c.	502,863	Aug. 8	1052	258 259	64	775
Prindle, Farrand C. (See Baumgarten, Theodore L., assignor.)						
Prindle, Farrand C., Hornellsville, N. Y. Portable commode	507,841	Oct. 31	3496	860	65	707
Prindle, George S. (See Flint, Edwin H., assignor.)						
Prindle, George S. (See Flint, Edwin H., assignor.) (Reissue.)						
Prindle, George S., et al. (See Hopkins, Jason R., assignor.)						
Pringle, Robert. (See Pringle, Walter and R.)						
Pringle, Walter and R., Hawick, Scotland. Thread-carrier for knitting-machines	507,929	Oct. 31	3627	877	65	731
Prins, Eliza L., Antwerp, Belgium. Preservative cover for water-closets	496,536	May 2	232	61	63	661
Prinz, William H., assignor to Saladin Pneumatic Malting Construction Company, Chicago, Ill. Grain steeping and washing apparatus	500,509	June 27	2908	715	63	1939
Priode, Abraham, Pomeroy, Ohio. Rotary cutter-head and bit	508,181	Nov. 7	325	81	65	818
Prior, Matthew, Watertown, Mass., assignor, by mesne assignments, to Century Cotton Company, of West Virginia. Roller cotton-gin	511,711	Dec. 26	3194	782 783	65	2041
Pritchard, Albert R. (See Milne, Charles D., assignor.)						
Pritchard, Albert R. (See Milne and Pritchard.)						
Pritchard, Albert R., assignor of one-half to C. D. Milne, Rochester, N. Y. Handle for vessels	494,386	Mar. 28	2644	662	62	1912
Pritchard, Albert R., assignor of one-half to C. D. Milne, Rochester, N. Y. Handle for vessels	494,387	Mar. 28	2644	662	62	1912
Pritchard, Hugh C., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	491,593	Feb. 14	820	222	62	939
Pritchard, Hugh C., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	496,169	Apr. 25	2611	657	63	532
Pritchard, Hugh C., assignor to National Cash Register Company, Dayton, Ohio. Cash register and recorder	496,795	May 2	643	171 172	63	734
Pritchard, James K., Providence, R. I. Electrical contact device	503,775	Aug. 22	2551	635	64	1077
Pritchett, Wesley W., Ogden, Utah Ter. Electric-railway trolley	496,280	Apr. 25	2763	696	63	564
Probst, Adam, assignor to Doerr & Reinhardt, Worms, Germany. Machine for working leather	489,611	Jan. 10	1010	263	62	226
Prochazka, George A., and W. Scharringhausen, assignors to Heller & Merz Company, Newark, N. J. Ultramarine-furnace	495,515	Apr. 18	1598	402	63	333
Proctor, Charles W., Lake Forest, Ill. Oil-can	504,748	Sept. 12	725	181	64	1420
Proctor, David G., Washington, D. C. Air cooling and purifying apparatus	489,033	Jan. 3	80	22 23	62	21
Proctor, H. P. (See Smith, Seth T., assignor.)						
Proctor, Josiah K., assignor to Philadelphia Textile Machinery Company, Philadelphia, Pa. Drying-machine	502,237	July 25	2730	688 689	64	544
Proctor, Josiah K., assignor to Philadelphia Textile Machinery Company, Philadelphia, Pa. Drying-machine	504,747	Sept. 12	722	180	64	1419
Procnier, Henry E., Oak Park, assignor to American Spring Company, Chicago, Ill. Apparatus for edging metal ribbons or strips	493,294	Mar. 14	826	211	62	1536

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Procurier, Henry E., Oak Park, assignor to American Spring Company, Chicago, Ill. Process of and apparatus for tempering or hardening steel wire	496,208	Apr. 25	2673	671	63	543
Proeber, Gustav, Brunswick, assignor, by mesne assignments, to G. Olberg, Grevenbroich, Germany. Centrifugal machine	489,166	Jan. 3	276	77	62	64
Progressive Product Company. (See Adriance and Armstrong, assignors.)						
Prohl, Albert C. (See Fiedler and Prohl.)						
Prohl, Albert C., Milwaukee, Wis. Book-holder or copy-stand	506,015	Oct. 3	332	88	65	65
Proskauer, Samuel, et al. (See Cosby, Anderson B., assignor.)						
Proskey, Samuel, et al. (See Lancaster, John P., assignor.)						
Pross, John A., and C. E. Lipe, Syracuse, N. Y. Welding apparatus	495,947	Apr. 18	2274	573 574	63	453
Prosser, David M., Reno, Nev. Wood-sawing machine	497,209	May 9	1300	331	63	871
Prosser, Joseph W., New London, assignor to C. Watrous and S. D. Beaushene, Ledyard, Conn. Bicycle	507,081	Oct. 17	2159	535	65	432
Protzman, John R., Streator, Ill. Support for electric lamps	493,446	Mar. 14	1061	273	62	1582
Prounsitzer, Julius, et al. (See Fay, Alpheus, assignor.)						
Prouty, Enoch, Chicago, Ill. Power-transmitting device	491,759	Feb. 14	1129	284 285	62	990
Prouty, Theodore C., St. Joseph, Mich. Door-hanger	502,582	Aug. 1	559	133	64	668
Provan, James W. and J. W., Oshawa, Canada. Hay-carrier	495,756	Apr. 18	1984	501 502	63	400
Provan, John W. (See Provan, James W. and J. W.)						
Provine, Albert G., Puyallup, Wash. Sprayer	498,696	May 30	3752	926	63	1350
Provino, James E., Ridgewood, N. J. Brush	489,034	Jan. 3	84	24	62	22
Provost, Peter, Menominee, Mich. Grain-scouring machine	504,173	Aug. 29	3180	794 795	64	1213
Pruden, Clarence D., assignor of one-half to P. A. Deslauriers, St. Paul, Minn. Sheet-metal-molding machine	489,498	Jan. 10	812	213 214	62	186
Pruden, Silas, assignor of one-half to G. Sinsabaugh, Los Angeles, Cal. Nailless horseshoe	500,946	July 4	634	167	64	116
Prud'hon, Léon. (See Dame and Prud'hon.)						
Prüfer, Carl. (See Schurig and Prüfer.)						
Prüsmann, Carl, assignor to Schäffer & Budenberg, Magdeburg-Buckau, Germany. Safety-valve	511,650	Dec. 26	3099	757	65	2024
Prutzman, Morris G., Lehigh Gap, Pa. Switch-stand	491,812	Feb. 14	1214	304	62	1007
Prutzman, Morris G., Lehigh Gap, Pa. Switch-stand	507,842	Oct. 31	3497	860	65	707
Pruyn Company. (See Pruyn, Henry S., assignor.)						
Pruyn, Henry S., Hoosick Falls, N. Y., assignor to Pruyn Company, Chicago, Ill. Elevated-railway car	494,081	Mar. 21	2129	544 545	62	1802
Pruyn, Henry S., Hoosick Falls, N. Y., assignor to Pruyn Company, Chicago, Ill. Traction wheel and rail	505,845	Oct. 3	66	17	65	15
Pruyn, John R., assignor of one-half to C. J. Miller, Chicago, Ill. Telephone-tablet	492,587	Feb. 23	2434	606	62	1283
Przybil, Paul, New York, N. Y. Saw-table gage	503,726	Aug. 22	2472	614	64	1061
Pyrm, Heinrich, Stolberg, near Aachen, Germany. Hook and eye	500,210	June 27	2455	599	63	1859
Pölander, Charles A. (See Angerer and Pölander.)						
Pösta, Anton, West Point, Nebr., assignor of one-half to K. E. Valentine. Wagon-loading device	493,598	Mar. 14	1334	340	62	1634
Puckett, S. H. (See Goings, Martin B., assignor.)						
Puckett, William J., assignor to Novel Envelope-Opener Company, Denver, Colo. Envelope-opener. (Reissue)	11,332	May 9	1467	370	63	899
Puckette, Charles J. C., Baton Rouge, La. Fixture for mosquito-bars	506,885	Oct. 17	1851	461	65	375
Puddefoot, Charles, assignor to Detroit Cork Screw Company, Detroit, Mich. Corkscrew	501,468	July 11	1486	374	64	286
Puetz, Tillman, Jr., St. Louis, Mo. Mash-mixing machine	490,498	Jan. 24	2425	626	62	534
Puffer, Alvin D., Jr., Medford, Mass., assignor to American Soda Fountain Company, Jersey City, N. J. Faucet for soda-water draft apparatus	489,325	Jan. 3	522	142	62	113
Puffer, Charles C. (See Hummel, August, assignor.)						
Puffer, Florentine V., et al. (See Kermeeen, George S., assignor.)						
Puffer, Freeman W., et al. (See Ring, John H., assignor.)						
Pugh, Andrew F., Palouse, Wash. Fabric-turfing implement	490,792	Jan. 31	2911	748	62	643
Pugh, Cortez V., assignor of two-thirds to J. Farrell and J. A. Dixon, Bowling Green, Mo. Hasp-lock	489,326	Jan. 3	524	142	62	113
Pugh, David, Cumberland, Md. Glass-batch mixer	491,445	Feb. 7	629	158	62	868
Pugh, Edward D., Clinton, Kans. Gate	510,445	Dec. 12	1000	238	65	1614
Pugh, Morton E., Sunflower, Miss. Excavator	498,364	May 30	3204	797	63	1253
Pugh, Oliver C., Chicago, Ill. Cane	490,722	Jan. 31	2797	717	62	622
Pugh, Oliver C., Chicago, Ill., assignor to S. W. Croy, Omaha, Nebr. Cane or similar article	498,187	May 23	2885	720	63	1183
Pugh, Robert, assignor of one-half to W. Grovenor, Casselton, N. D. Heating-drum	502,999	Aug. 8	1285	314	64	816
Pugh, William H., Carthage, Ohio. Buckle and snap	511,310	Dec. 19	2528	615	65	1907
Pugsley, Charles E., New York, N. Y. Rope-clamp	506,441	Oct. 10	1126	280	65	227
Pullar, Charles, Hartford, Conn. Axle-box	509,584	Nov. 28	2697	652	65	1309
Pulliam, Luther, assignor to R. M. Scruggs, St. Louis, Mo. Bridge	495,005	Apr. 4	743	188	63	142
Pullman, Charles L., Chicago, Ill. Safety device for railway-cars	509,326	Nov. 21	2224	537 538	65	1207
Pullman, Herbert S., assignor of one-half to H. L. Allen, Meriden, Conn. Necktie-fastener	502,757	Aug. 8	875	214	64	741
Pullman, William R., and H. Smith, Godalming, England. Machine for treating hides	491,446	Feb. 7	631	158 159	62	869
Pullman's Palace Car Company. (See Rapp, August, assignor.)						
Pumphrey, Nimrod B., Moorefield, Ohio. Plow	491,904	Feb. 14	1358	318	62	1035
Puntney, Minnie E., Butler, Ill. School-desk and organ combined	506,938	Oct. 17	1936	479	65	392
Purcell, Henry, New Madrid, Mo. Washboard	497,342	May 16	1558	392	63	931
Purcell, James J., Boston, assignor of one-half to W. H. Crosson, Middleborough, Mass. Signaling apparatus	497,128	May 9	1188	303 396 397 398 399	63	851
Purdon, Frederick, and H. E. Walters, London, England. Apparatus for obtaining motive power from running water	506,725	Oct. 17	1580	396 397 398 399	65	326
Purdon, Frederick, and H. E. Walters, London, England. Roller-bearing	507,162	Oct. 24	2327	572	65	476
Purdon, Frederick, and H. E. Walters, London, England. Roller-bearing	509,048	Nov. 21	1739	430 431	65	1116
Purdon, Frederick, H. E. Walters, and W. H. Woodcock, London, England. Roller-bearing	490,859	Jan. 31	3003	770	62	663
Purdum, Samuel E., Macomb, Ill. Blind-stop	497,685	May 16	2096	523	63	1027
Purdy, B. F., et al. (See Forsyth, Henry C., assignor.)						
Purdy, Charles H., Michigan City, Ind., assignor to Frank H. Clement Company, Rochester, N. Y. Double-boring machine	494,082	Mar. 21	2132	545	62	1802

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Purdy, Hiram E., Rockwell City, Iowa. Automatic hog-watering trough.....	506,253	Oct. 10	793	196	65	162
Purdy, John H., Chicago, Ill. Lamp.....	493,341	Mar. 14	900	231	62	1549
Purinton, Warren S., <i>et al.</i> (See Weidaw, Frank T., assignor.)						
Purinton, Judson K., Des Moines, Iowa. Dish-cleaner.....	506,726	Oct. 17	1582	399	65	326
Purling, William, assignor of one-half to J. Bird, Roanoke, Va. Folding fence.....	492,614	Feb. 28	2486	617	62	1292
Purrrington, Elwin I., assignor of one-half to S. J. Putney, Wakefield, Mass. Drainage-skid.....	496,537	May 2	232	61	63	661
Pursell, Harry D., Washington Court-House, Ohio. Vending-machine.....	496,281	Apr. 25	2785	697	63	565
Pursell, Harry D., and E. F. Price, Washington Court-House, Ohio. Coin-controlled automation.....	496,324	Apr. 25	2864	715	63	579
Parves, George. (See Johnston, John H., assignor.)						
Parvis, Charley D., Cardington, Ohio. Incubator.....	511,546	Dec. 26	2930	{ 713 714 }	65	1994
Parvis, William. (See Glen, Purvis, and Smith.)						
Pasel, Albert, Munich, Germany. Spittoon.....	509,555	Nov. 28	2650	641	65	1300
Pusey, Lea, Wilmington, Del. Ice-making apparatus.....	491,225	Feb. 7	267	67	62	799
Pusey, Thomas M., West Chester, Pa. Valve-gear for steam-engines.....	490,966	Jan. 31	3225	824	62	705
Putnam, B. F., <i>et al.</i> (See Karnes and Rice, assignors.)						
Putnam, Charles E., Richmond, Kans. Cash-drawer and manual recorder.....	507,592	Oct. 31	3083	753	65	629
Putnam, Edmond. (See Gardner, George W., assignor.)						
Putnam, Joseph H., Bridgeton, N. J. Hot-air furnace.....	505,177	Sept. 19	1432	369	64	1566
Putnam, Samuel W., Elizabeth, assignor to American Saw Company, Trenton, N. J. Wrench.....	503,677	Aug. 22	2389	596	64	1045
Putnam, Waldo D., assignor of one-half to W. H. Wilkinson, Boston, Mass. Nut-tapping machine.....	497,892	May 23	2435	609	63	1104
Putnam, William F., Wellington, Ohio. Flour compound.....	492,969	Mar. 7	312		62	1421
Putnam, William H., Smithton, Mo. Chicken-house.....	508,529	Nov. 14	911	224	65	942
Putnam, William T., Brightwood, Ind. Oil-burner.....	500,350	June 27	2680	{ 657 658 }	63	1898
Putnam, William T., Brightwood, Ind. Oil-burner.....	501,692	July 18	1846	459	64	367
Putney, S. J. (See Purrrington, Elwin I., assignor.)						
Pyle, Charles and J. Lebanon, assignors of one-third to W. B. Bradsby, Greenville, Ill. Windmill.....	491,663	Feb. 14	982	{ 247 248 }	62	960
Pyle, Edwin I., assignor of one-half to W. H. Gardner, Bridgeport, Conn. Mechanical toy.....	510,444	Dec. 12	998	238	65	1613
Pyle, Joseph. (See Pyle, Charles and J.)						
Pynchon, Edwin, Chicago, Ill. Air-ship.....	508,753	Nov. 14	1240	{ 309 310 }	65	1007
Q. & C. Company. (See Holmes, William W., assignor.)						
Q. & C. Company. (See Reece, Benjamin, assignor.)						
Q. & C. Company. (See Worthington, William W., assignor.)						
Quartius, August G., <i>et al.</i> (See Winkler, Fredrick W., assignor.)						
Quast, Charles, assignor of one-half to F. M. Hicks, Chicago, Ill. Air-compressor.....	501,046	July 4	805	210	64	144
Quayle, Robert, Kaukauna, Wis., assignor to Safety Car Heating and Lighting Company, of New Jersey. Car-heating device.....	497,252	May 9	1372	348	63	834
Queen, Allen R., and J. J. Kimball; said Queen assignor to J. J. Nesbit, Larned, Kans. Lubricator.....	501,627	July 18	1741	433	64	349
Queen Liquid and Filtering Slot Machine Company. (See Bothwell, Henry R., assignor.)						
Quentell, William P., Kansas City, Mo. Lamp-extinguisher.....	509,943	Dec. 5	160	37	65	1439
Quick, Alfred M. (See Perkins, Frank A., assignor.)						
Quick, Alfred M., Providence, R. I. Game apparatus.....	508,774	Nov. 14	1244	310	65	1008
Quick, Joseph, and T. Nelson, London, England. Twine-cutter.....	499,364	June 13	1039	252	63	1526
Quickel, Edwin G. (See Moul and Quickel.)						
Quigg, Lewis R., Spring City, assignor of one-half to S. S. Wells, Royersford, Pa. Bread-cutter.....	495,999	Apr. 25	2354	595	63	484
Quiggle, James B., McElhattan, Pa. Coffee-mill.....	490,163	Jan. 17	1865	486	62	413
Quigley Furniture Company. (See Bancroft, Melvin, assignor.)						
Quigley, Hiram F., Atoka, Indian Ter. Churn.....	504,174	Aug. 29	3182	795	64	1214
Quilleash, John M., and W. F. Bacon, Sauborn, Iowa. Bridle-check.....	489,545	Jan. 10	879	230	62	199
Quimby, John H., Concord, N. H. Automatic railway-switch.....	506,606	Oct. 10	1379	346	65	276
Quimby, John H., Concord, N. H. Car-coupling.....	508,239	Nov. 7	425	103	65	837
Quimby, John R., assignor to H. Mann, Jr., Wilmington, Vt. Attachment for screw-drivers.....	491,687	Feb. 14	1018	258	62	969
Quimby, Albert O., Fresno, Cal. Gate-hinge.....	490,834	Jan. 31	2970	762	62	656
Quincy, Josiah. (See Bélanger, Victor, assignor.)						
Quinlan, John E., Boston, Mass. Banjo.....	493,875	Mar. 21	1774	452	62	1735
Quinn, David J., Brookline, and P. W. Hoffmann, Boston, Mass., assignors to Iona Manufacturing Company, Portland, Me. Electric gas-lighter.....	496,618	May 2	355	96	63	684
Quinn, Gordon H., <i>et al.</i> (See Fanning, James W., assignor.)						
Quinn, James A., Brooklyn, N. Y. Dumping-bucket.....	500,426	June 27	2792	{ 687 688 689 }	65	1918
Quinn, James B., New Orleans, La. Dredging apparatus.....	496,599	May 2	486	{ 130 131 }	63	707
Quinn, John N., Cincinnati, Ohio. Grinding-machine for scarfing or beveling saws.....	489,984	Jan. 17	1568	410	62	352
Quinn, Roger, Philadelphia, Pa. Tool for cutting tapering openings.....	489,265	Jan. 3	442	122	62	97
Quinn, William, Tyler, Tex. Screw-jack.....	493,183	Mar. 7	639	163	62	1484
Quinn, William, and J. S. Berry, Tyler, Tex. Railway-splice.....	494,083	Mar. 21	2134	546	62	1803
Quinn, William H., <i>et al.</i> (See Fanning, James W., assignor.)						
Quintus, Louis and W., Garner, Iowa. Band-cutting and feeding attachment for thrashing-machines.....	507,163	Oct. 24	2328	{ 573 574 }	65	476
Quintus, William. (See Quintus, Louis and W.)						
Quirk, Edward W., <i>et al.</i> (See Bells, Robert T., assignor.)						
Quisenberry, Edward A., Lexington, Va. Car-heater.....	501,361	July 11	1332	331	64	256
Quisenberry, Edward A., Lexington, Va. Car-heater.....	501,483	July 11	1510	380	64	290
Quortrup, August, Richmond Hill, N. Y. Bill-file.....	491,905	Feb. 14	1359	338	62	1035
R. E. Dietz Company. (See Betts, Lewis F., assignor.)						
R. E. Dietz Company <i>et al.</i> (See Erb, Charles F., assignor.)						
R. E. Dietz Company <i>et al.</i> (See Dietz, Frederick, assignor.)						
R. E. Dietz Company <i>et al.</i> (See Wright, Frederick K., assignor.)						
R. L. Little Manufacturing Company. (See Little, William M., assignor.)						
R. S. True Company. (See True, Richard S., assignor.)						
R. T. Barton Company. (See Barton, Richard T., assignor.)						
Raab, Josef, Ludwigshafen, Germany. Woven pile fabric.....	509,138	Nov. 21	1904	465	65	1147
Raabe, Carl, Berlin, Germany, assignor of one-half to G. H. Benjamin, New York, N. Y. Rotary cutter.....	501,213	July 11	1023	275	64	213
Rabbeth, Francis J., Boston, Mass. Coffee-pot.....	506,338	Oct. 10	934	232	65	190

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Rabbidge, Parnell, Sydney, New South Wales. Telephonic switch appliance.....	489,266	Jan. 3	443	122	62	97
Rabbidge, Parnell, Sydney, New South Wales. Electro-magnetic alarm.....	509,680	Nov. 28	2846	687 688	65	1338
Rabbidge, Parnell, Sydney, New South Wales. Telephonic instrument.....	511,456	Dec. 26	2796	677	65	1968
Raben, Charles K. J., Grand Rapids, Mich. Stock securing and releasing device.....	510,365	Dec. 5	857	206	65	1573
Raber, Nathan L., Corvallis, assignor to Portland Amalgamator and Mining Company, Portland, Oreg. Amalgamator.....	497,603	May 16	1969	493	63	1004
Rabich, William, assignor, by mesne assignments, of one-half to Herrmann-Rabich Fan and Motor Manufacturing Company, St. Louis, Mo. Adjustable belt-tightener for fans.....	491,024	Jan. 31	3293	840 841	62	719
Rabich, William, assignor to Herrmann-Rabich Fan and Motor Manufacturing Company, St. Louis, Mo. Motor.....	496,486	May 2	144	40	63	645
Raby, Richard, York, Pa. Hedge-clip.....	503,161	Aug. 15	1552	380	64	879
Raby, Richard, assignor to D. A. Eberle, York, Pa. Lifting-jack.....	507,038	Oct. 17	2095	519	65	421
Rach, Carl, Chicago, Ill. Making beer.....	492,052	Feb. 21	1582	62	1095	
Rach, Carl, Chicago, Ill. Apparatus for brewing.....	493,342	Mar. 14	901	231	62	1550
Rach, Carl, Chicago, Ill. Preparation of wort from Indian corn.....	500,294	June 27	2577	63	1880	
Rachal, Paul F., Fort Jesup, La. Vehicle-hub.....	495,707	Apr. 18	1910	487	63	385
Raddin, John, Lynn, Mass. Wagon axle and box.....	500,427	June 27	2794	688	63	1919
Rader, Edward, and L. G. Heist, Philadelphia, Pa. Meat-scorer.....	494,027	Mar. 21	2043	521	62	1786
Rader, Reuben G., Cerro Gordo, Ill. Dehorning implement.....	503,617	Aug. 22	2306	575	64	1029
Rader, William, and E. Hunter, Allentown, Pa. Car-axle box.....	492,231	Feb. 21	1869	467	62	1154
Radford, Benjamin F., Hyde Park, Mass. Spiral conveyor.....	499,175	June 6	729	173	63	1517
Radford, Benjamin F., Hyde Park, Mass. Brake for pulleys.....	500,611	July 4	133	33	64	24
Radovanovic, Andreas, Pilsen, Austria-Hungary. Reversing-gear.....	490,754	Jan. 31	2848	731	62	631
Rady, John, Georgetown, Conn. Wire-netting machine.....	503,356	Aug. 15	1872	463 464 465	64	936
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Electric locomotive.....	491,857	Feb. 14	1284	318 319	62	1021
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Conduit-railway.....	492,106	Feb. 21	1604	413 414	62	1111
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Cross-over switch for electric railways.....	495,615	Apr. 18	1760	444	63	361
Rae, Robert A. V. (See Kay, Joshua A., assignor.)						
Rae, Thomas, New York, N. Y. Door-check.....	490,925	Jan. 31	3124	801	62	686
Raeuchle, William, Boston, Mass. Guide for sewing-machines.....	490,885	Jan. 31	3051	783	62	673
Raez, Nikolaus, St. Joseph, Mo. Planting and seeding machine.....	494,795	Apr. 4	432	106 107	63	84
Raffel, Isaac G., Baltimore, Md. Paper-box-covering machine.....	490,124	Jan. 17	1801	469 470	62	400
Raffloer, Louis, <i>et al.</i> (See Bayler, Adolph, assignor.)						
Ragan, James B., Sidney, Nebr. Station-indicator.....	489,499	Jan. 10	816	214	62	186
Ragland, Eddie T. (See Shutt and Ragland.)						
Ragoucy, Joachim, Paris, France. Velocipede.....	506,727	Oct. 17	1583	399 400	65	326
Ragoucy, Joachim, Paris, France. Hub for vehicle-wheels.....	510,519	Dec. 12	1117	270	65	1636
Ragoucy, Joachim, Paris, France. Velocipede-frame.....	511,359	Dec. 26	2622	637	65	1938
Rahner, Martin, Union, N. J. Armature.....	505,957	Oct. 3	238	63	65	47
Rahr, Reinhardt, Manitowoc, Wis. Making caramel malt.....	491,813	Feb. 14	1216	62	1007	
Raible, Constantin, Oskaloosa, Iowa. Vegetable-cutter.....	510,289	Dec. 5	751	182	65	1551
Railsback, Lafayette D., Indianapolis, Ind. Rotary-disk plow.....	505,777	Sept. 26	2468	622	64	1773
Railsback, Lafayette D., Indianapolis, Ind. Rotary-disk plow.....	510,992	Dec. 19	2014	497 498	65	1810
Rainey, Frank S. (See Allen, Peter W., assignor.)						
Rainey, J. B., <i>et al.</i> (See Bryant, William H., assignor.)						
Rainey, Samuel, <i>et al.</i> (See Austin, William G., assignor.)						
Raisbeck, George A., Brooklyn, N. Y. Portable cabinet.....	493,247	June 13	829	197	63	1549
Raky, Anton, Dürrenbach, Germany. Boring apparatus for deep borings.....	510,366	Dec. 5	858	207	65	1573
Ralph, D. Clark. (See Parkinson, William J., assignor.)						
Ralph, Martin, New York, N. Y. Ticket and change pocket.....	505,001	Sept. 12	1144	293	64	1500
Ralph, Sidney L., and G. W. Roach, Abilene, Tex.; said Roach assignor to said Ralph. Window-sash.....	498,991	June 6	433	100 101	63	1467
Ralph, William H., Allegheny, Pa. Garment-supporter.....	493,648	Mar. 21	1411	358	62	1664
Ralston, Matthew J., assignor of two-thirds to R. M. Ralston and G. W. Priest, Meriden, Kans. Washing-machine.....	506,544	Oct. 10	1294	324	65	260
Ralston, Richard M., <i>et al.</i> (See Ralston, Matthew J., assignor.)						
Ramacciotti, Albert D., executor. (See Ramacciotti, Francis.)						
Ramacciotti, Francis, deceased; A. D. Ramacciotti, New York, N. Y., executor. Machine for swaging wire for musical instruments.....	508,974	Nov. 21	1628	399 400	65	1095
Ramage, William A., Auburn, N. Y. Oyster-steamer.....	492,970	Mar. 7	313	80	62	1421
Ramer, Elwood T., Geneseo, Ill. Work-box.....	489,593	Jan. 10	949	247	62	212
Ramey, Alfred H., Aurora, Ill. Pistol for discharging coins.....	497,059	May 9	1080	277	63	831
Ramey, James, Brooks, Ill. Combined land furrower and marker.....	504,617	Sept. 5	491	126	64	1362
Ramien, Edgar F., assignor to H. Hobbs, A. W. Friese, and H. W. Ramien, Milwaukee, Wis. Switch for governing electric motors.....	505,063	Sept. 12	1243	319	64	1518
Ramien, Henry W., <i>et al.</i> (See Ramien, Edgar F., assignor.)						
Rammel, Augusta, Alexandria, Va. Baking-pan.....	489,985	Jan. 17	1569	411	62	352
Ramsburg, George W., Van Clievesville, W. Va. Flood-fence.....	492,232	Feb. 21	1871	467	62	1154
Ramsay, Burt, Attleborough, Mass. Ink-bottle attachment.....	508,340	Nov. 7	582	143	65	866
Ramsdell, Frank G. (See Edmunds, George C., assignor.)						
Ramsey, Claude L., <i>et al.</i> (See Triphagen, Charles H., assignor.)						
Ramsey, George E. (See Owens and Lewellyn, assignors.)						
Ramsey, George M., Clokey, Pa. Steel rail for use on common roads.....	492,365	Feb. 21	2070	517	62	1195
Ramsey, John J., <i>et al.</i> (See Patton, Charles W., assignor.)						
Ramsey, Joseph, Jr., and E. W. Harden, assignors to F. C. Weir, Cincinnati, Ohio. Electric signal, switch moving, and interlocking mechanism.....	494,489	Mar. 28	2788	699 700	62	1938
Ramsey, Thomas J., <i>et al.</i> (See Patton, Charles W., assignor.)						
Rand, Charles N., Geneva, Ohio. Pedal-piano.....	489,035	Jan. 3	85	24	62	22
Rand, George D., <i>et al.</i> (See Phillips, Charles W., assignor.)						
Rand, James H., North Tonawanda, N. Y. Combined index and balance-indicator for account-books.....	493,841	Mar. 21	1723	439 440	62	1725
Rand, Lory O. (See Shallenberger and Rand.)						
Randall, Charles A., London, England. Apparatus for recording and reproducing speech, &c.....	502,382	Aug. 1	220	52, 53	64	606

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Randall, Charles A., London, England. Apparatus for recording and reproducing articulate speech.	502,383	Aug. 1	224	53, 54	64	607
Randall, Charles F., Washington, D. C., assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	498,305	May 30	3103	773	63	1236
Randall, Durward E., et al. (See Cleeland, William M., assignor.)						
Randall, Egbert J., and G. H. Chase, Evart, Mich. Trace-carrier.	507,164	Oct. 24	2331	574	65	476
Randall, Frank J., St. Louis, Mo. Lining for bearing-boxes.	497,210	May 9	1303	331	63	872
Randall, Franklin S., Philadelphia, Pa. Electric-wire covering.	511,547	Dec. 26	2931	714	65	1994
Randall, James D. (See Randall, Silas H., assignor.)						
Randall, James D., et al. (See Allen, Alfred J., assignor.)						
Randall, Silas H., et al. (See Allen, Alfred J., assignor.)						
Randall, Silas H., assignor of one-half to J. D. Randall, Wyoming, Ohio. Clutch.	502,758	Aug. 8	876	214	64	741
Randall, Silas H., assignor of one-half to J. D. Randall, Wyoming, Ohio. Leather-folder.	506,939	Oct. 17	1936	{ 479 480	{ 65	392
Randlette, George B. (See Webber, Oakland A., assignor.)						
Randolph & Clowes. (See Callan, James, assignor.)						
Randolph & Clowes. (See Clatworthy, Thomas B., assignor.)						
Randolph & Clowes. (See Cotter, Charles A., assignor.)						
Randolph & Clowes. (See Deming, Ferdinand, assignor.)						
Randolph & Clowes. (See Dever and Cotter, assignors.)						
Randolph, George W., assignor of one-half to J. M. Smith, Memphis, Tenn. Cultivator and planter.	509,766	Nov. 28	2978	721	65	1362
Randolph, George W., assignor of one-half to J. M. Smith, Memphis, Tenn. Combined side-harrow and cultivator.	509,767	Nov. 28	2981	{ 721 722	{ 65	1363
Randolph, George W., assignor of one-half to J. M. Smith, Memphis, Tenn. Cultivator, harrow, and cotton-planter.	509,826	Nov. 28	3082	745	65	1383
Randolph, James J., Cadiz, Ky. Pole or shaft support for vehicles.	489,614	Jan. 10	978	254	62	218
Randolph, Jiles R. and W. R., Trigg county, Ky. Reversible saw-handle.	508,975	Nov. 21	1632	400	65	1095
Randolph, Madison A., W. C., and R. L., Summerville, Mo. Combined gang-plow and cultivator.	498,697	May 30	3753	926	63	1351
Randolph, Robert L. (See Randolph, Madison A., W. C., and R. L.)						
Randolph, William, Ashton, Nebr. Hand-car.	492,337	Feb. 21	2025	{ 503 504	{ 62	1186
Randolph, William C. (See Randolph, Madison A., W. C., and R. L.)						
Randolph, William R. (See Randolph, Jiles R. and W. R.)						
Range, John J., and E. N. Foote, assignors to Boston Cash Register Company, Northampton, Mass. Cash-registering machine.	495,948	Apr. 18	2277	574	63	454
Range, John J., and E. N. Foote, assignors to Boston Cash Register Company, Northampton, Mass. Cash-registering machine.	498,728	May 30	3825	{ 943 944	{ 63	1363
Ranger, Henry P., Rochester, N. Y. Mirror for use in photography.	505,127	Sept. 19	1354	348	64	1552
Rank, W. M., et al. (See Masterman, William H., assignor.)						
Rankin, Francis M. (See Murphy and Rankin.)						
Rankin, Thomas I., assignor to Abram Cox Stove Company, Philadelphia, Pa. Fireplace-stove.	508,341	Nov. 7	584	{ 143 144	{ 65	866
Rankin, Thomas L., Chicago, Ill. Artificial-ice skating-rink.	502,755	Nov. 14	1245	310	65	1008
Rankin, William, Lincoln, Ill. Combination-tool.	494,161	Mar. 28	2274	577	62	1843
Rankin, William F. (See Plasters, Rankin, and Wolfe.)						
Rankine, David A., Waterloo, near Liverpool, England. Apparatus for filtering water.	502,583	Aug. 1	560	134	64	669
Ranney, Charles T., assignor to Ranney Refrigerator Company, Greenville, Mich. Drip-cup attachment for refrigerators.	498,489	May 30	3389	843	63	1288
Ranney, Fred. E., assignor to Ranney Refrigerator Company, Greenville, Mich. Ice-rack for refrigerators.	497,458	May 16	1737	438	63	963
Ranney Refrigerator Company. (See Ranney, Charles T., assignor.)						
Ranney Refrigerator Company. (See Ranney, Fred. E., assignor.)						
Ranney, William C., et al. (See Wolcott, Henry E., assignor.)						
Ranney, William H., Detroit, Mich. Card shuffling and dealing mechanism.	507,930	Oct. 31	3628	897	65	731
Rano, Charles O. (See Dean, Cyrus S., assignor.)						
Ransley, Thomas, Jr., Troy, N. Y. Thill-coupling.	505,674	Sept. 26	2299	583	64	1742
Ransom, Franklin A., Farley, Iowa. Ledger-index.	506,074	Oct. 3	427	111	65	83
Ransom, Merritt L., Dixon, Ill. Draft-equalizer.	507,559	Oct. 31	3008	738	65	617
Ransome, Ernest L., Oakland, Cal. Electric conduit.	490,630	Jan. 24	2649	682	62	579
Ransome, Ernest L., Oakland, Cal. Concrete-mixing machine.	490,631	Jan. 24	2649	682	62	579
Ransome, Ernest L., Oakland, Cal. Concrete-distributing apparatus.	490,632	Jan. 24	2650	682	62	579
Ransome, Ernest L., Oakland, Cal. Manufacturing monolithic concrete pipes in situ.	507,521	Oct. 24	2941	65	590	
Ranson, Thomas W., Hornellsville, N. Y. Car-coupling.	489,661	Jan. 10	1033	270	62	230
Ranz, Jacob. (See Kletzker and Ranz.)						
Rapieff, John, New York, N. Y. Auxiliary valve for pneumatic guns.	490,125	Jan. 17	1803	{ 470 471	{ 62	400
Rapieff, John, New York, N. Y. Auxiliary valve for pneumatic guns.	502,016	July 25	2363	{ 293 294	{ 64	474
Rapieff, John, New York, N. Y. Pneumatic cannon.	502,759	Aug. 8	877	{ 214 215	{ 64	742
Rapp, Anton. (See Gillmore and Rapp.)						
Rapp, August, assignor to Pullman's Palace Car Company, Chicago, Ill. Door-opener.	500,211	June 27	2456	599	63	1859
Rapp, August, assignor to Pullman's Palace Car Company, Chicago, Ill. Sleeping-car.	509,944	Dec. 5	161	37, 38	65	1439
Rapp, Jerome W., Pineville, Pa. Horseshoe-sharpener.	490,499	Jan. 24	2425	626	62	535
Rapp, Joseph, Akron, Ohio. Fuse for projectiles.	493,735	Mar. 21	1558	397	62	1694
Rapp, Oscar. (See Gillmore and Rapp.)						
Rapplevea, Nicholas. (See Stein and Rapplevea.)						
Rasch, Hermann, Berlin, Germany. Bolting and separating machine.	497,343	May 16	1559	392	63	931
Rasch, Peter, assignor to King Bridge Company, Cleveland, Ohio. Elevated tramway for hoisting and conveying machines.	505,635	Sept. 26	2230	566	64	1729
Rasch, Peter, assignor to King Bridge Company, Cleveland, Ohio. Elevated tramway for hoisting mechanism.	505,636	Sept. 26	2233	{ 566 567	{ 64	1730
Rasch, Peter, assignor to King Bridge Company, Cleveland, Ohio. Hoisting and conveying apparatus.	505,637	Sept. 26	2235	567	64	1730
Rasch, Peter, assignor to King Bridge Company, Cleveland, Ohio. Hoisting and conveying tramway mechanism.	505,638	Sept. 26	2237	{ 567 568	{ 64	1730
Rasch, Peter, assignor to King Bridge Company, Cleveland, Ohio. Hoisting and conveying machine.	505,639	Sept. 26	2240	568	64	1731
Rasco, W. P. (See Duncan, John R., assignor.)						
Rash, Howard C., assignor to Natural Body Brace Company, Salina, Kans. Truss.	503,000	Aug. 8	1296	315	64	816
Rashleigh, Theodore J., Hawthorn, and J. Hern, Melbourne, Victoria. Sanitary utensil.	496,097	Apr. 25	2511	635	63	513
Rasmus, Theophil, Long Island City, N. Y. Safety clothes-line support.	494,162	Mar. 28	2275	577	62	1843

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Rasner, Frank, Bangor, assignor to C. Shuman, Bath, Pa. Washtub.....	503,913	Aug. 22	2743	688	64	1115
Rassbach, Hermann, Washington, D. C. Condenser.....	507,039	Oct. 17	2096	519 520	65	421
Rassbach, Hermann, Washington, D. C. Gas-tight joint for refrigerating apparatus.....	507,040	Oct. 17	2098	520	65	422
Ratcliff, William H., Orange, N. J. Rim for wheels.....	510,189	Dec. 5	582	136	65	1520
Rateau, Auguste, St. Etienne, France. Centrifugal pump or ventilator.....	494,890	Apr. 4	579	146	63	113
Rateau, Camille E. A., St. Etienne, France. Propeller or blower.....	500,080	June 30	2202	537 538	63	1803
Rath, Joseph. (See David and Rath.)						
Rathbone, William, assignor of one-half to W. J. Price, St. Louis, Mo. Vise.....	489,327	Jan. 3	524	142	62	113
Rathbun, Frank A., assignor to Rathbun Manufacturing Company, Sioux City, Iowa. Wheeled scraper.....	499,038	June 6	514	121	63	1481
Rathbun, Frank A., assignor to Rathbun Manufacturing Company, Sioux City, Iowa. Wheeled scraper.....	509,398	Nov. 28	2371	574 575	65	1246
Rathbun, James B., New York, N. Y. Pneumatic tire for wheels.....	504,135	Aug. 29	3112	779	64	1200
Rathbun, James B., New York, N. Y. Inflating-tube for pneumatic tires.....	509,097	Nov. 21	1841	450	65	1135
Rathbun, Lewis V., assignor, by mesne assignments, to M. E. Rathbun, Rochester, N. Y. Dust-collector.....	496,897	May 9	831	220 221	63	787
Rathbun Manufacturing Company. (See Rathbun, Frank A., assignor.)						
Rathbun, Mary E. (See Rathbun, Lewis V., assignor.)						
Rathburn, Sereno H., Stanberry, Mo. Steam-engine.....	495,516	Apr. 18	1599	403	63	334
Rau, Otto. (See Dobbie, Robert S., assignor.)						
Rau, Otto, Jersey City, N. J., assignor of one-half to R. S. Dobbie, New York, N. Y. Electric-railway-trolley base.....	502,530	Aug. 1	476	114	64	654
Raubold, Alfred A., Grebin, near Ploen, Germany. Apparatus for obtaining motive power from river-currents.....	500,947	July 4	635	167	64	116
Rauch, Charles E. (See Andrews, Charles B., assignor.)						
Rauch, Emil G. and G., and W. J. Kelly, Milwaukee, Wis. Device for operating vehicle-tops.....	489,756	Jan. 10	1190	312	62	262
Rauch, George. (See Rauch and Kelly.)						
Raundnitz, Siegmund, assignor of one-half to E. Jokl, Vienna, Austria-Hungary. Protecting iron from rust.....	507,082	Oct. 17	2162		65	433
Raupbach, Eduard, and L. Bergel, Gauchtl, Austria-Hungary. Making glue.....	500,428	June 27	2795		63	1919
Ranser, Henry, C. Wieber, and A. Sokoloff, Moscow, Russia. Pressure-gage.....	507,387	Oct. 24	2714	667	65	548
Rauton, William J., Syracuse, N. Y. Steam-generator.....	489,689	Jan. 10	1078	280	62	240
Ravn, Carl F., Delavan, Wis. Stock-tank heater.....	505,229	Sept. 19	1509	394	64	1580
Rawles, John, Seville, assignor of two-thirds to G. H. McElvain and J. L. Griffith, Bushnell, Ill. Car-coupling.....	496,444	May 2	89	25	63	635
Rawlings, Joseph W. V. (See Rawlings, Samuel V., assignor.)						
Rawlings, Samuel V., Marquette, assignor of one-half to J. W. V. Rawlings, Houghton, Mich. Automatic throttle for engines.....	501,959	July 25	2277	569 570	64	458
Rawls, Thomas J. and W., Elon, Ark. Plow.....	496,538	May 2	234	62	63	661
Rawls, William. (See Rawls, Thomas J. and W.)						
Rawson, Charles L. (See Evans, Samuel, assignor.)						
Ray, Edwin R. (See Alderson, William N. B., assignor.)						
Ray, Francis M. (See Hawkins and Ray.)						
Ray, John M. (See Williams, Otis H., assignor.)						
Ray, Philip. (See Thomas, Benjamin F., assignor.)						
Ray, William E., West Coxsackie, N. Y. Envelope and stamp moistener.....	503,618	Aug. 22	2307	575	64	1030
Rayburn, Eddy S., and C. A. Bell, San José, Cal. Hand-truck.....	490,043	Jan. 17	1673	435	62	373
Raymond, Adelbert, and F. S. North, Detroit, Mich. Sash-fastener.....	503,294	Aug. 15	1767	437	64	917
Raymond, Charles W., Evansville, assignor of one-half to J. H. Harford, Indianapolis, Ind. Carpet beating and cleaning machine.....	505,481	Sept. 26	1920	495	64	1671
Raymond, George W., Seneca, Ill. Draft-equalizer.....	496,955	May 9	920	241	63	804
Raymond, George W., Seneca, Ill. Draft-equalizer.....	508,120	Nov. 7	235	60	65	802
Raymond, Jean M., Paris, France. Treating vulcanized rubber to render it adhesive.....	490,500	Jan. 24	2426		62	535
Raymond, John W., San Francisco, Cal. Gas-engine.....	491,855	Feb. 14	1281	317	62	1020
Raymond, Perley B., assignor to Adams & Williamson, Indianapolis, Ind. Lumber-drying rack.....	504,279	Aug. 29	3351	837	64	1245
Raymond, Pierre A., Grenoble, France, assignor to Consolidated Fastener Company, Portland, Me. Lacing-stud.....	494,084	Mar. 21	2135	546	62	1803
Raymond, Pierre A., Grenoble, France, assignor to Consolidated Fastener Company, Portland, Me. Shoe-fastening.....	494,085	Mar. 21	2136	546	62	1803
Raymond, Pierre A., Grenoble, France, assignor to Consolidated Fastener Company, Portland, Me. Buckle.....	494,086	Mar. 21	2136	546	62	1803
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper.....	491,954	Feb. 14	1432	357	62	1050
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper.....	503,678	Aug. 22	2350	596	64	1045
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper.....	503,679	Aug. 22	2392	596	64	1046
Raymond, Ward, Johnstown, Pa. Machine for shearing metal bars.....	498,729	May 30	3830	944	63	1364
Rayner, George H. (See Webb and Rayner.)						
Raynor, Charles H. (See Damm, Frederick C., assignor.)						
Reach, Robert, Philadelphia, Pa. Portable furnace.....	503,494	Aug. 15	2079	519	64	974
Read, Alfred H., St. Louis, Mo., assignor to American Nut-Lock Company, of Missouri. Nut-lock.....	510,708	Dec. 12	1474	364	65	1701
Read, Alonzo P., Kenosha, Wis. Window-bead fastener.....	505,640	Sept. 26	2244	569	64	1732
Read, Charles C., Mandarin, Fla. Berry-picker.....	500,613	July 4	125	33	64	25
Read, Charles H., Pittsburg, Pa. Combined chair and brace.....	493,386	Mar. 14	971	250	62	1565
Read, Isaac, Eastbourne, England. Bow for use in drilling and turning.....	492,559	Feb. 28	2306	596	62	1275
Read, John F., Walsenburg, Colo. Artificial limb.....	507,453	Oct. 24	2818	690	65	568
Read, Stephen G., assignor of one-half to E. Green, Choteau, Mont. Nut-lock.....	498,446	May 30	3324	827	63	1277
Read, Walter G., Colusa, Cal. Machine for cracking and separating almond-nuts.....	504,244	Aug. 29	3295	823 824	64	1234
Read, Walter G., Colusa, Cal. Almond hulling and shelling machine.....	505,002	Sept. 12	1145	293	64	1500
Read, William C., and B. Hager, Salt Lake City, Utah Terr. Wagon or cart.....	500,612	July 4	124	33	64	24
Reading, Dallas H., et al. (See Reading, John, assignor.)						
Reading, Herbert, et al. (See Reading, John, assignor.)						
Reading, John, assignor to D. H. and H. Reading, Akron, Ohio. Wall-paper trimmer.....	497,523	May 16	1855	468	63	984
Ready, John, Boonville, N. Y. Label-holder.....	490,164	Jan. 17	1866	486	62	413
Reagan, Dominick A., Altoona, Pa. Valve-stem shield.....	509,681	Nov. 28	2847	668	65	1338
Reagan, Dominick A., F. D. Saupp, and A. A. Hibbs, assignors to themselves, J. Z. Kinch, and O. H. Ormsby, Altoona, Pa. Steam-boiler.....	492,766	Feb. 28	2721	677	62	1339

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Reagan, Harry C., Jr., Philadelphia, Pa. Exhaust-nozzle.....	493,783	Mar. 21	1632	{ 415 416 }	62	1708
Reagan, Harry C., Jr., Philadelphia, Pa. Air-pump.....	496,898	May 9	833	221	63	787
Reagan, Paul M. (See Bean, Charlie E., assignor.)						
Reagan, Paul M., Chicago, Ill. Draft-rigging for cars.....	491,785	Feb. 14	1175	294	62	998
Reagan, Thomas B., Mapleton, Kans. Fruit-gatherer.....	504,245	Aug. 29	3301	824	64	1235
Reakirt, Charles C., <i>et al.</i> (See Fay, Alpheus, assignor.)						
Ream, George W. (See Stone and Ream.)						
Ream, George W., assignor to Bucher & Gibbs Plow Company, Canton, Ohio. Planer for plow-beams.....	492,338	Feb. 21	2026	504	62	1186
Reams, Albert R., Elmira, Cal. Electroplating apparatus.....	497,129	May 9	1188	304	63	851
Reams, Andrew J., Wichita, Kans. Electric program-clock.....	492,971	Mar. 7	314	80	62	1421
Reamy, Thomas J., St. Louis, Mo. Feed mechanism for sawmills.....	491,856	Feb. 14	1283	318	62	1020
Reamy, Thomas J., Auburn, Ind. Sawmill feed mechanism.....	510,818	Dec. 12	1663	{ 412 413 }	65	1735
Reardon, Daniel J., Westerly, R. I. Ratchet-pawl.....	493,944	Mar. 21	1895	483	62	1758
Reardon, Patrick, assignor of one-half to M. Murphy, Paterson, N. J. Street-sweeper.....	492,487	Feb. 28	2280	567	62	1249
Reason, Albert, Pinckney, Mich. Shaft-coupling.....	496,063	Apr. 25	2459	621	63	503
Reasoner, Oliver, Upland, Ind. Gas separator or purifier.....	495,059	Apr. 11	823	210	63	173
Rober, James C. (See Xander, John G., assignor.)						
Reber, John G., and J. L. Sefton, Chicago, Ill. Paper box.....	500,295	June 27	2578	{ 629 630 631 }	63	1880
Reber, John G., and J. L. Sefton, Chicago, Ill. Egg-case.....	500,296	June 27	2583	{ 631 632 633 }	63	1881
Rebhun, Daniel C., Albany, N. Y. Machinery for boring lasts.....	491,493	Feb. 7	703	178	62	884
Rebsamen, Julius, Chicago, Ill. Fluid-compressor.....	500,720	July 4	306	82	64	57
Rebscher, Henry B. (See Wankel, Frank, assignor.)						
Rebstock, Christian. (See Ansapach and Rebstock.)						
Recht, Frederick, Brooklyn, N. Y. Bracket.....	498,027	May 23	2645	661	63	1140
Rechtsteiner, Frank S., Dayton, Ohio. Attachment for lathes.....	502,760	Aug. 8	882	216	64	743
Reck, Martha, Union Bridge, Md. Table-leaf support.....	506,545	Oct. 10	1295	324	65	260
Reck, Peter W., Davenport, Iowa. Chuck.....	504,939	Sept. 12	1039	267	64	1440
Reckenzaun, Anthony, London, England, assignor to J. A. Pentz, Philadelphia, Pa. Electric meter.....	503,805	Aug. 22	2586	{ 645 646 647 }	64	1084
Record, Adam T., assignor of one-half to L. A. Simmon, Kokomo, Ind. Penholder.....	510,092	Dec. 5	423	94	65	1490
Record, George J., Conneaut, Ohio. Fastening for the caps of cans. (Reissue).....	11,382	Nov. 7	683	167	65	885
Record, George J., Conneaut, Ohio. Cap for cans.....	509,098	Nov. 21	1842	450	65	1135
Records, Mary B., Philadelphia, Pa. Child's crib.....	508,240	Nov. 7	426	103	65	837
Records, Thomas W. (See Lawrence, Daniel F., assignor.)						
Redding, Benjamin S., Greensborough, Ala. Belt-shifter.....	509,604	Nov. 28	2731	659	65	1316
Redding, William F., King's Station, N. Y. Clothes-drier.....	490,361	Jan. 24	2311	576	62	494
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Forming matrices. (Reissue).....	11,316	Mar. 28	2890	724	62	1957
Redfield, Casper L., Minneapolis, Minn., assignor, by mesne assignments, to Chicago Matrix Machine Company. Matrix-making machine.....	495,835	Apr. 18	2110	{ 510 531 }	63	423
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Type-die for matrix-making machines. (Reissue).....	11,335	May 16	2213	551	63	1049
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Type-die for matrix-making.....	501,297	July 11	1210	306	64	235
Redfield, Charles T., Glen Haven, N. Y. Stovepipe-damper.....	502,203	July 25	2668	674	64	533
Redfield, E. E. (See Redfield, John H. and S. H., assignors.)						
Redfield, John H. and S. H., Medford, assignors of one-third to E. E. Redfield, Grant's Pass, Oreg. Music-leaf turner.....	504,052	Aug. 29	2977	744	64	1174
Redfield, Samuel H. (See Redfield, John H. and S. H.)						
Redfield, William C. (See Booth and Redfield.)						
Redlfsen, Jens. (See Hafely and Redlfsen.)						
Redlinger, Mathias, Jr. (See Morgan and Redlinger.)						
Redmond, Daniel M., Philadelphia, Pa. Machine for forming and securing the eyes on umbrella-ribs.....	509,682	Nov. 28	2348	688	65	1338
Redmond, Daniel M., Philadelphia, Pa. Machine for securing heads to rods.....	509,683	Nov. 28	2250	689	65	1339
Redstone, Charles G. (See Abbott and Redstone.)						
Redwine, William J., assignor of one-half to N. B. Brown, Concordia, Kans. Rifle attachment for shotguns.....	490,614	Jan. 24	2597	669	62	568
Redwood, Boverton. (See Clowes and Redwood.)						
Reece, Benjamin, assignor to Q. & C. Company, Chicago, Ill. Making railway-tie plates.....	494,692	Apr. 4	261	66	63	52
Reece Button Hole Machine Company. (See Benedict, Francis D., assignor.)						
Reece, John. (See Hill, George S., assignor.)						
Reece, John, Boston, Mass. Buttonhole sewing-machine.....	494,240	Mar. 28	2465	{ 620 621 622 }	62	1878
Reece, John, Boston, Mass. Sewing-machine.....	498,216	May 23	2035	{ 730 731 }	63	1191
Reed, Albert E., Gravesend, England. Paper-pulp-beating engine.....	503,553	Aug. 15	2178	{ 544 545 }	64	992
Reed & Barton Corporation. (See McAusland, William, assignor.)						
Reed, Charles H. (See Bailey, Charles S., assignor.)						
Reed, Charles J., Orange, N. J. Storage-battery.....	504,455	Sept. 5	227	61	64	1313
Reed, Charles J., Orange, N. J., assignor of one-third to G. Stahl, Philadelphia, Pa. Electric-railway system.....	500,104	June 20	2239	{ 545 546 }	63	1809
Reed, Charles J., Orange, N. J., assignor of one-half to G. Stahl, Philadelphia, Pa. System of telegraphy.....	510,612	Dec. 12	1313	320	65	1670
Reed, Charles J., Orange, N. J., assignor of one-half to G. Stahl, Philadelphia, Pa. Magneto-electric induction apparatus.....	510,613	Dec. 12	1315	321	65	1670
Reed, Charles M. (See Vogel, Kasimir, assignor.)						
Reed, Charley R. (See Sutton and Reed.)						
Reed, Daniel G., <i>et al.</i> (See Allison, John H., assignor.)						
Reed, David W., assignor of one-half to J. G. Reed, Bearden, Ark. Cant-hook.....	492,107	Feb. 21	1666	414	62	1111
Reed, Eli S., assignor of one-half to A. J. Stoops, Chattanooga, Tenn. Antifilling device for bottles, &c.....	508,342	Nov. 7	585	144	65	867
Reed, Eli S., assignor of two-thirds to A. J. and H. E. Stoops, Chattanooga, Tenn. Advertising-balloon.....	507,165	Oct. 24	2331	574	65	476
Reed, Franklin M., Anderson, Ind. Hydrocarbon-burner.....	496,282	Apr. 25	2787	697	63	565

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Reed, Franklin M., Anderson, Ind. Combined hydrocarbon generator and burner	498,730	May 30	3831	{ 944 945 }	{ 63 62 }	1364
Reed, Franklin M., assignor of one-half to D. C. Chipman, Anderson, Ind. Gas-protector.	489,392	Jan. 3	624	169	62	134
Reed, Franklin M., assignor of one-half to E. Shaw, Anderson, Ind. Generator	492,366	Feb. 21	2071	517	62	1195
Reed, George. (See Frasher, Charles T., assignor.)						
Reed, George J., assignor of three-fourths to W. J. Cleveland and F. D. Pelletier, Kansas City, Mo. Clothes-line fastener	507,593	Oct. 31	3088	754	65	630
Reed, George T. (See Hughes and Reed.)						
Reed, George W., Derby, Vt. Toilet-paper holder	492,894	Mar. 7	193	48	62	1397
Reed, Hugh T., Chicago, Ill. Fountain-pen	508,182	Nov. 7	326	81	65	818
Reed, James, Eagle, Mich. Washing-machine	508,756	Nov. 14	1247	311	65	1009
Reed, James M. (See Oliver and Reed.)						
Reed, James T., Correctionville, Iowa. Tag-attaching implement	504,280	Aug. 29	3352	838	64	1246
Reed, Jay, Butler, Mo. Harness-strap attachment	509,449	Nov. 28	2477	597	65	1267
Reed, John E. (See Royer, Henry C., assignor.)						
Reed, John G. (See Reed, David W., assignor.)						
Reed, John W., Chicago, Ill. Piano	489,231	Jan. 3	387	107	62	87
Reed, John W., Chicago, Ill. Upright-piano back	489,232	Jan. 3	388	107	62	87
Reed, Lemon M., Cleveland, Ohio. Combined pencil-sharpener and paper-weight	504,940	Sept. 12	1040	267	64	1480
Reed, Samuel C., assignor of one-half to A. Southworth, Falls Creek, Pa. Binding lever or clamp	506,254	Oct. 10	794	196	65	162
Reed, Samuel S. and I. S. Reitz, Shamokin, Pa. Nut-lock	498,943	June 6	341	81	63	1452
Reed, Thomas W., Osborn, Ohio, assignor of one-half to G. E. Whipple, Westfield, Mass. Stalk-splitting machine for whips	495,430	Apr. 11	1457	368	63	288
Reed, William B., East Lynne, Mo. Washing-machine	492,430	Feb. 28	2172	543	62	1228
Reed, William M., Bellaire, Ohio, assignor of one-fourth to J. W. Robb, Wheeling, W. Va. Nut-lock	508,757	Nov. 14	1248	311	65	1009
Reed, William S., trustee. (See Gilman, Willard H., assignor.)						
Reed, William S., Marshalltown, Iowa. Apparatus for heating water	501,846	July 18	2087	515	64	408
Reed, William S., Leominster, Mass. Toy bowling-alley	505,536	Sept. 26	2042	521	64	1693
Reeder, William S., assignor to Kingsland & Douglas Manufacturing Company, St. Louis, Mo. Machine for receiving, cleaning, and distributing seed-cotton	506,728	Oct. 17	1584	400	65	326
Reénstierna, Gustaf L., Boston, Mass. Electric bell alarm	492,309	Feb. 21	1982	493	62	1178
Rees, John, Hamilton, Iowa. Trap-door for mines	497,211	May 9	1304	332	63	872
Rees, Morris, <i>et al.</i> (See Chamberlin, James R., assignor.)						
Rees, Napoleon B., Lincoln, Kans. Time-lock	493,115	Mar. 7	534	133	62	1464
Reese, Abram, Pittsburg, Pa. Universal rolling-mill	499,590	June 13	1418	339	63	1653
Reese, Charles E., <i>et al.</i> (See Brunney, Daniel F., assignor.)						
Reese, E. Ewing. (See Finney and Davidson, assignors.)						
Reese, Edwin A., S. N. Hench, and W. A. Dromgold, York, Pa.; said Reese assignor to said Hench and Dromgold. Mechanism for operating sawmill-carriages	491,447	Feb. 7	641	160	62	870
Reese, Frederick W., Paris, Ill. Broom-corn cleaner	505,128	Sept. 19	1355	{ 348 349 }	{ 64 63 }	1553
Reese, Jacob, Pittsburg, assignor to Steel Patents Company, Philadelphia, Pa. Basic lining.	499,248	June 13	830		63	1549
Reese, John H., Austin, Ill. Hot-air register	492,233	Feb. 21	1872	467	62	1154
Reese, Thomas B., Mansfield, Ohio. Cutter-head	491,373	Feb. 7	520	133	62	847
Reeser, Otto, Philadelphia, Pa. Testing-machine	493,784	Mar. 21	1633	416	62	1708
Reetz, Hermann F. (See Stelling and Reetz.)						
Reeve, Ernest D., London, England. Washing-machine	504,246	Aug. 29	3301	{ 824 825 }	{ 64 63 }	1235
Reeves, Alfred B., J. N. D., and M. T., assignors to Reeves & Co., Columbus, Ind. Folding straw-carrier chute	498,028	May 23	2646	661	63	1140
Reeves, Alfred N., Woonsocket, R. I. Shuttle-check and binder for looms	509,945	Dec. 5	162	38	65	1440
Reeves & Co. (See Kailor, John N., assignor.)						
Reeves & Co. (See Reeves, Alfred B., J. N. D., and M. T., assignors.)						
Reeves & Co. (See Reeves, Marshal T., assignor.)						
Reeves, Dorus D., assignor of one-half to T. H. Hunt, McFall, Mo. Door-bolt	508,635	Nov. 14	1073	266	65	975
Reeves, James N. D. (See Reeves, Alfred B., J. N. D., and M. T.)						
Reeves, Madison W., Sayre, Pa. Door-holding device	500,036	June 20	2138	518	63	1792
Reeves, Marshal T. (See Reeves, Alfred B., J. N. D., and M. T.)						
Reeves, Marshal T., assignor to Reeves & Co., Columbus, Ind. Concave for clover-hulling machines	499,591	June 13	1420	340	63	1653
Regan, Genevieve T. V., Long Branch, N. J. Scrubbing-brush	494,761	Apr. 4	368	93	63	73
Regent Gold Extracting Company. (See Chaster, John E., assignor.)						
Register, Thomas L., assignor to C. C. Denny and O. A. Farley, Blair, Nebr. Windmill-governor	492,488	Feb. 28	2282	567	62	1250
Regnell, Herman T., J. A. Bigney, and C. O. Sweet, Attleborough, Mass. Jewelry and making same	501,232	July 11	1112	282	64	218
Regnstrom, Charles G., Ishpeming, Mich. Sleigh	504,941	Sept. 12	1041	267	64	1480
Rehfuss, George, J. G., and M. O., assignors to W. I. Steel, Philadelphia, Pa. Match-splint-coiling machine	507,843	Oct. 31	3499	861	65	708
Rehfuss, John G. (See Rehfuss, George, J. G., and M. O.)						
Rehfuss, Martin O. (See Adam and Rehfuss.)						
Rehfuss, Martin O. (See Rehfuss, George, J. G., and M. O.)						
Rehkugler, Charles J., <i>et al.</i> (See Lane, Levi E., assignor.)						
Reich, Christian, Nuremberg, Germany. Apparatus for automatically guiding skin molds in machines for making leaf metal	489,642	Jan. 10	1011	263	62	226
Reichardt, Ferdinand A., New York, N. Y. Vial-holder	501,162	July 11	1013	257	64	198
Reichardt, George J., Indianapolis, Ind. Hinge	495,268	Apr. 11	1209	303	63	241
Reichart, Sarah, Mainville, Pa. Cover or protector for plants	489,500	Jan. 10	817	214	62	187
Reichert, Charles W. and G. J. Kennan, Wis. Log-draw	494,263	Mar. 28	2438	614	62	1874
Reichert, George J. (See Reichert, Charles W. and G. J.)						
Reichert, Karl, Muscatine, Iowa. Door-check	505,329	Sept. 19	1673	431	61	1611
Reichhelm & Co. (See Leibman, Frank J., assignor.)						
Reichhelm, Edward P., Jersey City, N. J. Rotary blower	502,890	Aug. 8	1092	269	64	782
Reichwein, Herman, New York, N. Y. Lifting-jack	497,604	May 16	1971	494	63	1004
Reichwein, Herman, New York, N. Y. Pulley-line hanger	508,758	Nov. 14	1250	311	65	1009
Reichwein, Herman, Villa Park, N. J., assignor of one-half to F. Keil & Son, New York, N. Y. Spring-hinge	495,370	Apr. 11	1359	340	63	269
Reichwein, Konrad, Birmingham, Ala. Combined plow and seeder	509,946	Dec. 5	164	38	65	1440
Reid, Alban H., Philadelphia, Pa. Butter-printer	493,517	Mar. 14	1173	300	62	1601
Reid, Alban H., Philadelphia, Pa. Shaft-bearing	499,752	June 20	1692	405	63	1713
Reid, Arthur B., Chicago, Ill. Cleaner for type-writing machines	494,304	Mar. 28	2500	631	62	1886
Reid, Arthur B., Chicago, Ill. Copy-holder	494,305	Mar. 28	2502	631	62	1886

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Reid, Charles R., Heidelberg, Miss. Seed-planter and fertilizer-distributor.	501,362	July 11	1335	334	64	256
Reid, Graham, and C. Stevenson, Philadelphia, Pa. Automatic controlling mechanism for circular-knitting machines.	500,351	June 27	2682	658	63	1899
Reid, Graham, and C. Stevenson, Philadelphia, Pa. Automatic controlling mechanism for circular-knitting machines. (Reissue.)	11,378	Nov. 7	675	165 166	65	883
Reid, Hugh M., and A. C. Pheil, Inverness, Fla.; said Reid assignor to said Pheil. Safe or cupboard.	506,794	Oct. 17	1694	426	65	347
Reid, James A. (See Cooper, Louis, assignor.)						
Reid, John M., Jacksonville, Ill. Manger.	492,473	Feb. 28	2246	561	62	1243
Reid, John S., London, England. Wire-barbing machine.	503,162	Aug. 15	1553	381 382 383	64	879
Reid, Lewis A., Harvard, Ill. Photograph-drier.	495,102	Apr. 11	916	231	63	190
Reid, Robert, R. Hanna, T. Holroyd, and H. A. Wheat, Melbourne, Victoria. Lamp.	490,415	Jan. 24	2285	594	62	507
Reiferscheid, William. (See Iwan and Reiferscheid.)						
Reiff, William H., assignor of one-half to H. F. McDowell, Philadelphia, Pa. Burglar-alarm.	499,365	June 13	1039	252	63	1587
Reiff, William H., assignor to H. A. Kline, Philadelphia, Pa. Trick device.	508,391	Nov. 7	673	165	65	883
Reiff, Ulrich, and J. F. Stauffer, Chicago, Ill. Gas-trap.	506,940	Oct. 17	1938	480	65	392
Reignier, Antoine C. (See Parrot and Reignier.)						
Reilly, Bernard T., assignor of one-half to M. R. Zehnder, Ashley, Pa. Governor for steam-brakes.	489,757	Jan. 10	1191	312	62	262
Reilly, Bernard T., assignor to M. R. Zehnder, Ashley, Pa. Machine-brake.	503,495	Aug. 15	2081	519	64	974
Reilly, Edward E. (See Beck and Reilly.)						
Reilly, Francis P., New York, N. Y., assignor, by mesne assignments, to Johnson Company, of Pennsylvania. Railway-rail chair.	504,818	Sept. 12	845	217	64	1442
Reilly, Francis P., New York, N. Y., assignor, by mesne assignments, to Johnson Company, of Pennsylvania. Combined rail-support and cross-tie.	508,049	Nov. 7	102	29	65	778
Reilly, James H., assignor to Curtis & Curtis, Bridgeport, Conn. Device for holding nipples during threading.	500,746	July 4	341	90	64	65
Reilly, Patrick, Newburg, N. Y. Piston-packing.	500,297	June 27	2585	633	63	1881
Reilly, Patrick, Lima, Ohio. Steam heating apparatus for railway-cars.	502,204	July 25	2669	674	64	334
Reiman, Robert, Egg Harbor City, N. J. Manufacturing artificial bone.	494,891	Apr. 4	582		63	113
Reimann, Johann C., assignor to F. J. Stuke, Union, N. J. Calipers.	499,039	June 6	517	122	63	1481
Reimer, Jeronimus, Toronto, Canada. Piano-case.	494,163	Mar. 28	2276	577	62	1843
Rein, Gustavus. (See Fassett and Rein.)						
Reinacher, Otto. (See Otto and Reinacher.)						
Reinauer, Frank, D., New York, N. Y. Theater appliance.	495,205	Apr. 11	1100	273	63	222
Reinders, Charles. (See Helms and Reinders.)						
Reinert, Joseph, Newark, N. J. Marble-shooter.	496,539	May 2	234	62	63	662
Reingruber, Friedrich. (See Kothe, Reingruber, and Hassencamp.)						
Reinhardt, Frederic W., Memphis, Tenn. Siphon-motor.	510,709	Dec. 12	1475	364	65	1701
Reinhart, Peter, Kirby, Ohio. Feed-trough.	499,249	June 13	830	197	63	1549
Reinhart, William H. (See Laird, William H., assignor.)						
Reinheimer, Sarah A., Winchester, Ind. Barrel tapping and emptying device.	499,592	June 13	1421	340	63	1653
Reinhold, Alexander and F. J., assignors to Detroit Combination Tool Company, Detroit, Mich. Combination-tool.	491,189	Feb. 7	211	54	62	788
Reinhold, Edwin L., et al. (See Werline, Henry E., assignor.)						
Reinhold, Frank J. (See Reinhold, Alexander and F. J.)						
Reinicke, Johannes, Wiesbaden, Germany. Car-coupling.	508,976	Nov. 21	1633	400 401	65	1095
Reinicke, Paul, Coethen, Germany. Pulp-strainer.	501,214	July 11	1024	275	64	213
Reinmuth, Carl H. (See Heinze and Reinmuth.)						
Reinschmidt, Peter. (See Gaisser, Frederich, assignor.)						
Reisen, Richard. (See Lloyd and Reisen.)						
Reiset, Frederic, and G. A. Waeber, New York, N. Y. Construction of sheet-metal cans.	496,209	Apr. 25	2676	672	63	544
Reisky, Charles. (See O'Connor and Reisky.)						
Reiss, Ernst, Düsseldorf, Germany. Ceiling or wall.	492,108	Feb. 21	1666	414	62	1112
Reiss, Hans, Jersey City, N. J., assignor to Singer Manufacturing Company of New Jersey. Mechanical movement.	496,000	Apr. 25	2355	595	63	484
Reiss, Heinrich J., assignor of one-half to P. A. Nebeling, New York, N. Y. Meat-ventilating pin.	509,099	Nov. 21	1843	451	65	1135
Reist, Henry G., Lynn, Mass., assignor to General Electric Company, of New York. Brush-holder for dynamo-electric machines.	500,614	July 4	126	34	64	25
Reist, Henry G., Lynn, assignor to General Electric Company, Boston, Mass. Commutator-brush.	501,960	July 25	2279	570	64	459
Reist, Henry G., Lynn, assignor to General Electric Company, Boston, Mass. Armature-core.	508,637	Nov. 14	1077	266	65	976
Reist, Henry G., and J. P. B. Fiske, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Connector for dynamo-electric machines.	508,636	Nov. 14	1075	266	65	975
Reiter, Samuel, et al. (See Marshall, William M., assignor.)						
Reitz, Isaac S. (See Reed and Reitz.)						
Rekard, Adam, Fort Jennings, Ohio. Harvester-reel.	491,264	Feb. 7	321	82	62	810
Reliance Corset Company. (See Smith, Emmet L., assignor.)						
Rembert, Henry, Willis, Tex. Cotton-cleaner.	506,134	Oct. 3	529	136 137	65	103
Rembert Roller Compress Company. (See Crooks, William, assignor.)						
Remhof, Charles, Brooklyn, N. Y. Shade-holder for electric lamps.	499,470	June 13	1223	292	63	1619
Remington, Alfred D. (See Giles, Henry T., assignor.)						
Remington Arms Company. (See Fay, Riumon C., assignor.)						
Remlinger, John L., assignor to Potter & Buflington, Providence, R. I. Jewelry.	496,796	May 2	647	172	63	734
Rempe, Henry, Danville, Pa. Clock-escapement.	499,176	June 6	730	173	63	1517
Remscheid, August, Solingen, Germany, assignor to G. W. Korn, New York, N. Y. Shears.	493,785	Mar. 21	1636	417	62	1709
Reusen, Timothy A., Brooklyn, N. Y. Switch for railway-cars.	508,837	Nov. 14	1370	339	65	1031
Remson, Isaac S., and E. A. Schoettel, Brooklyn, N. Y. Register or recorder.	505,958	Oct. 3	239	63, 64	65	47
Remy, Wilhelm, Crefeld, Germany. Apparatus for folding and creasing the edges of ribbons.	494,347	Mar. 28	2572	648	62	1899
Reneau, Charles W., assignor of one-half to J. A. Lewis, Meridian, Miss. Conveyor.	489,831	Jan. 10	1293	338	62	24
Reneau, Charles W., assignor of one-half to J. A. Lewis, Meridian, Miss. Furnace-door.	503,875	Aug. 22	2681	672	64	1102
Renaud, Edward, et al. (See Coombs, Charles L., assignor.)						
Renear, Charles W., Stockton, Cal. Boomerang.	510,290	Dec. 5	752	182	65	1552
Renear, Charles W., Stockton, Cal. Catapult for propelling boomerangs.	510,936	Dec. 19	1910	467	65	1792
Renehan, James J., New Britain, Conn. Suspension device for electric lamps.	498,570	May 30	3332	874	63	1313
Renehan, James J., New Britain, Conn. Electric-lamp support.	510,486	Dec. 12	1063	256	65	1626
Reniff, Charles W., Greensburg, Pa. Axle-journal.	504,749	Sept. 12	727	181	64	1420
Reniff, Garrett R., and G. W. Tucker, Fonda, Iowa. Wire-and-picket-fence machine.	498,306	May 30	3105	773	63	1236

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Renisch, Hermann. (See Corleis and Renisch.)						
Renkel, William J. (See Brunner and Renkel.)						
Renko, Peter A., Prince's Bay, N. Y. Surface-gage	495,565	Apr. 18	1675	422	63	347
Renner, Julia A. (See Bentinck and Renner.)						
Rennerfelt, Gustaf, Buffalo, N. Y. Electrical meter	494,225	Mar. 28	2380	601	62	1863
Rennerfelt, Gustaf O., Stockholm, Sweden. Electrolytic apparatus.	495,600	Apr. 18	1734	436	63	357
Rennyson, William, Norristown, Pa. Heating attachment	492,431	Feb. 28	2174	543 544	62	1228
Reno, Robert S., St. Louis, Mo., assignor to J. H. Brinkop, Quincy, Ill. Machine for cutting tobacco	497,008	May 9	1000	257	63	816
Renshaw, Alfred H., assignor to Trojan Car Coupler Company, Troy, N. Y. Car-coupling.	489,233	Jan. 3	389	107 108	62	87
Renshaw, Alfred H., and H. H. Burden, Troy, N. Y. Car-coupling	496,956	May 9	921	242	63	804
Renson, Jean, Brussels, Belgium. Washing-machine	499,937	June 20	1986	492	63	1765
Renstrom, Nils A., assignor of one-half to J. S. Stone, Omaha, Nebr. Electro-magnetic blanket.	499,681	June 13	1557	375	63	1676
Renton, George W., et al. (See Rothchild, Joseph, assignor.)						
Rentsch, George, Wheeling, W. Va. Cloak-rack	496,230	Apr. 25	2704	678	63	549
Renwick, Thomas, Miami, Canada. Car-coupling	509,627	Nov. 28	2762	666	65	1322
Renwick, William W., Milburn, N. J. Elevator for passengers and freight	495,616	Apr. 18	1761	444	63	362
Renz, Robert L., and H. Weidman, Poplar, Mont. Shepherd's crook	504,175	Aug. 29	3183	795	64	1214
Reppell, Louis H., Kansas City, assignor to W. R. Reppell, St. Louis, Mo. Downdraft brick-kiln.	510,819	Dec. 12	1664	413	65	1736
Reppell, William R. (See Reppell, Louis H., assignor.)						
Requa, Leonard F., New York, N. Y. Insulated electric conductor	506,830	Oct. 17	1757	442	65	359
Resley, Horace, Cumberland, Md. Car-coupling	510,291	Dec. 5	753	182	65	1552
Resner, Jacob, et al. (See Smith, Augustus, assignor.)						
Resor, Charles H., assignor to W. Resor & Co., Cincinnati, Ohio. Grate for stoves or ranges	507,284	Oct. 24	2540	625	65	513
Resor & Co., William. (See Resor, Charles H., assignor.)						
Resser, Philip T., Geneseo, Ill. Swinging cradle	493,786	Mar. 21	1637	417	62	1709
Retterer, Gustave, Paris, France. Apparatus for galvanizing iron	491,720	Feb. 14	1072	271	62	979
Rettig, Charles, Philadelphia, Pa. Apparatus for aerating, cooling, and clarifying liquids	498,571	May 30	3534	874	63	1313
Rettig, Julius E., Washington, D. C. Outlet-valve for garbage-cars	502,584	Aug. 1	562	134	64	669
Rettig, Julius E., Washington, D. C. Inlet-valve for digesters	502,635	Aug. 1	644	154 155	64	685
Reubold, Adam, New York, N. Y. Device for cooking meats	508,759	Nov. 14	1251	312	65	1009
Reud, William R., New York, N. Y. Galvanic battery	489,832	Jan. 10	1294	338	62	284
Reul, John F., Juneau, Wis. Windmill	496,098	Apr. 25	2512	635	63	513
Reupke, Charles H., et al. (See Schroeder, John, assignor.)						
Reusch, Hermann, Senbach, Austria-Hungary, and B. Preu, Goerlitz, Germany. Casting hard-metal or chilled rolls	492,874	Mar. 7	164	39	62	1391
Reuschenberg, Diederrech. (See Cates and Reuschenberg.)						
Reuss, Albrecht, Cannstadt, Germany. Tobacco-pipe	501,808	July 18	2039	502	64	400
Reuter, Henry, Rice Lake, Wis. Faucet	511,360	Dec. 26	2623	638	65	1938
Reuter, Henry, Rice Lake, Wis. Machine for washing bottles	511,361	Dec. 26	2624	638	65	1938
Reutlinger, Jean, assignor of one-half to J. Jacobs, St. Louis, Mo. Electric-railway trolley.	489,234	Jan. 3	391	108	62	87
Reuter, Samuel E., Worcester, Mass. Folding camp-stool	506,255	Oct. 10	795	197	65	162
Revere Rubber Company. (See Elliott, Charles B., assignor.)						
Reversible Rivet Company. (See Cummings, Henry H., assignor.)						
Revilliod-De Muralt, Aloys. (See Badoni, Massimiliano, assignor.)						
Rew, Ida M., New York, N. Y. Bust-supporter	505,003	Sept. 12	1148	294	64	1500
Rew, Ida M., New York, N. Y., assignor to Delsarte Corset Company, Newark, N. J. Corset-waist	509,327	Nov. 21	2225	538	65	1208
Rew, Madison, Grinnell, Iowa, assignor of one-third to Chambers, Bering, Quinlan Company, Decatur, Ill. Hay rake and loader	502,679	Aug. 1	736	177 178	64	700
Rex, Benjamin F., St. Louis, Mo. Electric push-button	506,729	Oct. 17	1589	401	65	327
Rex, John P., Mansfield, Ohio. Machine for registering sales	497,030	May 9	1034	263	63	823
Rex, John P., and T. B. McNiece, Mansfield, assignor of one-third to J. M. Kinner, Cleveland, Ohio. Autographic register	499,250	June 13	832	197 198	63	1549
Rexford, Daniel D., et al. (See Arkland, Henry D., assignor.)						
Rexicker, George W., assignor of two-thirds to C. F. Kurtzmann and W. S. Servis, Buffalo, N. Y. Waste-paper press	497,818	May 23	2306	579 580	63	1081
Reynolds, Arthur D., San Francisco, Cal. Animal-shears	499,938	June 20	1986	482	63	1765
Reynolds, Berton L. (See Reynolds, Herbert H. and B. L.)						
Reynolds, Charles H. (See Hartman, Andrew, assignor.)						
Reynolds, Charles J., assignor, by mesne assignments, to Elevator Safety Manufacturing Company, Boston, Mass. Hatchway-guard	500,721	July 4	307	82	64	58
Reynolds, Christopher C., assignor of one-half to E. Brown, Eldorado, Utah. Combination-tool	489,875	Jan. 10	1350	352	62	295
Reynolds, Christopher C., assignor of one-third to E. Brown, Eldorado, Utah Ter. Wagon-brake	498,188	May 23	2887	720	63	1183
Reynolds, David R., Philadelphia, Pa. Glove or dress fastener	490,044	Jan. 17	1674	435	62	374
Reynolds, Edwin, Milwaukee, Wis. Method of and machinery for hoisting	504,942	Sept. 12	1042	268	64	1481
Reynolds, Edwin, and E. Cheshire, Milwaukee, Wis. Compound engine	505,004	Sept. 12	1149	294	64	1501
Reynolds, Ella V., Philadelphia, Pa. Key and knob fastening device	509,489	Nov. 28	2547	614	65	1281
Reynolds, Elles, Hubbard, Iowa. Reel attachment	493,518	Mar. 14	1174	300	62	1602
Reynolds, Fred A. (See Barker and Reynolds.)						
Reynolds, George H., New York, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. T merchant-bar	497,253	May 9	1373	348	63	884
Reynolds, George H., New York, N. Y., assignor, by mesne assignments, to National Company, of Illinois. Piston-packing	499,471	June 13	1224	292 453 454 455	63	1619
Reynolds, Henry S., Brooklyn, N. Y. Machinery for making solid or tubular rivets	503,329	Aug. 15	1830	454 455	64	929
Reynolds, Henry S., Brooklyn, N. Y. Ear for sheet-metal vessels	503,680	Aug. 22	2393	597	64	1046
Reynolds, Henry S., Brooklyn, N. Y. Ear for sheet-metal vessels	503,681	Aug. 22	2394	597	64	1046
Reynolds, Henry S., Brooklyn, N. Y. Handle for sheet-metal vessels	503,682	Aug. 22	2395	597	64	1046
Reynolds, Henry S., Brooklyn, N. Y. Machine for wiring the edges of sheet-metal vessels	505,675	Sept. 26	2300	583 584	64	1742
Reynolds, Herbert H. and B. L., West Bangor, N. Y. Wagon-brake	489,036	Jan. 3	86	24	62	22
Reynolds, Hiram C., Addison, assignor of one-half to G. W. Mourhess, Presho, N. Y. Folding shelf	495,910	Apr. 18	2226	561	63	444

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Reynolds, James A. (See Skinner, Thomas J., assignor.)						
Reynolds, John H. (See Burns, John, assignor.)						
Reynolds, John H., Troy, N. Y. Ventilator.	509,947	Dec. 5	166	39	65	1441
Reynolds, Joseph L., Winterset, Iowa. Electric-railway conduit.	498,189	May 23	288	720	63	1184
Reynolds, Miron G., Elwood, Ind. Gas-regulator.	498,861	June 6	193	47	63	1427
Reynolds, Nelson G., Bangor, Mich. Hammock-support.	504,618	Sept. 5	491	127	64	1362
Reynolds, Richard S., et al. (See Savage, Arthur W., assignor.)						
Reynolds, Robert B., Stockport, N. Y. Rowing-gear.	509,605	Nov. 28	2731	660	65	1316
Reynolds, Samuel D., Rochelle, assignor to C. E. Bradt, M. D. Shipman, and S. E. Bradt, De Kalb, Ill. Delivery-wagon.	500,212	June 27	2457	599 600	63	1860
Reynolds, Sylvanus J., Saginaw, Mich. Adjustable desk.	491,249	Feb. 7	301	76	62	806
Reynolds, Thomas, et al. (See Minogue, Martin T., assignor.)						
Reynolds, Thomas, et al. (See Neer, Harry M., assignor.)						
Reynolds, Watson L., assignor to J. N. Valley, Jersey City, N. J. Brake for elevated rail-ways.	510,292	Dec. 5	754	183	65	1552
Reynolds, Wythington, et al. (See Green, Ira L., assignor.)						
Reznor, George, Mercer, Pa. Plumber's hook.	501,439	July 11	1446	362	64	278
Reznor, George, Mercer, Pa. Plumber's hook.	501,484	July 11	1511	380	64	291
Rheutan, Abram A., assignor of one-half to W. H. Hill Envelope Company, Worcester, Mass. Gunning mechanism for envelope-machines.	504,136	Aug. 29	3113	779	64	1201
Rhind, Frank, Meriden, assignor to Bridgeport Brass Company, Bridgeport, Conn. Vapor-burning lamp.	494,938	Apr. 4	644	165	63	124
Rhind, Frank, Meriden, assignor to Bridgeport Brass Company, Bridgeport, Conn. Lamp-burner.	497,605	May 16	1974	494	63	1005
Rhind, Frank, Meriden, assignor to Bridgeport Brass Company, Bridgeport, Conn. Bicycle-lantern.	499,440	June 13	1177	281	63	1610
Rhind, Frank, Meriden, assignor of one-half to Bridgeport Brass Company, Bridgeport, Conn. Central-draft lamp.	501,025	July 4	767	201	64	140
Rhind, Frank, Meriden, assignor to Bridgeport Brass Company, Bridgeport, Conn. Lamp-burner.	505,959	Oct. 3	240	64, 65	65	47
Rhinehart, Charles E., Mechanicsburg, Pa. Fly-net.	507,285	Oct. 24	2541	625	65	513
Rhino, John, Hecla, Mont. Ratchet-wrench.	507,041	Oct. 17	2100	520	65	422
Rhoades, Alonzo E. (See Draper and Rhoades.)						
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Yarn-guide for doubling and twisting machines.	494,490	Mar. 28	2792	700	62	1939
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Rise-roll mechanism for warping-machines.	500,541	June 27	2968	729	63	1951
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Mechanism for handling beams.	504,456	Sept. 5	229	61	64	1313
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Mechanism for handling beams of warping-machines.	504,457	Sept. 5	230	61, 62	64	1313
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Mechanism for handling beams.	504,458	Sept. 5	233	62	64	1314
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Warping-machine.	504,459	Sept. 5	235	62, 63	64	1314
Rhoades, Alonzo E., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-retainer for sleeve-whirl spindles.	504,281	Aug. 29	3353	838	64	1246
Rhoades, Robert G., et al. (See Rupel, James M., assignor.)						
Rhoads, John H., Nokomis, Ill. Harness.	509,247	Nov. 21	2091	504	65	1182
Rhodes, Albert. (See Barraclough and Rhodes.)						
Rhodes, Edward, assignor of one-half to J. Mayers, Philadelphia, Pa. Stuffing-box.	505,369	Sept. 19	1739	450	64	1623
Rhodes, Henry W. (See Moyer and Rhodes.)						
Rhodes, James B., Grand Rapids, Mich. Saw-gummer.	502,319	Aug. 1	113	36	64	586
Rhodes, James B., Grand Rapids, Mich. Saw-grinding machine.	504,404	Sept. 5	148	38, 39	64	1297
Rhodes, John W., Havana, Ill. Metallic flask-holder.	498,406	May 30	3258	812	63	1265
Rhodes, John W., Havana, Ill. Grain-drill.	502,831	Aug. 8	1003	241 245	64	766
Rhodes, Leonidas M., Warrenton, Ga. Cotton-planter.	501,026	July 4	770	202	64	140
Rhodes, Malon, Marengo, Wis. Lumber-tallying machine.	496,980	May 9	951	249	63	809
Rhodes, Samuel L., Bradford, Pa. Lampblack-machine.	497,686	May 16	2096	524	63	1027
Rhodes, Wilson E. (See Harmon and Rhodes.)						
Rhone, Charles E., Bellefonte, Pa. Dental engine.	492,432	Feb. 28	2175	544	62	1229
Rhone, Charles E., Bellefonte, Pa. Dental engine.	492,433	Feb. 28	2178	545	62	1229
Rhude, Alonzo B., assignor to J. Sweeney, Thompson Falls, Mont. Self-fastening giant-powder cap.	501,440	July 11	1447	363	64	278
Ricard, Joseph A., Manchester, assignor of one-half to Crane Manufacturing Company, Lakeport, N. H. Circular-knitting machine.	507,560	Oct. 31	3010	739 740 741	65	617
Rice, Charles E., et al. (See Aniello, John A., assignor.)						
Rice, Charles E., L. B. McDonald, and J. D. McDowell, Little Rock, Ark. Weight-motor.	494,693	Apr. 4	262	66, 67	63	53
Rice, Charles L., assignor of one-third to O. H. Sorlien, Granite Falls, Minn. Door-operating device.	503,985	Aug. 29	2869	719 720	64	1155
Rice, David H. (See Currier and Rice.)						
Rice, David H., Brookline, assignor to Somerset & Johnsonburg Manufacturing Company, Somerset, Mass. Brick-machine.	500,510	June 27	2911	715	63	1939
Rice, Duane L., assignor to W. W. Kimball Company, Chicago, Ill. Guard for pianos.	511,210	Dec. 19	2360	576	65	1876
Rice, Edward E., New Durham, N. H. Metallic brush.	511,062	Dec. 19	2108	521	65	1828
Rice, Edward J., assignor to T. Rice, Rochester, N. Y. Beer-cooler.	489,546	Jan. 10	880	230	62	199
Rice, Edwin W., Jr. (See Thomson and Rice.)						
Rice, Edwin W., Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. System of electric conversion.	495,229	Apr. 11	1140	285	63	229
Rice, Edwin W., Jr., Swampscott, assignor to General Electric Company, Boston, Mass. Electric distribution.	508,838	Nov. 14	1371	339	65	1031
Rice, Edwin W., Jr., Swampscott, assignor to General Electric Company, Boston, Mass. System of electric distribution.	508,839	Nov. 14	1372	339	65	1031
Rice, Edwin W., Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Means for regulating multiphase currents.	508,638	Nov. 14	1078	267	65	976
Rice, Edwin W., Jr., Swampscott, assignor to General Electric Company, Boston, Mass. System of electric distribution.	510,487	Dec. 12	1066	256 257	65	1627
Rice, Elliott S. (See Hisey, Charles S., assignor.)						
Rice, Frederick A., Bridgeport, Conn. Folding hoe for removing ashes.	492,875	Mar. 7	166	39	62	1391
Rice, Henry C., Farmington, Conn. Edge-trimmer.	508,183	Nov. 7	328	81, 82	65	819
Rice, I. Preston. (See Howe, Eugene L., assignor.)						
Rice, James M., Peoria, Ill. Target practice.	495,371	Apr. 11	1361	341	63	270

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Rice, John. (See Davis, Rice, and McDaniel.)						
Rice, John C., <i>et al.</i> (See Paige, Charles F., assignor.)						
Rice, Joseph C., Grundy Centre, Iowa. Three-horse equalizer	503,163	Aug. 15	1558	383	64	880
Rice, Keness F. (See Karnes and Rice.)						
Rice, Keness F., and J. P. Doss, Eureka Springs, Ark. Clothes-fastener for wire clothes-lines	492,835	Mar. 7	95	23	62	1376
Rice, Robert F., Hartford, Conn. Magazine-camera	494,164	Mar. 28	2277	578	62	1843
Rice, Robert F., Hartford, Conn. Photographic camera	495,566	Apr. 18	1676	422 423	63	348
Rice, Theresa. (See Rice, Edward J., assignor.)						
Rice, Thomas C., Worcester, Mass. Street-car fender	494,165	Mar. 28	2280	578	62	1844
Rice, Wentworth, Rapid City, S. D. Rotary engine	502,585	Aug. 1	564	135	64	669
Rice, William. (See Bowman and Rice.)						
Rice, William. (See Scott, Barton W., assignor.)						
Rice, William H. (See Norton, Stephen, assignor.)						
Rice, William S., Elvira, Iowa. Box-forming machine	502,320	Aug. 1	114	26, 27	64	586
Rich, Adenah W., Jersey City, N. J. Machine for sawing logs, trees, or spiles	505,482	Sept. 26	1921	495	64	1672
Rich, Alfred J., San Francisco, Cal. Securing attachment for fire-escapes	490,362	Jan. 24	2212	576	62	494
Rich, Edwin. (See Rich, Harrison, assignor.)						
Rich, Fred S., Sycamore, Ill. Corn and cob crusher and grinder	503,357	Aug. 15	1876	465 466	64	937
Rich, Geary, assignor to Folmer & Schwing Manufacturing Company, New York, N. Y. Pocket match-safe	508,977	Nov. 21	1634	401	65	1096
Rich, George H., Chicago, Ill. Oat-cleaner	491,594	Feb. 14	884	222	62	939
Rich, Harrison, assignor of one-half to E. Rich, Muskegon, Mich. Railway-switch	494,441	Mar. 28	2717	681	62	1925
Rich, Jerome, Jackson, Mich. Window-screen	507,844	Oct. 31	3502	861	65	708
Rich, John G., <i>et al.</i> (See Allison, John H., assignor.)						
Rich, Richard H., Beverly, Mass. Insulated binding-post	498,407	May 30	3260	812	63	1265
Rich & Sager Company. (See Sager, James H., assignor.)						
Rich, Willard G., and J. H. Sager, Rochester, N. Y. Saddle for velocipedes	489,501	Jan. 10	818	214	62	187
Richard, Jean E., assignor, by mesne assignments, to J. Scott, New York, N. Y. Lathe attachment	500,722	July 4	309	83	64	58
Richard, Stephen, Jr., and W. N. Blanchard, Southbridge, Mass. Eyeglasses	492,234	Feb. 21	1873	468	62	1154
Richard, Walter C., and H. Hanson, Natrona, Pa. Car-coupling	491,059	Jan. 31	3348	854	62	731
Richards Balanced Engine Company. (See Richards, Jackson, assignor.)						
Richards, Charles R., assignor to Union Metallic Cartridge Company, Bridgeport, Conn. Machine for covering bullets	493,519	Mar. 14	1176	301 302 303	62	1602
Richards, Charles R., assignor to Union Metallic Cartridge Company, Bridgeport, Conn. Machine for trimming cartridge-shells	500,511	June 27	2912	716 717 718	63	1940
Richards, Charles R., assignor to Union Metallic Cartridge Company, Bridgeport, Conn. Machine for printing wads	506,374	Oct. 10	997	248 249 250	65	202
Richards, Edwin G., assignor of one-half to H. L. Naramore, Sharon, Mass. Vote-counting apparatus	500,948	July 4	636	168	64	117
Richards, Eugene H. (See Draper, William B., assignor.)						
Richards, Francis H. (See Cox and Richards.)						
Richards, Francis H., Hartford, Conn. Die for pointing metal drills	494,226	Mar. 28	2381	601	62	1864
Richards, Francis H., Hartford, Conn. Valve-rod guide for hydrants	495,431	Apr. 11	1460	368	63	228
Richards, Francis H., Hartford, Conn. Button-setting instrument	501,661	July 18	1796	447	64	358
Richards, Francis H., Hartford, Conn. Drawing-rolls	505,887	Oct. 3	133	34	65	27
Richards, Francis H., Hartford, Conn. Soap-canister	510,294	Dec. 5	757	183	65	1553
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Hydrant	490,601	Jan. 24	2573	663	62	564
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Clamping mechanism for turret-lathes	496,001	Apr. 25	2356	595 596	63	484
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Molding seat-rings	496,002	Apr. 25	2358	596	63	485
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Turret-clamping mechanism	496,064	Apr. 25	2460	621	63	503
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Stop mechanism for turret-lathes	496,065	Apr. 25	2461	621 622	63	503
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Making valve-gates	496,126	Apr. 25	2563	645	63	523
Richards, Francis H., assignor to W. Wood, Hartford, Conn. Turret-lathe	497,212	May 9	1305	332 333	63	872
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Metal-drill	500,213	June 27	2459	600	63	1860
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Seating valves	500,214	June 27	2461	600	63	1860
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Valve-seating tool	500,215	June 27	2462	600 601	63	1860
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Machine for seating valves	500,216	June 27	2464	601 602	63	1861
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Turret-clamping mechanism	500,217	June 27	2469	602	63	1861
Richards, Francis H., Hartford, assignor to Parker & Whipple Company, Meriden, Conn. Belt-shifting apparatus	493,409	Mar. 14	998	258	62	1571
Richards, Francis H., Hartford, assignor to Parker & Whipple Company, Meriden, Conn. Turning-machine	497,226	May 9	1447	365 366 367	63	895
Richards, Francis H., assignor to J. P. Lee, Hartford, Conn. Straight-pull bolt-gun	506,339	Oct. 10	536	233 234	65	190
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Grate	510,547	Dec. 12	1196	288	65	1649
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,548	Dec. 12	1198	288 289	65	1650
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,549	Dec. 12	1200	289	65	1650
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,550	Dec. 12	1201	289 290	65	1650
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,551	Dec. 12	1203	290	65	1651
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,552	Dec. 12	1205	290 291	65	1651
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,553	Dec. 12	1206	291	65	1651
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Furnace	510,554	Dec. 12	1209	292	65	1652

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Richards, Francis H., Hartford, Conn., assignor to E. B. Coxe, Drifton, Pa. Furnace.....	510,555	Dec. 12	1210	293	65	1652
Richards, Francis H., Hartford, Conn., assignor to E. B. Coxe, Drifton, Pa. Furnace.....	510,556	Dec. 12	1212	293 294	65	1652
Richards, Frank J., Williamsport, Pa. Dental plugger.....	494,227	Mar. 28	2382	601	62	1864
Richards, Frank P., assignor of one-half to G. P. Harrington, Edinburg, Ill. Straw-binder for harvesters.....	495,121	Apr. 11	959	240 241 242 243	63	197
Richards, George C., assignor of one-half to R. A. Shade, Sisson, Cal. Lock-nut.....	491,814	Feb. 14	1217	304	62	1007
Richards, Hubert P., assignor to Traut & Hine Manufacturing Company, New Britain, Conn. Snap-hook.....	489,502	Jan. 10	821	215	62	187
Richards, Jackson, Philadelphia, Pa., assignor to Richards Balanced Engine Company, of Maine. Locomotive-engine.....	493,599	Mar. 14	1335	340	62	1634
Richards, John T., Gardiner, Me. Axle-lubricator.....	492,697	Feb. 28	2609	646	62	1317
Richards, John T., Gardiner, Me. Composition for journal-bearings.....	492,750	Feb. 28	2686	.....	62	1332
Richards, Joseph W., Bethlehem, and A. E. Hunt, Pittsburg, Pa. Alloy.....	501,233	July 11	1113	.....	64	218
Richards, Robert H., Boston, Mass. Telescope.....	495,231	Apr. 11	1144	286	63	230
Richards, Robert H., Boston, Mass. Stadia-rod.....	495,332	Apr. 11	1145	286	63	230
Richards, Samuel W. (See Lichtenstein, Herman, assignor.)						
Richards, Stephen A., Fresno, Cal. Dresser for boots or shoes.....	507,845	Oct. 31	3503	861	65	708
Richards, Theron A., Brooklyn, N. Y. Journal-bearing.....	494,594	Apr. 4	111	26	63	23
Richards, Thomas K. (See White, Samuel A., assignor.)						
Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car- coupling.....	491,134	Feb. 7	110	30	62	770
Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car- buffer.....	495,060	Apr. 11	829	210 211	63	173
Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car- buffer.....	495,061	Apr. 11	831	211 212	63	174
Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car- coupling.....	495,062	Apr. 11	833	212	63	174
Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car- coupling.....	509,100	Nov. 21	1844	451	65	1135
Richards, Willard F., Buffalo, assignor to Gould Coupler Company, New York, N. Y. Car- coupling.....	511,457	Dec. 26	2797	677	65	1969
Richards, Willard F., assignor to Gould Coupler Company, Buffalo, N. Y. Car-coupling.....	498,029	May 23	2647	662	63	1140
Richards, William, Mayburg, Pa. Friction-pulley for sand-reels.....	492,632	Feb. 28	2512	622	62	1298
Richards, William E., New York, N. Y. Device for partitioning drawers, &c.....	490,987	Jan. 31	3327	895	62	706
Richards, William E., New York, N. Y. Support for shelves.....	501,591	July 18	1677	418	64	338
Richards, William E., New York, N. Y. Card-box.....	501,693	July 18	1847	459	64	367
Richards, William E., New York, N. Y. Ladder.....	501,694	July 18	1849	470	64	367
Richards, William E., New York, N. Y. Adjustable shelf-partition.....	502,321	Aug. 1	117	27	64	587
Richards, William G., Boston, Mass. Machine-vise.....	510,293	Dec. 5	755	183	65	1552
Richards, William J., Marquette, Mich. Boiler-furnace.....	494,028	Mar. 21	2044	521	62	1786
Richardson, Alvorada, et al. (See Wilkinson, William A., assignor.)						
Richardson, Battie K., Nashville, Tenn. Car-coupling.....	509,248	Nov. 21	2091	504	65	1183
Richardson & Boynton Company. (See Mackay, William M., assignor.)						
Richardson, Charles A., Kansas City, Kans. Deflector for heating-stoves.....	509,948	Dec. 5	167	39	65	1441
Richardson, Charles E., Springfield, Vt. Electric-lamp support.....	494,348	Mar. 28	2573	648	62	1900
Richardson, Charles G. (See Grant and Richardson.)						
Richardson, Charles H., Philadelphia, Pa. Circuit-breaking device for reciprocating elec- tric machines.....	508,050	Nov. 7	103	30	65	778
Richardson, Charles H., assignor to S. S. White Dental Manufacturing Company, Philadel- phia, Pa. Means for regulating electric motors.....	501,961	July 25	2279	570	64	459
Richardson, Charles H., assignor to S. S. White Dental Manufacturing Company, Philadel- phia, Pa. Regulating apparatus for electric motors.....	503,750	Aug. 22	2516	626	64	1070
Richardson, Clinton W., Bath, N. Y. Bake-pan.....	497,606	May 16	1976	494	63	1005
Richardson, Daniel W., South Frankfort, assignor of one-third to H. May, Frankfort, Mich. Hoe.....	501,662	July 18	1798	447	64	350
Richardson & De Long Brothers. (See De Long, Frank E., assignor.)						
Richardson & De Long Brothers. (See Granger, John W., assignor.)						
Richardson & De Long Brothers. (See Manville, Robert C., assignor.)						
Richardson, Edward J., Newport, N. H. Press-board and support for same.....	498,083	May 23	2726	681	63	1154
Richardson, Frederic W., West Hartlepool, England, assignor to Tubular Twin Screw Amidships Propulsion Company, Limited. Water-jet propulsion for steamships.....	498,572	May 30	3537	574 575	63	1313
Richardson, George A., assignor of one-half to J. W. Richardson, Reading, Mass. Turned shoe.....	508,242	Nov. 7	429	104	65	838
Richardson, Henry T., Brooklyn, N. Y. Grate-bar and grate.....	494,694	Apr. 4	264	67	63	53
Richardson, Howe & Lovejoy. (See Wing, Lingan C., assignor.)						
Richardson, Ingraham G., Minneapolis, Minn. Wall-desk.....	509,101	Nov. 21	1845	451 452	65	1136
Richardson, James C., London, England. Apparatus for depolarizing in electrolysis.....	501,628	July 18	1742	434	64	249
Richardson, James C., London, England. Electrolytic apparatus.....	508,241	Nov. 7	427	104	65	838
Richardson, Jason W. (See Richardson, George A., assignor.)						
Richardson, Jeremiah J., New York, N. Y. Furnace.....	489,758	Jan. 10	1192	312	62	262
Richardson, Jeremiah J., Brooklyn, N. Y. Furnace.....	501,695	July 18	1852	460	64	368
Richardson, John, and W. Norris, Lincoln, England. Oil-supplying device for hydrocar- bon-engines.....	500,673	July 4	230	60, 61	64	44
Richardson, John, and W. Norris, Lincoln, England. Combustion-chamber for petroleum or hydrocarbon engines.....	500,674	July 4	231	61	64	44
Richardson, John T., Harrisburg, assignor of one-half to A. H. Ege, Mechanicsburg, Pa. Dumping-wagon.....	495,708	Apr. 18	1911	481 482	63	386
Richardson, Joseph M., Indianapolis, Ind. Farm-gate.....	492,698	Feb. 28	2610	646	62	1317
Richardson, Julius C., Smithport, Pa. Nail-holding tool.....	509,399	Nov. 28	2375	576	65	1246
Richardson Manufacturing Company. (See Turtton, Albert W., assignor.)						
Richardson, Mark F., and C. A. Woodbury, Rutland, Vt. Magazine-gun.....	496,231	Apr. 25	2706	678 679	63	549
Richardson, William H. (See Fries and Richardson.)						
Richey, James N., Carmichael's, S. N. Hinch and W. A. Dromgold, York, Pa.; said Richey assignor to said Hinch and Dromgold. Mechanism for operating sawmill-carriages.....	491,494	Feb. 7	705	178	62	884
Richford, James H., Peoria, Ill. Draft-equalizer.....	510,710	Dec. 12	1476	365	65	1701
Richmond, Alvan S., assignor to J. S. Huyler, New York, N. Y. Dental apparatus.....	489,235	Jan. 3	391	108	62	87
Richmond, Alvan S., assignor to J. S. Huyler, New York, N. Y. Dental apparatus.....	492,434	Feb. 28	2160	545	62	1230
Richmond, Cassius M., New York, N. Y. Dental-tool holder.....	495,267	Apr. 11	1208	303	63	241
Richmond, George, New York, N. Y. Calculating and recording machine.....	503,986	Aug. 29	2870	720 721 722	64	1155

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Richmond, George, New York, N. Y. Coin-controlled renting-machine.....	509,181	Nov. 21	1966	479	65	1160
Richmond, Herbert, <i>et al.</i> (See Moore and Willett, assignors.)						
Richmond, Josiah M., Raymond, Nebr. Steam-vehicle.....	495,709	Apr. 18	1915	482	63	386
Richmond, Mary J., Republic, Mo. Fruit-drier.....	507,846	Oct. 31	3504	862	65	709
Richmond, Louis L., Meadville, Pa. Bicycle-saddle.....	502,017	July 25	2366	594	64	475
Richmond, William L., Holyoke, Mass. Thread-guide for spooling-machines.....	497,819	May 23	2308	580	63	1081
Richter, August E. (See Guhr and Richter.)						
Richter, Edward, Hackettstown, N. J. Car-coupling.....	495,230	Apr. 11	1142	285	63	230
Richter, Edward, Hackettstown, N. J. Car-coupling.....	510,190	Dec. 5	584	136	65	1520
Richter, Ernst. (See Hoffmann and Richter.)						
Richter, Ernst, and C. Hoffmann, assignors to Siemens & Halske, Berlin, Germany. Elec- tro-magnetic safety-coupling.....	503,727	Aug. 22	2472	614	64	1061
Richter, Friedrich, Rathenow, Germany. Concave for thrashing-machines.....	509,490	Nov. 28	2547	615	65	1281
Richter, George H. (See Gifford, Harry E., assignor.)						
Richter, William H., Benvenue, Pa. Sulky.....	497,501	May 16	1819	458	63	977
Rick, August, Jr., St. Louis, Mo. Coping.....	490,501	Jan. 24	2427	626	62	535
Ricke, George H., assignor of three-fourths to O. M. Hill, M. A. McGuire, and C. C. Agin, Cincinnati, Ohio. Hanger for trolley-wires.....	509,328	Nov. 21	2226	538	65	1208
Ricke, George H. E., assignor of one-half to J. A. Ringold, Cincinnati, Ohio. Mechanical telephone.....	496,137	Apr. 25	2564	645	63	523
Rickel, Henry, <i>et al.</i> (See Hardy, Lewis W., assignor.)						
Rickert, Anton, assignor of one-half to G. Mehtren, Clements, Cal. Gate.....	497,031	May 9	1035	264	63	823
Ricketts, James J., Pittsburg, Pa. Coupling for water-closets.....	492,946	Mar. 7	275	70	62	1413
Ricketts, James J., Pittsburg, Pa. Connection for water-closets.....	511,161	Dec. 19	2278	558	65	1261
Ricketts, Pierre D., New York, N. Y. Separating metallic nickel.....	505,846	Oct. 3	66		65	15
Ricke, Rufus S., and I. Feitel, New Orleans, La. Apparatus for boring wells.....	504,619	Sept. 5	492	127	64	1362
Riddel, Tice S., Eugene, Oreg. Wagon-road.....	497,344	May 16	1561	393	63	931
Ridell, Frank R., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Post-office lock-box.....	491,495	Feb. 7	706	179	62	884
Riddell, John, Saugus, assignor to Thomson-Houston Electric Company, Boston, Mass. Machine for boring out the standards and field-magnets of dynamo-electric machines.....	502,639	Nov. 14	1079	267	65	976
Riddell, John, Saugus, assignor to Thomson-Houston Electric Company, Boston, Mass. Device for boring spherical cavities.....	508,640	Nov. 14	1081	267	65	977
Riddelle, Philip S., Woodstock, Va. Sash-holder.....	501,809	July 18	2040	502	64	400
Riddelle, Philip S., Woodstock, Va. Sash-operating mechanism.....	504,620	Sept. 5	494	127	64	1362
Riddle, Frank C., St. Louis, Mo. Coffin-fastener.....	498,525	May 30	3457	857	63	1300
Riddle, John B., Morganfield, Ky. Car-coupling.....	497,213	May 9	1309	333	63	873
Riddle, John B., Morganfield, Ky. Car-coupling.....	506,075	Oct. 3	428	112	65	83
Rideal, Samuel, Manchester, assignor to Sampan Patent Railway Sleeper and Steel Plant Syndicate, Limited, Stalybridge, England. Permanent way for railways.....	508,243	Nov. 7	430	104 105	65	838
Rideal, Samuel, Manchester, assignor to Sampan Patent Railway Sleeper and Steel Plant Syndicate, Limited, Stalybridge, England. Permanent way for railways.....	510,295	Dec. 5	759	184	65	1553
Rideout, William J., and J. W. Merritt, Atwood, Ill. Thill-coupling.....	493,387	Mar. 14	972	250	62	1565
Rider, Charles M., Newark, Ohio. Bicycle-support.....	497,549	May 16	1882	475	63	989
Rider, Ebenezer W., Racine, assignor to Milwaukee Office Specialty Company, Milwaukee, Wis. Copying-press.....	510,296	Dec. 5	760	184 185	65	1553
Rider, George S. (See Anderson and Rider.)						
Rider, Joseph, Newark, Ohio. Breech-loading gun.....	500,949	July 4	638	168	64	117
Rider, Joseph, Newark, Ohio. Breakdown gun.....	511,362	Dec. 26	2627	638 639	65	1939
Ridgway, John J., Brooklyn, N. Y. Lock.....	498,490	May 30	3391	844	63	1258
Ridgway, John J., Brooklyn, N. Y. Door check and lock.....	498,491	May 30	3392	844	63	1289
Ridings, George T., Monroe City, Mo. Chicken-coop.....	506,831	Oct. 17	1758	442	65	359
Ridout, Chester G., <i>et al.</i> (See Ridout, Moses T. and E. M., assignors.)						
Ridout, Edgar M. (See Ridout, Moses T. and E. M.)						
Ridout, Moses T. and E. M., assignors of one-half to C. G. Ridout and W. D. Graham, Hutchinson, Minn. Clevis.....	496,957	May 9	923	242	63	804
Rieckert, Herman A. J., and L. F. Kwiatkowski, New York, N. Y. Opera-chair.....	489,328	Jan. 3	526	143	62	113
Riedel, John M. E. (See Luethi and Riedel.)						
Riedel, Ludwig F. (See Thoms, Hermann, assignor.)						
Riedig, Carl A., Chemnitz, Germany. Shoe.....	508,978	Nov. 21	1635	401	65	1096
Rieffer, Sigmund, Munich, Germany. Mercurial compensation-pendulum.....	508,530	Nov. 14	913	224	65	942
Rieffer, Sigmund, Munich, Germany. Pendulum-escapement.....	508,760	Nov. 14	1252	312	65	1010
Riegert, Frederick, St. Joseph, Mo. Treatment of sole-leather.....	492,836	Mar. 7	96		62	1376
Riegger, Constantin, Louisville, Ky. Automatic cut-off for musical instruments.....	498,573	May 30	3538	875 876	63	1314
Riehl, John B., Philadelphia, Pa. Umbrella-runner retainer.....	509,684	Nov. 28	2851	689	65	1339
Riehl, John B., Philadelphia, Pa. Umbrella-runner retainer.....	509,685	Nov. 28	2853	629	65	1339
Ries, Edward, Goodrich, Mich. Hay or stock rack.....	501,363	July 11	1338	334	64	256
Ries, Elias E., assignor to Ries & Henderson, Baltimore, Md. Metal-working.....	499,040	June 6	518	122	63	1481
Ries & Henderson. (See Ries, Elias E., assignor.)						
Ries, Perry, Goodrich, Mich. Sulky-plow.....	498,030	May 23	2648	662	63	1141
Riesberry, William C., Carberry, Canada. Wrench.....	491,721	Feb. 14	1073	271	62	979
Riese, Oskar, and H. Pohl, Berlin, Germany. Inking device for printing-machines.....	495,142	Apr. 11	1003	250	63	204
Riess, Rudolph W., Philadelphia, Pa. Mechanism for automatically operating the adjust- able saddles of bicycles, &c.....	510,993	Dec. 19	2017	498	65	1810
Riessner, Paul. (See Brachhausen and Riessner.)						
Riester, Leon A., Buffalo, N. Y. Machine for and mode of hulling coffer, rice, &c.....	509,606	Nov. 28	2732	660	65	1316
Riesthal, Alphonse de, <i>et al.</i> (See Keller, Gottlieb, assignor.)						
Rife, Charles E., Chandler, Mo. Pulverizer and stalk-cutter.....	489,690	Jan. 10	1082	281	62	241
Rigaud, Jean B. F. (See Grimaux, Edouard, assignor.)						
Rigby, Henry, Pittsburg, Pa. Rolling-mill appliance.....	495,683	Apr. 18	1867	468 469	63	379
Rigby, Richard, Fall River, Mass. Loom.....	507,328	Oct. 24	2618	644	65	529
Riggenbach, Eduard. (See Leinwather and Riggenbach.)						
Riggs, Breese, deceased, Crowley, Oreg.; S. Riggs, executor. Animal-gun.....	497,607	May 16	1976	495	63	1005
Riggs, Horace A., Plymouth, Ohio. Brick or tile cutter.....	504,364	Sept. 5	74	19 20 21	64	1285
Riggs, John D. (See Tew and Riggs.)						
Riggs, Seth, executor. (See Riggs, Breese.)						
Richter, J. B. (See Jencks, Calvin J., assignor.)						
Rightor, William R., assignor of one-fourth to J. O. Bagwell, Helena, Ark. Gravity-ray- way.....	494,595	Apr. 4	113	26	63	24

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Rigling, Alfred. (See McVey and Rigling.)						
Rigole, Dieudonné, Singapore, Straits Settlements. Process of and apparatus for the extraction of gutta-percha from the leaves and twigs of the gutta-percha tree	495,757	Apr. 18	1986	502	63	400
Riker, Andrew L., New York, N. Y. Magnetic frame for field-magnets	507,689	Oct. 31	3241	{ 793 794 }	{ 65	660
Riker, Andrew L., New York, N. Y. Laminated field-magnet frame for dynamo-electric machines	507,690	Oct. 31	3242	794	65	660
Riker, Brice E., Branchville, N. J., and A. Green, Brooklyn, N. Y. Stirrup	509,139	Nov. 21	1904	465	65	1147
Riley, Edward, assignor of one-half to T. J. Riley, Salamanca, N. Y. Keyhole-guard	495,517	Apr. 18	1602	403	63	334
Riley, George, Vallejo, Cal. Horse-detacher	491,815	Feb. 14	1218	305	62	1007
Riley, Hugh A. (See Watrous and Riley.)						
Riley, John A. (See McIntyre, Byron F., assignor.)						
Riley, John C., New Orleans, La. Sugar-cane-juice strainer and elevator	492,235	Feb. 21	1873	468	62	1155
Riley, Joseph P., et al. (See Paige, Charles F., assignor.)						
Riley, Michael, London, Ohio. Railway foot-guard	493,649	Mar. 21	1412	358	62	1664
Riley, Samuel, and W. Evans, Huron, Kans. Harrow	493,116	Mar. 7	535	134	62	1464
Riley, Thomas J. (See Riley, Edward, assignor.)						
Riley, William W., Cromwell, Conn. Suspender-buckle	508,121	Nov. 7	236	60	65	802
Rinck, Charles, Cincinnati, Ohio. Steam-boiler furnace	500,777	July 4	392	103	64	73
Rinehart, Ira C. C., Kansas City, Mo. Cigar-tip cutter	503,496	Aug. 15	2082	520	64	974
Ring, Dennis J., et al. (See Ring, John H., assignor.)						
Ring, Eliza F., Westfield, Mass. Ironing-board	507,847	Oct. 31	3505	862	65	709
Ring, Henry H., Lairdsville, assignor to Sprout, Waldron & Co., Muncy, Pa. Feed mechanism for grinding-mills	499,145	June 6	672	161	63	1508
Ring, Henry H., Lairdsville, assignor to Sprout, Waldron & Co., Muncy, Pa. Middlings-purifier	508,979	Nov. 21	1636	402	65	1096
Ring, John H., assignor of three-eighths to J. H. Pindar, F. W. Puffer, and D. J. Ring, Lowell, Mass. Police-patrol system	494,596	Apr. 4	114	27	63	24
Ringen, John, St. Louis, Mo. Combination-lock	495,911	Apr. 18	2228	561	63	444
Ringen, John, St. Louis, Mo. House mail-box	497,214	May 9	1310	333	63	873
Ringen, John, St. Louis, Mo. House mail-box	501,441	July 11	1447	363	64	278
Ringle, Jakob. (See Scheetz and Ringle.)						
Ringle, William H., Van Buren, Ohio. Fence-post	489,986	Jan. 17	1571	411	62	353
Ringold, John A. (See Ricke, George H. E., assignor.)						
Rink, August, Philadelphia, Pa. Moistening device for envelopes, &c.	489,267	Jan. 3	444	122	62	98
Rink, August, and C. Ruppenthal, Philadelphia, Pa. Lamp-chimney cleaner	508,761	Nov. 14	1254	312	65	1010
Rinker, Joseph L. (See Knocker and Rinker.)						
Ripson, John D., Thorold, assignor of one-half to T. F. Brown and W. M. German, Welland, Canada. Car-coupling	502,205	July 25	2671	674	64	533
Rion, Baptist, and H. Dupont, New York, N. Y. Machine for shaping artificial flowers	496,890	May 9	835	221	63	788
Riordan, Dennis W., assignor to H. Riordan, Elburn, Ill. Refrigerator-car	491,496	Feb. 7	707	179	62	885
Riordan, Helena. (See Riordan, Dennis W., assignor.)						
Riordan, Charles, et al. (See Cookson, Thomas, assignor.)						
Ripberger, Jacob, Newport, Ky., assignor of one-half to C. Manne, Cincinnati, Ohio. Car-starter	493,736	Mar. 21	1559	397	62	1694
Ripp, Robert. (See Strauss and Ripp.)						
Ripson, Joseph B., Antigo, Wis. Standard for wagon-bolsters	500,429	June 27	2796	688	63	1919
Risdon Iron and Locomotive Works. (See Dyer, William J., assignor.)						
Rishor, Christopher J., assignor to Hincks & Johnson, Bridgeport, Conn. Device for opening doors of hansom	493,520	Mar. 14	1184	303	62	1604
Rishworth, John M., Horsforth, S. Ingham, Leeds, and J. Vickers, Horsforth, England. Machinery for sorting and separating loose substances into various grades of fineness	493,521	Mar. 14	1185	303	62	1604
Risk, Robert J., assignor to B. Eastwood, Paterson, N. J. Take-up mechanism for looms	491,816	Feb. 14	1219	305	62	1008
Risley, Edwin H., et al. (See Savage, Arthur W., assignor.)						
Risley, Isaac. (See Lake and Risley.)						
Rison, Marcellus H., Paris, Tenn. Rake or fork	495,836	Apr. 18	2113	531	63	423
Risse, Hermann O., Leipsic, Germany. Spirit-level	508,762	Nov. 14	1255	313	65	1010
Risser, Morris H., assignor of one-half to J. H. Russell, Ashland, Ohio. Thill-coupling	510,093	Dec. 5	425	94	65	1490
Rissmüller, Ludwig, Newark, N. J., and H. Vollbrecht, New York, N. Y., assignors to Newark Chemical Works, Newark, N. J. Manufacture of superphosphates from kettle-residue	494,939	Apr. 4	646		63	125
Rissmüller, Ludwig, Newark, N. J., and H. Vollbrecht, New York, N. Y., assignors to Newark Chemical Works, Newark, N. J. Manufacture of superphosphates	494,940	Apr. 4	647		63	125
Rist, Henry W., assignor of one-half to E. Kloes, Allegheny, Pa. Car-coupling	498,190	May 23	2890	720	63	1184
Ristedt, Albert H., Cleveland, Ohio. Tool for grasping and carrying hot utensils	497,287	May 9	1458	367	63	897
Ritch, Milton M., Laurinburg, N. C. Brace for bedsteads	494,228	Mar. 23	2383	601	62	1864
Ritchie, Annie. (See Grant, Duncan E., assignor.)						
Ritchie, Edward S., Newton, Mass. Mariner's compass	503,164	Aug. 15	1559	383	64	880
Ritchie, Enoch E., assignor of one-half to J. S. Graves, Howard Lake, Minn. Saw set and gage	505,925	Oct. 3	192	48	65	38
Ritchie & Sons, Edward S. (See Luce, William B., assignor.)						
Ritchie, William A., assignor of one-half to E. F. Maritz, Sr., St. Louis, Mo. Adding or registering machine	493,117	Mar. 7	536	134	62	1465
Riter, D. Clinton. (See Brocke, Gerhard, assignor.)						
Riter, John L., Brownsville, Ind. Wire fence	506,256	Oct. 10	797	197	65	163
Riter, John L., Brownsville, Ind. Wire fence	506,257	Oct. 10	797	197	65	163
Riter, John L., Brownsville, Ind. Wire fence	506,258	Oct. 10	798	197	65	163
Riter, John L., Brownsville, Ind. Wire fence	506,259	Oct. 10	799	198	65	164
Riter, John L., Brownsville, Ind. Wire fence	511,458	Dec. 26	2799	677	65	1969
Riter, Michael M., Jr., et al. (See Moe, George T., assignor.)						
Rites, Francis M., Allegheny, Pa. Balanced slide-valve	501,663	July 18	1799	448	64	359
Rites, Francis M., Allegheny, Pa. Steam distribution in multiple-expansion engines	502,140	July 25	2559	{ 641 642 }	{ 64	512
Rites, Francis M., Allegheny, Pa. Steam distribution in triple-expansion engines	502,501	Aug. 1	425	{ 101 102 }	{ 64	645
Ritson, George A., Wellington, New Zealand. Rotary engine	496,900	May 9	836	222	63	788
Rittenhouse, Silas B., Liberty Mills, Ind. Pipe-wrench	492,435	Feb. 28	2182	545	62	1230
Ritter, Abraham, assignor to R. Wolf & Co., New York, N. Y. Purse and making same	490,165	Jan. 17	1867	487	62	413
Ritter, Henry, and E. H. Lunken, assignors to Lunkenheimer Company, Cincinnati, Ohio, Lubricator	506,442	Oct. 10	1127	281	65	228
Ritz, George A. (See Schaaf and Ritz.)						
Rivenburgh, Alvin, assignor of one-half to F. D. Mears, Greenfield, Iowa. Extension-electrolter	508,343	Nov. 7	587	144	65	867
Rivero, Ramon G., Monterey, Mexico. Plow	495,837	Apr. 18	2114	532	63	423

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Rivers, Campbell, St. Joseph, Mo. Step-ladder	503,165	Aug. 15	1560	384	64	880
Rix, Edward A. (See Macomber, Squire H., assignor.)						
Roach, Frank S. (See Brown, John W. L., assignor.)						
Roach, George W. (See Ralph and Roach)						
Roach, John M., Chicago, Ill. Safety-coupling for cars	490,399	Jan. 24	2262	588	62	503
Roach, John W., Phillipsburg, Kans. Cornstalk-cutter	496,003	Apr. 25	2350	596 597	63	485
Roadhouse, Levi, assignor to Weir Plow Company, Monmouth, Ill. Lister plow and planter	489,037	Jan. 3	88	24, 25	62	22
Robb, James T., Mount Vernon, assignor to Edison General Electric Company, New York, N. Y. Electric-lamp fixture or bracket	491,596	Feb. 14	887	223	62	940
Robb, James T., Mount Vernon, assignor to Edison General Electric Company, New York, N. Y. Base for electric-light brackets	493,411	Mar. 14	1001	258	62	1571
Robb, John W. (See Reed, William M., assignor.)						
Robb, John W., De Witt, Iowa. Seed-planter	489,268	Jan. 3	444	123	62	98
Robb, Joseph. (See Ruffing, George W. F., assignor.)						
Robb, Malcolm E., Knowlton, Canada. Vehicle-spring	506,546	Oct. 10	1296	324	65	260
Robbins, Addison. (See Murray and Robbins.)						
Robbins, Edward R., and L. L. Walrath, Sacramento, Cal. Strap or rope attachment	503,497	Aug. 15	2083	520	64	974
Robbins, Frank G., Haverhill, assignor of one-half to C. H. Kelley, Revere, Mass. Tack- ing-machine	490,988	Jan. 31	3229	825	62	706
Robbins, George B., Hinsdale, Ill. Refrigerator-car	489,759	Jan. 10	1194	313	62	262
Robbins, Hermon E. (See Robbins, William H., assignor.)						
Robbins, John M., Fort Worth, Tex. Hydraulic dredging-machine	499,042	June 6	523	123	63	1482
Robbins, Joseph T., Newton, Iowa. Water-heater for warming buildings	496,004	Apr. 25	2360	597	63	485
Robbins, Royal E., et al., trustees. (See Bagley, Charles H., assignor.)						
Robbins, Royal E., et al., trustees. (See Stark, John, assignor.)						
Robbins, Samuel G. (See Dowling, John S., assignor.)						
Robbins, Silas, Omaha, Nebr. Game apparatus	499,041	June 6	522	132	63	1482
Robbins, William E., Kansas City, Mo. Odorless gasoline-heater	510,520	Dec. 12	1118	270	65	1636
Robbins, William H., Millgrove, Ind. Lamp-burner attachment	500,255	June 27	2520	615	63	1871
Robbins, William H., assignor of one-half to H. E. Robbins, Mill Grove, Ind. Switch	508,840	Nov. 14	1373	339	65	1032
Roberson, George W., Shushan, N. Y. Car-coupling	494,167	Mar. 28	2284	579	62	1844
Roberson, James D., et al. (See Campbell, James C., assignor.)						
Roberson, Joseph. (See Smith, Millage M., assignor.)						
Robert, Christian, Lawrenceville, Ind. Rotary harrow	509,686	Nov. 28	2855	689 690	65	1339
Robert, Cumberland M., Athens, Tex. Churn	495,103	Apr. 11	917	231	63	191
Roberts, Albert E., Norwalk, Ohio. Metallic railway-tie	494,029	Mar. 21	2045	521 522	62	1786
Roberts, Alfred T., Winnebago, Ill. Railway-alarm	507,286	Oct. 24	2541	626	65	513
Roberts, Benjamin, Indianapolis, Ind. Oil-burner	491,226	Feb. 7	268	67	62	799
Roberts, Benjamin, Indianapolis, Ind. Smoke-consuming furnace	501,163	July 11	1014	257	64	199
Roberts, Benjamin, Indianapolis, Ind. Fluid-fuel atomizing and burning apparatus	501,164	July 11	1015	257	64	199
Roberts, Charles H., Eau Claire, Wis. Electric plow	509,556	Nov. 28	2651	641 642	65	1300
Roberts, Charles H., Eau Claire, Wis. Band-saw mill	509,557	Nov. 29	2655	642 643	65	1301
Roberts, Cyrus, deceased; J. B. and G. A. Roberts, C. B. Tucker, Three Rivers, Mich., and S. H. Roberts, Denver, Colo., executors. Push-car	509,182	Nov. 21	1969	479	65	1160
Roberts, Cyrus, deceased; J. B. and G. A. Roberts, C. B. Tucker, Three Rivers, Mich., and S. H. Roberts, Denver, Colo., executors. Hand-car	511,211	Dec. 19	2361	577	65	1876
Roberts, Dugald H., Detroit, Mich. Water-gage	500,298	June 27	2586	633	63	1281
Roberts, Edward E., assignor to Roberts Safety Water Tube Boiler Company, Red Bank, N. J. Steam-generator	507,504	Oct. 24	2906	714 715	65	583
Roberts, Edward E., assignor to Roberts Safety Water Tube Boiler Company, Red Bank, N. J. Steam-generator	507,505	Oct. 24	2909	715 716	65	584
Roberts, Edward F., assignor to Roberts Manufacturing Company, Columbus, Ohio. Au- tomatic drip-valve	506,260	Oct. 10	800	198	65	164
Roberts, Ellwood W., Brooklyn, N. Y. Folding hollow body	490,680	Jan. 31	2736	705	62	610
Roberts, Frank C., Philadelphia, Pa. Puddling-furnace	511,162	Dec. 19	2280	558	65	1862
Roberts, Frank C., Philadelphia, Pa. Hot-blast stove	511,253	Dec. 19	2426	591	65	1888
Roberts, George A., et al., executors. (See Roberts, Cyrus.)						
Roberts, George J., Dayton, Ohio. Steam-actuated valve	501,579	July 18	1660	415	64	335
Roberts, George J., Dayton, Ohio. Gas-mixer	502,531	Aug. 1	477	115	64	654
Roberts, George W. (See O'Keefe, Frank D., assignor.)						
Roberts, George W., Philadelphia, Pa. Carrying-strap	504,307	Aug. 29	3396	850	64	1254
Roberts, Gracie S., Springfield, N. Y. Key-holder	508,244	Nov. 7	432	105	65	838
Roberts, Hedley G. (See Roberts, Leonard and H. G.)						
Roberts, Henry. (See Pease, Robert R., assignor.)						
Roberts, Henry P. (See Hayes and Roberts.)						
Roberts, Isaiah L., Brooklyn, N. Y. Carbonizing apparatus	511,459	Dec. 26	2800	677 678	65	1969
Roberts, Jacob, Catasauqua, Pa. Furnace	490,774	Jan. 31	2877	739	62	637
Roberts, Jacob, Catasauqua, Pa. Horseshoe-machine	494,166	Mar. 28	2222	578 579	62	1844
Roberts, Jacob, Catasauqua, Pa. Machine for making horseshoes	501,298	July 11	1212	306 307	64	235
Roberts, Jacob, Poughkeepsie, N. Y. Lemon-juice extractor	504,365	Sept. 5	85	21	64	1287
Roberts, James, assignor to S. A. Woods Machine Company, Boston, Mass. Cutter-head hood for planers or matchers	495,912	Apr. 18	2229	561	63	445
Roberts, James B., et al., executors. (See Roberts, Cyrus.)						
Roberts, Jesse W., assignor of one-half to S. K. Samms, Philadelphia, Pa. Paris-green dis- tributor	495,432	Apr. 11	1461	368 369	63	288
Roberts, John A., et al. (See Marklev, John A., assignor.)						
Roberts, John R., Homer City, Pa. Thermostat	490,926	Jan. 31	3125	802	62	687
Roberts, John W., assignor to Sherwin-Williams Company and B. Patterson, Cleveland, Ohio. Can-soldering machine	490,126	Jan. 17	1805	471 472 473	62	401
Roberts, John W., assignor to Sherwin-Williams Company and Roberts Tin Ware Company, Cleveland, Ohio. Soldering-machine	502,141	July 25	2562	643 644	64	512
Roberts, Leonard and H. G., London, England. Ice-cream freezer	511,252	Dec. 19	2425	591	65	1888
Roberts, Lorin. (See Fulghum and Roberts.)						
Roberts, Luke, and J. Wheeler, Bradford, England; said Wheeler assignor to said Roberts. Brake mechanism for cars	491,664	Feb. 14	983	248	62	961

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Roberts Manufacturing Company. (See Roberts, Edward F., assignor.)						
Roberts, Miller, Poplar Bluff, Mo. Washing-machine.	489,760	Jan. 10	1196	313	62	263
Roberts, Nate H. (See Hancock, Atkins, and Roberts.)						
Roberts, Nate H., assignor to E. C. Atkins, Indianapolis, Ind. Rotary plow	506,443	Oct. 10	1128	281	65	228
Roberts, Nathaniel H. (See Falkinburg, Percy, assignor.)						
Roberts, Richard B. (See Judy, William F., assignor.)						
Roberts, Robert M., Anderson, Ind. Glass-carrying vehicle	499,593	June 13	1422	340	63	1653
Roberts, Robert S., Philadelphia, Pa. Telegraph-transmitter	491,595	Feb. 14	885	223	62	940
Roberts Safety Water Tube Boiler Company. (See Roberts, Edward E., assignor.)						
Roberts, Samuel H., et al., executors. (See Roberts, Cyrus.)						
Roberts, Taylor. (See Decker, Theodore, assignor.)						
Roberts, Thomas, assignor of one-half to E. Weiller, Baltimore, Md. Piston-packing	509,827	Nov. 28	3085	745	65	1383
Roberts, Thomas B., Kansas City, Kans. Refrigerator-car	500,615	July 4	127	34	64	25
Roberts, Throp & Co. (See Donovan, James, assignor.)						
Roberts Tin Ware Company et al. (See Roberts, John W., assignor.)						
Roberts, William F., Jr., et al. (See James, John H., assignor.)						
Roberts, William H. (See Snider and Roberts.)						
Roberts, William P., et al. (See Winner, William P., assignor.)						
Roberts, William P., Evansville, Wis. Animal-catcher	506,864	Oct. 17	1805	453	65	367
Robertson, Archibald J., New York, assignor to himself, G. S. Brush, Brooklyn, and H. Carey, Elm Park, N. Y. Conduit for electric railways.	508,578	Nov. 14	992	243	65	958
Robertson, D. W., et al. (See Edmonds, Charles S., assignor.)						
Robertson, Francis M., Fulham, England. Evaporating-pan	503,498	Aug. 15	2084	{ 520 521 }	{ 64	975
Robertson, Frank, assignor of one-half to A. J. Runyan, Loami, Ill. Bundle-feeder for thrashing-machines	493,296	Mar. 14	829	211	62	1537
Robertson, Harry, Jersey City, N. J. Bottling carbonated fluids	490,681	Jan. 31	2738	705	62	610
Robertson, James, Manchester, England. Method of and apparatus for compressing and shaping metal articles	493,897	Mar. 21	1809	460	62	1742
Robertson, James, Manchester, England. Apparatus for making tubes	493,898	Mar. 21	1810	461	62	1742
Robertson, James, Manchester, England. Apparatus for forming elongated articles from billets of heated metal	493,945	Mar. 21	1895	{ 483 484 }	{ 62	1758
Robertson, James, Manchester, England. Method of and apparatus for shaping and drawing metal tubes	493,946	Mar. 21	1895	484	62	1759
Robertson, James, Cleveland, Ohio. Automatic feeding device for rolling-mills	507,166	Oct. 24	2333	575	65	477
Robertson, James, assignor to Florence Machine Company, Northampton, Mass. Shuttle for sewing-machines	500,430	June 27	2797	628	63	1919
Robertson, James, assignor of one-half to A. B. Rudd and H. H. Neilson, Perth, Canada. Combined wrench and wheel-lifter	500,950	July 4	642	168	64	117
Robertson, James, assignor of one-half to A. B. Rudd and H. H. Neilson, Perth, Canada. Sash-holder	510,614	Dec. 12	1317	321	65	1671
Robertson, James P., London, England. Car-propeller	509,491	Nov. 28	2548	615	65	1281
Robertson, Joseph, et al. (See Cooper, Harry, assignor.)						
Robertson, Peter, Melbourne, Victoria. Lamp	507,754	Oct. 31	3333	816	65	677
Robertson, Richard S., Castle Gate, Utah Ter. Car-coupling	489,092	Jan. 3	169	46	62	40
Robertson, Samuel D., Undine, Cal. Pipe-expander	497,820	May 23	2309	550	63	1081
Robertson, Thomas J. W., Washington, D. C. Stove-base	506,547	Oct. 10	1298	324	65	260
Robertson, William A., and H. Carlton, Baltimore, Md., assignors to Chicago Railway Equipment Company, Chicago, Ill. Brake-beam	497,728	May 16	2161	540	63	1039
Robertson, William T., Washington, D. C. Trousers-guard	503,683	Aug. 22	2386	598	64	1046
Robeson, Edward H., New Orleans, La. Bagasse-burner	493,522	Mar. 14	1187	304	62	1604
Robins, Henry S., Philadelphia, Pa. Safety-fender for tram-cars	507,167	Oct. 24	2336	575	65	477
Robins, Thomas, Jr., Morristown, N. J. Conveyor-belt	499,472	June 13	1225	292	63	1619
Robinson, Andrew J., Boston, Mass. Detachable umbrella-cover	502,761	Aug. 8	883	216	64	743
Robinson, Arthur W., Bucyrus, Ohio. Hydraulic dredge	504,750	Sept. 12	728	{ 181 182 }	{ 64	1420
Robinson, Arthur W., Bucyrus, Ohio. Dredge and excavator	508,122	Nov. 7	237	60, 61	65	802
Robinson, Charles M. (See Robinson, James T. and C. M.)						
Robinson, Charles N., Philadelphia, Pa. Puzzle	508,245	Nov. 7	435	105	65	839
Robinson, Charles S., Lonsdale, R. I. Drawing-frame	505,371	Sept. 19	1742	451	64	1623
Robinson, Charles W., Reed City, Mich. Vehicle-wheel	494,168	Mar. 28	2285	579	62	1844
Robinson, Charles W., Reed City, Mich. Wagon	501,165	July 11	1016	258	64	199
Robinson, Charles W., Greentown, Ind. Incubator	499,396	June 13	1095	264	63	1596
Robinson & Co., J. M. (See Colling, Charles J., assignor.)						
Robinson & Co., John T. (See Chamberlain, Henry J., assignor.)						
Robinson & Co., John T. (See Robinson and Chamberlain, assignors.)						
Robinson, Dighton A., Minneapolis, Minn. Means for driving elevator-belts	511,212	Dec. 19	2362	577	65	1877
Robinson, Dighton A., Minneapolis, Minn. Rope-drive for elevators	511,213	Dec. 19	2363	577	65	1877
Robinson, Dighton A., and D. R. Hoopes, Minneapolis, Minn. Straw-burning stove	499,330	June 13	967	233	63	1572
Robinson, Edward W., Boston, assignor of one-half to E. B. Welch, Cambridge, Mass. Apparatus for automatically stopping railway-trains	492,837	Mar. 7	96	24	62	1376
Robinson, Elbert R., Nashville, Tenn. Electric-railway trolley	505,370	Sept. 19	1740	451	64	1623
Robinson, Eugene, Detroit, Mich. Pavement	496,099	Apr. 25	2514	635	63	514
Robinson, Francis D., Somerville, Mass. Spring-hinge	503,064	Aug. 8	1378	340	64	834
Robinson, George B., and W. R. Roby, assignors to G. B. Robinson and B. E. Roby, Colorado Springs, Colo. Bicycle	510,820	Dec. 12	1666	{ 413 414 }	{ 65	1736
Robinson, Harry, St. Louis, Mo. Attachment for mortising-machines	490,502	Jan. 24	2428	627	62	535
Robinson, Henry D., Richmond, Ind. Fence-machine reel	496,283	Apr. 25	2789	697	63	565
Robinson, James. (See Pearson and Robinson.)						
Robinson, James D., et al. (See Campbell, James C., assignor.)						
Robinson, James T. and C. M., Altoona, assignors to Robinson Machine Company, Altoona and Bellwood, Pa. Car-truck	495,372	Apr. 11	1364	341	63	270
Robinson, John B. (See Robinson, Nelson B. and J. B.)						
Robinson, John G., et al. (See Adams, Nathaniel F., assignor.)						
Robinson, John T., Hyde Park, Mass. Paper-creasing machine	498,904	June 6	281	65	63	1442
Robinson, John T., Hyde Park, Mass. Paper box and making same	501,664	July 18	1902	448	64	359
Robinson, John T., Hyde Park, Mass. Paper scoring or cutting machine	503,751	Aug. 22	2517	626	64	1070
Robinson, John T., and H. J. Chamberlain, assignors to J. T. Robinson & Co., Hyde Park, Mass. Machine for cross-cutting and collating paper	501,027	July 4	771	202	64	141
Robinson, Josephine M., Cincinnati, Ohio. Corner picture-hanger	505,230	Sept. 19	1510	394	64	1581
Robinson, Luther, Boston, Mass. Ventilator	493,295	Mar. 14	827	211	62	1537
Robinson Machine Company. (See Robinson, James T. and C. M., assignors.)						
Robinson, Miner, Newton, Mass. Electric-circuit testing and switching device	507,691	Oct. 31	3243	794	65	660
Robinson, Nelson B. and J. B., The Grove, Tex. Cultivator	495,207	Apr. 11	1103	274	63	223

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Rodwell, George J. B., Buffalo, N. Y., assignor of two-thirds to S. J. Moore and H. C. Secord, Toronto, Canada. Apparatus for manufacturing rubber stamps	511,548	Dec. 26	2932	{ 714 715 }	65	1994
Roe, Arthur R., Duluth, Minn. Electric switching apparatus	502,105	July 25	2509	630	64	501
Roe, Arthur R., Duluth, Minn., assignor of one-half to G. J. Northrop, Marquette, Mich. Electric switching apparatus	502,104	July 25	2506	629	64	501
Roe, Arthur R., assignor to Electric Motor Company, Duluth, Minn. Reciprocating electric motor	510,367	Dec. 5	860	{ 207 208 }	65	1573
Roe, J. Miller. (See Soleau, Edward R., assignor.)						
Roe, William C., Honolulu, Hawaii. Lathe-center	493,119	Mar. 7	540	135	62	1465
Roebel, Max C., Philadelphia, Pa. Cigar or cigarette holder	491,744	Feb. 14	1103	279	62	986
Roebler, Heinrich, Duxburg, near Magdeburg, Germany. Sled-propeller	508,980	Nov. 21	1639	402	65	1097
Roebeling, Ferdinand W. (See Arnold, Horace L., assignor.)						
Roebuck, Frank H. (See Moore, Rue, Smith, Roebuck, Mills, and Kirk.)						
Roecker, Wilhelm, Loechgau, Germany. Straw-cutting machine	491,745	Feb. 14	1107	280	62	986
Roeidiger, Fredrick, assignor to S. V. McCormick, Nashville, Tenn. Car-brake	500,952	July 4	644	169	64	118
Roehl, Charles E., Chicago, Ill., S. Z. Mitchell, Portland, Oreg., and E. P. Wetmore, Helena, Mont. Electric heater	500,272	June 27	2545	622	63	1875
Roehm, Herman. (See Shand, James, assignor.)						
Roehm, William W., and J. Schweitzer, Jr., Augusta, Ky. Car-coupling	507,932	Oct. 31	3633	898	65	732
Roehr, Charles. (See Roehr, William H. and C.)						
Roehr, William H. and C., Bucyrus, Ohio. Pew-back, &c.	491,190	Feb. 7	212	54	62	788
Roemer, Hermann, Philadelphia, Pa. Apparatus for polishing the caps of bottles, &c.	490,682	Jan. 31	2739	706	62	610
Roeske, Henry, Philadelphia, assignor of one-half to R. Wetherill & Co., Chester, Pa. Method of and apparatus for purifying water	501,732	July 18	1909	475	64	378
Roessing, Henry, Chicago, Ill. Bridge-gate	494,796	Apr. 4	435	107	63	84
Roessler, Moritz, Jr., College Point, N. Y. Ladder and truck	497,131	May 9	1190	304	63	851
Roessler, William, St. Louis, Mo. Rowing apparatus	502,467	Aug. 1	364	87	64	633
Roger, George, Warrington, England. Apparatus for cutting the pile of weft pile fabrics	504,441	Sept. 5	210	55	64	1309
Roger, John, Denver, Colo. Swinging bearing	508,981	Nov. 21	1639	{ 402 403 }	65	1097
Rogers, Albert J., Santa Rosa, Cal. Lubricator	497,968	May 23	2549	636	63	1123
Rogers & Bros., C. (See Lacroix, Elizear P., assignor.)						
Rogers, Charles, New Plymouth, New Zealand, assignor to F. W. Schäfer, London, England. Apparatus for receiving written messages	509,140	Nov. 21	1905	466	65	1147
Rogers, David, Bridgehampton, N. Y. Wire fence	509,102	Nov. 21	1846	452	65	1136
Rogers, David D. (See Mead, Frank H., assignor.)						
Rogers, David J., Lebanon, Ky. Fly-fan	506,549	Oct. 10	1300	325	65	260
Rogers, Dennis L. (See Cook, William N., assignor.)						
Rogers, Edward F., Norfolk, Va. Natural-draft dry-kiln	497,687	May 16	2100	524	63	1028
Rogers, Edward G., Lincoln Falls, Pa. Implement for tightening wire-fence strands	507,454	Oct. 24	2820	690	65	569
Rogers, Elbert S., Knoxville, Tenn. Combined fireplace heater and furnace	506,796	Oct. 17	1696	{ 426 427 }	65	347
Rogers, Frank H., Golden, Colo. Harvesting-machine	509,492	Nov. 23	2549	{ 615 616 617 }	65	1281
Rogers, Haskell A., and J. M. Runyan, Boone, Iowa. Drilling-tool	492,053	Feb. 21	1583	394	62	1095
Rogers, Horace T., Louisville, Ky. Belt-clamp	499,146	June 6	674	162	63	1508
Rogers, Ichabod R., Lynn, Mass. Heel	497,132	May 9	1193	305	63	851
Rogers, Ichabod R., Lynn, Mass. Heel-die	509,768	Nov. 28	2083	722	65	1363
Rogers, James A., Glencoe, Nebr. Earmark	492,838	Mar. 7	99	24	62	1377
Rogers, James A., Glencoe, Nebr. Punching and riveting apparatus	499,331	June 13	968	233	63	1573
Rogers, James S., Saratoga Springs, N. Y. Gas-burner for furnaces	496,445	May 2	90	26	63	635
Rogers, James S., Saratoga Springs, N. Y. Apparatus for producing gas from hydrocarbon liquids	506,730	Oct. 17	1591	401	65	327
Rogers, James S., and J. H. Baker, Saratoga Springs, N. Y. Apparatus for producing gas	489,594	Jan. 10	950	247	62	212
Rogers, John A., Hartsell's, Ala. Railway-signal	510,397	Dec. 5	761	185	65	1554
Rogers, John B., Washington, D. C. Electrical annunciator	494,762	Apr. 4	369	93	63	73
Rogers, John H., Glyncoed, England. Annealing-furnace	494,597	Apr. 4	115	27	63	24
Rogers, John H., Glyncoed, England. Apparatus used in the manufacture of tin or terne plates	496,487	May 2	145	{ 40 41 42 }	63	645
Rogers, John H., Glyncoed, England. Hydraulic crane	497,216	May 9	1313	{ 334 335 }	63	874
Rogers, Lee J., Pomona, Cal. Plumb-level	498,084	May 23	2726	682	63	1155
Rogers, Lewis H., Buffalo, N. Y. Tree-transplanter	491,135	Feb. 7	113	31	62	770
Rogers, Louis P., and J. Hofman, Rochester, N. Y. Transporting-receptacle	504,503	Sept. 5	332	83	64	1330
Rogers Printing Company. (See Lindemeyer, Philip, Jr., assignor.)						
Rogers, Samuel A. (See Coker, James R., assignor.)						
Rogers, Samuel C., Buffalo, N. Y. Knife-grinder	507,634	Oct. 31	3156	773	65	644
Rogers, Schwartz & Co. (See Sebastian, Charles, assignor.)						
Rogers, Thomas, Miles, Iowa. Trace-buckle	510,488	Dec. 12	1069	257	65	1627
Rogers, Thomas B., Brooklyn, N. Y. Acoustic telephone	493,297	Mar. 14	831	212	62	1537
Rogers, Thomas N., Philadelphia, Pa. Strengthening-strip for trunks, &c.	500,352	June 27	2684	658	63	1899
Rogers, William H. (See Baker, Halsey H., assignor.)						
Rogers, William H., Philadelphia, Pa. Hot-air furnace	497,345	May 16	1563	393	63	931
Rogers, Winfield S., Troy, N. Y. Coin-controlled lock	499,803	June 20	1770	429	63	1727
Rogers, Woodbury O., assignor to W. A. Aiken, Norwich, Conn. Display-frame	500,745	July 4	340	90	64	64
Rohde, Johann W. L., London, England. Means for securing detachable ornaments in articles of jewelry	501,365	July 11	1340	335	64	257
Rohn, Frank G., Lampasas, Tex. Vehicle-pole	501,255	July 11	1152	292	64	224
Rohn, Frank H., et al. (See Obrist, Andrew J., assignor.)						
Rohn, Jacob P., Easton, Pa. Sheaf-register for harvesters	492,109	Feb. 21	1667	{ 414 415 }	62	1112
Rohner, Walter E., New York, N. Y. Wood-polishing compound	498,961	June 6	374		63	1458
Rohr, Henry, et al. (See Black, William S., assignor.)						
Rohrbach, Gabriel, Del Rio, Tex. Swinging gate	496,138	Apr. 25	2565	646	63	523
Rohrbach, Gabriel, Del Rio, Tex. Triangle for billiard-balls	501,256	July 11	1153	292	64	224
Rohrbach, Gabriel, Del Rio, Tex. Billiard-ball holder	501,257	July 11	1154	292	64	224
Rohrbach, Gabriel, Del Rio, Tex. Combined car and air-brake coupling	508,764	Nov. 14	1256	313	65	1011
Rohrer, Albert L., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric switch	490,363	Jan. 24	2213	{ 576 577 }	62	494
Rohrer, Albert L., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Switchboard for electric circuits	496,901	May 9	838	223	63	788

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Rohrer, Albert L., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Search-light	508,642	Nov. 14	1084	268	65	977
Rohrer, Albert L., Lynn, and G. W. Mausfield, Melrose, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Switchboard for power-stations	508,641	Nov. 14	1083	268	65	977
Rohrer, Reuben C., assignor of one-half to S. Moyer, Orwigsburg, Pa. Automatic safety-gate for railway-crossings	506,187	Oct. 3	636	162	65	123
Rolfson, Rolf J., assignor to Union Gas Engine Company, San Francisco, Cal. Carburetor.	498,447	May 30	3325	828	63	1277
Rolfson, Rolf J., assignor to Union Gas Engine Company, San Francisco, Cal. Carburetor.	509,828	Nov. 28	3086	745 746	65	1383
Roller, Henry C., Newark, N. J. Lubricator	499,595	June 13	1425	341	63	1654
Rollet, Antoine P. G., deceased, St. Etienne, France; P. Mauro, Washington, D. C., administrator. Refining metals	491,498	Feb. 7	711		62	885
Rollet, Antoine P. G., deceased, St. Etienne, France; P. Mauro, Washington, D. C., administrator. Apparatus for the purification of cast-iron	491,508	Feb. 7	729	184 185	62	889
Rolling, John, Scranton, Pa. Car-wheel	504,790	Sept. 12	794	201	64	1432
Rollins, George A., Chicago, Ill. Armature-connection for dynamo-electric machines	493,447	Mar. 14	1062	273	62	1582
Rollins, Robert W., Hartford, Conn. Electric-lighting system	492,638	Feb. 28	2513	622	62	1298
Rollins, Thomas G. (See Mallett, Markham W., assignor.)						
Rolston, William C., Boston, Mass. Channel-cutting tool for planing-machines	508,981	Nov. 21	1641	403	65	1097
Rolston, William S., Elizabeth, N. J. Ice-cream freezer	507,929	Oct. 24	2620	645	65	529
Romans, Freeland H., Bentonville, Ark. Pump	504,366	Sept. 5	6	22	64	1287
Romans, Justus M., White Cloud, Mich. Dumping-wagon	489,987	Jan. 17	1572	411	62	353
Rombauer, Ernest E., St. Louis, Mo. Hand-strap for cars	497,893	May 23	2436	607	63	1104
Rominger, George S., Philadelphia, Pa. Worm-gear-cutting machine	490,503	Jan. 24	2430	627	62	535
Romoser, Charles W., Marion, Ohio. Vapor-stove	490,085	Jan. 17	1737	452	62	387
Roncaglia, Augustine, Denver, Colo. Mason's trowel	509,352	Nov. 21	2275	551	65	1217
Roney, William R., Chicago, Ill. Pyrometer	490,723	Jan. 31	2798	718	62	623
Rood, Vernon H., Jeanesville, Pa. Coal or ore jigger	490,793	Jan. 31	2912	748 749	62	644
Rooks, Alva N., assignor of one-half to W. J. Tweed, Iuka, Ill. Combined air-valve kitchen and grocery cabinet	507,933	Oct. 31	3635	898 899	65	733
Rooney, Eugene H., Milwaukee, Wis. Door-fastener	506,196	Oct. 3	652	166	65	126
Rooney, George A., Cloquet, Minn. Stake log-binder	505,848	Oct. 3	69	17	65	16
Rooney, John J. (See Sheldon and Rooney.)						
Rooney, John J., Brooklyn, N. Y. Safety stirrup-holder	500,512	June 27	2923	718	63	1942
Rooney, Michael, et al. (See Huntley, Hosea H., assignor.)						
Roop, Jacob W., Harrisburg, Pa. Corner and base carpet-sweeper	490,589	Jan. 24	2550	657	62	559
Roosevelt, James A. (See Darrow and Roosevelt.)						
Roosevelt, James A., assignor of one-half to J. H. Warmoth, Austin, Tex. Mail-bag fastener	508,841	Nov. 14	1374	340	65	1032
Root, George R., Indianapolis, Ind. Rail-joint	506,076	Oct. 3	429	112	65	84
Root, Sanford O., Lodi, N. Y. Pliers	496,902	May 9	839	223	63	788
Roots & Heinemann. (See Kehl, Anthony, assignor.)						
Roots, James, London, England. Petroleum or liquid-hydrocarbon engine	511,651	Dec. 26	3100	757	65	2024
Roots, Logan H., et al. (See Smith, George, assignor.)						
Roovers, Alfred W. (See Williams and Roovers.)						
Roper, Arthur C., Exeter, England. Brake for cycles or other carriages having rubber-tired wheels	509,183	Nov. 21	1970	479 480	65	1160
Roper, Charles F., assignor of one-half to G. Draper & Sons, Hopedale, Mass. Voting-machine	501,443	July 11	1450	364	64	279
Ropes, Julius, Ishpeming, Mich. Envelope-opener	497,133	May 9	1194	305	63	852
Rosander, Andrew, Vale, S. D. Grain-drill	502,636	Aug. 1	646	155	64	686
Rosback, Frederick P., Chicago, Ill. Book-stapling machine	493,298	Mar. 14	831	212 213 214	62	1537
Rosback, Frederick P., and H. F. Band, Chicago, Ill. Fence	492,876	Mar. 7	167	40	62	1391
Rosback, Frederick P., and H. F. Band, assignors to International Steel Post Company, Chicago, Ill. Fence	511,063	Dec. 19	2109	521	65	1828
Roscher, Albin, Chemnitz, Germany. Circular-knitting machine	494,229	Mar. 28	2384	602	62	1264
Rose, Antone G., Fresno, Cal. Traction-wheel	500,819	July 4	454	120	64	84
Rose, Charles J. (See Pearson and Rose.)						
Rose, Charles J. (See Veltin and Rose.)						
Rose, Charley B. (See Smith and Rose.)						
Rose, E. C. (See Cole, Andrew M., assignor.)						
Rose, George W. (See Abney, Dite, H., assignor.)						
Rose, Henry, British Royal Navy. Speaking-tube	490,364	Jan. 24	2215	577	62	494
Rose, Henry N., Odell, Nebr. Thill-coupling	497,217	May 9	1314	335	63	874
Rose, James M., Allegheny, Pa. Apparatus for the manufacture of gas	505,537	Sept. 26	2043	521 522	64	1693
Rose, James R., Allegheny, assignor of one-half to J. T. Potts, Philadelphia, Pa. Apparatus for the manufacture of gas	506,077	Oct. 3	430	112 113	65	84
Rose, James R., Allegheny, assignor of one-half to J. T. Potts, Philadelphia, Pa. Manufacture of gas	506,078	Oct. 3	432	113 114	65	84
Rose, John, Philadelphia, Pa. Tubular umbrella-stick	504,944	Sept. 12	1047	269	64	1481
Rose, John, Philadelphia, Pa. Umbrella-case	504,945	Sept. 12	1048	269	64	1482
Rose, John A. (See Abercrombie, Robert, assignor.)						
Rose, Joseph. (See Flint, Cyrus W., assignor.)						
Rose, William, Gainsborough, England, assignor to R. H. Wright, New York, N. Y. Machinery for making up tobacco into packets	502,637	Aug. 1	647	155 156 157 158 159	64	686
Roseboom, Jesse G., Cincinnati, Ohio. Wheel-hub	503,114	Aug. 8	1463	359	64	849
Roseboom, Jesse G., Cincinnati, Ohio. Vehicle-wheel	503,554	Aug. 15	2180	545	64	992
Rosegrant, William. (See Parker, James C., assignor.)						
Rosell, Aron, Philadelphia, Pa. Rotary sifting appliance	505,849	Oct. 3	70	17	65	16
Rosenberg, Albert, Baltimore, Md. Shutter-worker	510,446	Dec. 12	1001	239	65	1614
Rosenberg, Helfred J., St. Louis, Mo. Wrench	506,261	Oct. 10	802	198	65	164
Rosenberger, Ernst, Chicago, Ill. Candy-molding apparatus	502,864	Aug. 8	1053	259	64	775
Rosenblatt, Harry M., C. A. Dickson, and T. G. Owen, Chicago, Ill.; said Dickson and Owen assignors to said Rosenblatt. Spring for medicine-cases	491,136	Feb. 7	114	31	62	770
Rosenfeld, Edward L., New York, N. Y. Change-gear for cycles	509,329	Nov. 21	2228	538 539	65	1208
Rosenfeld, Louis. (See Birch, Frank C., assignor.)						
Rosenfield, Jacob A. (See Meyers, Ernest, assignor.)						
Rosenholz, Alfred, Wardner, Idaho. Cable-tramway grip	495,374	Apr. 11	1368	342	63	271

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Rosenquest, Oschar, Pittsburg, Pa. Device for attaching water-conductors to buildings.	500,616	July 4	130	31	64	25
Rosenstiehl, Daniel A. (See Poirrier and Rosenstiehl.)						
Rosenthal, August, Milwaukee, Wis. Rein-holder.	493,412	Mar. 14	1002	258	62	1571
Rosenthal, Charles T., Batesville, Ark. Temporary binder.	507,388	Oct. 24	2716	667	65	548
Rosenthal, Emanuel M., assignor of one-half to A. Mergentheim, Fort Wayne, Ind. Display glove-case.	489,691	Jan. 10	1084	281	62	241
Rosenthal, Emanuel M., assignor of one-half to A. Mergentheim, Fort Wayne, Ind. Display glove-case.	504,114	Aug. 29	3080	771	64	1195
Rosenthal, Josef, Fürth, Germany. Coloring metal leaves.	509,687	Nov. 28	2556		65	1340
Rosentreter, Albert J., assignor of one-half to E. Schirck, Rochester, N. Y. Pneumatic tire.	506,550	Oct. 10	1302	235	65	261
Rosenwald, Gustave, London, England. Punch.	507,042	Oct. 17	2102	521	65	422
Rosenzweig, Samuel, New York, N. Y. Frame for pocket-books, &c.	509,688	Nov. 28	2857	690	65	1340
Rösing, Bernhard, Charlottenburg, Germany. Extracting lead from its ores.	494,349	Mar. 28	2574	648	62	1900
Roslosnik, John, New York, N. Y. Vegetable-cutter.	508,185	Nov. 7	330	82	65	819
Ross, Andrew S., Ridgway, Pa. Stand for umbrellas, hats, coats, &c.	503,708	Aug. 22	2442	608	64	1055
Ross, Augustus H. (See Lewis and Ross.)						
Ross, Charles W. (See Ament, Elzie, assignor.)						
Ross, Christian H., Chicago, Ill. Ventilating vault-cover.	497,388	May 16	1624	410	63	943
Ross, David P., South Evanston, Ill. Hanging and adjusting pressure-bars of planers.	489,038	Jan. 3	91	25, 26	62	23
Ross, Edward, Brooklyn, assignor to Scheuer & Brother, New York, N. Y. Fan.	509,249	Nov. 21	2094	504	65	1183
Ross, Elmore W., deceased, Springfield, Ohio; M. F. Ross, executrix. Carrier attachment.	492,751	Feb. 28	2687	667 668	62	1332
Ross, Elmore W., deceased, Springfield, Ohio; M. F. Ross, executrix. Safety driving mechanism.	504,479	Sept. 5	273	71	64	1321
Ross, George W., assignor of one-half to J. A. Winebrener, Boonsville, Tex. Straw-cutter.	490,989	Jan. 31	3233	826	62	707
Ross, Henry W., Springfield, Mass. Horse-collar.	493,299	Mar. 14	841	214	62	1538
Ross, Henry W., Springfield, Mass. Snap-hook.	493,300	Mar. 14	842	215	62	1539
Ross, Jasper S., Sharon, Pa. Inkstand.	511,549	Dec. 26	2933	715	65	1995
Ross, John, London, England. Ejector mechanism for drop-down guns.	491,270	Feb. 7	330	84	62	811
Ross, John H., and E. E. Atkins, Birmingham, England. Oil-lamp.	494,230	Mar. 28	2387	603	62	1864
Ross, John K., Newark, N. J., assignor to T. F. Somers, New York, N. Y. Corset.	500,431	June 27	2789	659	63	1919
Ross, Joseph, Newark, N. J. Belt.	506,375	Oct. 10	1009	250 251	65	204
Ross, Marcus M. (See McCallen and Ross.)						
Ross, Mary F., executrix. (See Ross, Elmore W.)						
Ross Moyer Manufacturing Company. (See Miller, Louis L., assignor.)						
Ross, Napoleon B., Gilboa, Ohio. Device for heating and lighting vehicles.	505,330	Sept. 19	1674	432	64	1611
Ross, Percy W., Los Angeles, Cal. Refrigerator-car.	497,346	May 16	1564	394	63	932
Ross, Robert P., Bethlehem, Pa. Gage-cock.	503,366	Aug. 15	1918	476	64	915
Ross, Simon, Jr., Cincinnati, Ohio. Sole-trimming machine.	489,876	Jan. 10	1351	352	62	295
Ross, Simon, Jr., Cincinnati, Ohio. Abrasive roll or wheel.	494,892	Apr. 4	583	146	63	113
Ross, Simon, Jr., Cincinnati, Ohio. Grinding-machine.	494,893	Apr. 4	584	146 147	63	113
Ross, William A., Maryville, Mo. Derrick.	498,816	June 6	115	30	63	1412
Rosse, Salisbury F., Sedalia, Mo. Retaining device for hydrant-caps.	489,329	Jan. 3	527	143	62	114
Rossiter, Ednor, assignor of one-half to J. L. McGervey, Xenia, Ohio. Folding bed-lounge.	506,262	Oct. 10	802	199	65	164
Rosskothen, Ferdinand, Aachen, Germany. Machinery or apparatus for winding yarns or threads.	494,723	Apr. 4	306	77	63	62
Rosson, Alpine B., assignor of one-half to J. C. Camp, Vernon, Tex. Hame-hook.	499,177	June 6	732	173	63	1517
Rost, Julius, Milwaukee, Wis. Hinge for molders' flasks.	508,923	Nov. 21	1642	403	65	1097
Rothe, Andrew B., Lancaster, Pa. Car-brake.	501,103	July 11	916	234 235	64	182
Rothe, Samuel F., and L. K. Landis, Lancaster, Pa. Cork-cutting machine.	491,375	Feb. 7	523	134	62	848
Roth, August W. O., Berlin, Germany, assignor to E. B. Meyrowitz, New York, N. Y. Ophthalmoscope.	507,934	Oct. 31	3638	899	65	734
Roth, Charles E. (See Sneckner and Roth.)						
Roth, Edward B., and G. R. Bispham, assignors, by mesne assignments, to P. & B. Nail Machine Company, St. Louis, Mo. Wire-nail machine.	493,222	Mar. 7	698	178 179	62	1495
Roth, George, Highland, Ill. Can-testing machine.	498,408	May 30	3260	812	63	1265
Roth, George, Highland, Ill. Can-filling machine.	505,005	Sept. 12	1151	294 295	64	1501
Roth, Heinrich, and W. Schmidt, Berlin, Germany, assignors of one-third to A. Weber, Kansas City, Mo. Heating attachment for cooking and heating purposes.	496,210	Apr. 25	2677	672	63	544
Roth, Herman, Philadelphia, Pa. Coal-hod and ash-sifter.	501,299	July 11	1213	307	64	235
Roth, Herman, Milwaukee, Wis. Device for supporting lighting-fixtures.	505,129	Sept. 19	1337	349	64	1553
Roth, Joseph. (See Butler, Jacob, assignor.)						
Roth, Joseph C., Buffalo, N. Y. Garbage-receptacle.	498,920	June 6	303	70	63	1446
Rothchild, Joseph, assignor of three-fourths to G. W. Renton, R. L. and G. C. Cranford, Brooklyn, N. Y. Pressure-regulator.	505,850	Oct. 3	71	18	65	16
Rothe, Richard. (See Ihle and Rothe.)						
Rothenbücher, George. (See Danner and Rothenbücher.)						
Rothenbücher, George. (See Thommen and Rothenbücher.)						
Rothholz, Gustave, assignor to I. Rothholz, Rochester, N. Y. Machine for sponging and shrinking cloth.	511,216	Dec. 19	2367	578	65	1878
Rothholz, Ida. (See Rothholz, Gustave, assignor.)						
Rothwell, Edward J., et al. (See Lambing, Isaac P., assignor.)						
Rothwell, Frederick. (See Boyler and Rothwell.)						
Rothwell, William K., Philadelphia, Pa. Cipher device.	506,731	Oct. 17	1595	402	65	328
Rott, Christian Z. F., Pittsburg, Pa. Machine for printing glassware.	491,025	Jan. 31	3294	841 842	62	720
Rottthoff, William, Rankin Station, Pa. Gas-valve for blast-furnaces.	504,622	Sept. 5	498	128	64	1363
Rouch, David R., Yonkers, N. Y. Device for holding lining or other materials for cutting.	491,026	Jan. 31	3298	842	62	721
Rouech, Augustus E., et al. (See Rouech, Marian L., assignor.)						
Rouech, Azell N., et al. (See Rouech, Marian L., assignor.)						
Rouech, Maggie A., et al. (See Rouech, Marian L., assignor.)						
Rouech, Marian L., assignor of three-fourths to A. N., A. E., and M. A. Rouech, Bay City, Mich. Soap-receptacle.	490,887	Jan. 31	3054	784	62	674
Ronghead, David, Buffalo, N. Y. Ball-bearing for wheels.	489,133	Jan. 3	229	62	62	54
Roulstone, Thomas R., Somerville, Mass. Adjustable support for school furniture.	508,557	Nov. 14	951	233	65	950

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Round, D. Wellington, Dexter, N. Y. Pulp-strainer.....	505,483	Sept. 26	1922	{ 495 496 }	64	1672
Rouse, Albion M., Boulder, assignor to Boss-Grip Lock-Nut Company, Denver, Colo. Mold for casting lock-nuts.....	505,778	Sept. 26	2472	623	64	1774
Rouse, John G. (See Egerton, Charles C., assignor.)						
Rouse, Lovell M., Chicago, Ill. Steam-tight coupling.....	508,765	Nov. 14	1258	314	65	1011
Roush, David J., Groveton, Pa. Potato-digger.....	511,550	Dec. 26	2935	715	65	1995
Roussat, Jules, Paris, France. Cycle-wheel.....	501,166	July 11	1019	258	64	200
Rousseau, David, New York, N. Y. Steam-boiler.....	508,532	Nov. 14	915	{ 224 225 }	65	943
Rousseau, Fenton L., Manchester, Ga. Car-coupling.....	508,344	Nov. 7	588	144	65	867
Routh, James E., Petersburg, Va. Fruit or vegetable crate or carrier.....	504,623	Sept. 5	499	{ 128 129 }	64	1364
Rouy, Gustave, Redlands, Cal. Three-wheeled carriage.....	490,400	Jan. 24	2264	588	62	503
Rowan, Joseph P., Los Angeles, Cal. Fender.....	503,331	Aug. 15	1837	455	64	930
Rowbotham, John, Merchantville, N. J. Molding compound.....	499,753	June 20	1693		63	1713
Rowe, Edward. (See Hetrick, Wilson, and Rowe.)						
Rowe, Joshua N., assignor of one-half to C. E. Crane, Seattle, Wash. Gyroscope artificial horizon.....	505,575	Sept. 26	2128	539	64	1711
Rowe, Samuel, London, England. Trotting-sulky.....	497,894	May 23	2437	607	63	1105
Rowe, William, Melbourne, Australia. Engineer's lamp.....	510,711	Dec. 12	1479	365	65	1702
Rowell, Guilford D., Appleton, Wis. Split pulley.....	493,523	Mar. 14	1188	304	62	1604
Rowell, Guilford D., Appleton, Wis. Pulp-screening machine.....	493,787	Mar. 21	1638	417	62	1710
Rowell, Loren G., et al. (See Kisinger, John T., Sr., assignor.)						
Rowell, Samuel W., Beaver Dam, Wis. Grain-drill.....	502,468	Aug. 1	366	88	64	633
Rowell, Sidney W., Albany, N. Y. Method of and apparatus for producing paper-stock.....	500,617	July 4	130	35	64	26
Rowland, Charles L., Brooklyn, N. Y. Valve-operating mechanism. (Reissue).....	11,328	May 2	713	189	63	747
Rowland, Evan, Youngstown, Ohio. Baby-carriage brake.....	496,903	May 9	840	223	63	789
Rowland, Frank B., Collamer, N. Y. Plow.....	491,137	Feb. 7	115	31	62	770
Rowland, Horace B., assignor of one-third to J. I. Bothwell, Philadelphia, Pa. Railway-tie and fastening.....	502,638	Aug. 1	654	159	64	687
Rowland, Horace B., assignor of one-third to J. I. Bothwell, Philadelphia, Pa. Railway-tie and fastening.....	502,639	Aug. 1	655	160	64	687
Rowland, Horace B., assignor of one-third to J. I. Bothwell, Philadelphia, Pa. Railway-tie and fastening.....	505,484	Sept. 26	1924	496	64	1672
Rowland, John R., assignor to Hemingway Manufacturing Company, Syracuse, N. Y. Removable cover for tanks.....	494,797	Apr. 4	436	108	63	85
Rowland, John R., assignor to Hemingway Manufacturing Company, Syracuse, N. Y. Removable cover for tanks.....	506,016	Oct. 3	333	88, 89	65	65
Rowland, John R., and J. F. Helm, assignors to Hemingway Manufacturing Company, Syracuse, N. Y. Can-filling machine.....	500,155	June 27	2360	{ 571 572 573 }	63	1842
Rowland, Thomas F., New York, N. Y. Hydraulic elevating mechanism.....	493,301	Mar. 14	843	215	62	1539
Rowland, William L., Philadelphia, Pa. Device for discharging liquids from vessels.....	505,642	Sept. 26	2247	569	64	1733
Rowlett, Daniel F. (See Rowlett and Robinson, assignors.)						
Rowlett, James H., and S. Robinson, assignors of one-third to D. F. Rowlett, Ludlow, Mo. Machine for reeling and stretching wire.....	489,877	Jan. 10	1354	353	62	296
Rowlett, William T., Leicester, England. Straight-knitting machine.....	500,953	July 4	646	{ 169 170 171 172 173 }	64	118
Rowley & Hermance Company. (See Marsh, Calvin D., assignor.)						
Rowley & Hermance Company. (See Overhiser and Marsh, assignors.)						
Rowley, James F., assignor of one-half to A. M. Linn, Des Moines, Iowa. Fracture apparatus.....	491,271	Feb. 7	331	84	62	812
Rowley, Leslie B., Ashland, Wis. Secondary battery.....	495,638	Apr. 18	1794	450	63	367
Rowlinson, William, Englewood, Ill. Support for kitchen-boilers.....	501,733	July 18	1911	475	64	378
Rowntree, Edward. (See Harrington, Charles, assignor.)						
Rowse, Walter R. (See Williams, Elkanah G., assignor.)						
Roy, Napoleon, Duluth, Minn. Car-door.....	497,218	May 9	1316	335	63	874
Royce, Marvin O., Somerville, Mass. Lock.....	489,692	Jan. 10	1085	281	62	241
Royer, David H., New Madison, Ohio. Fence-wire stay.....	509,493	Nov. 28	2554	517	65	1282
Royer, Henry C., assignor of one-half to J. E. Reed, Los Angeles, Cal. Electro-therapeutic appliance.....	497,822	May 23	2311	681	63	1082
Roys, Corry, Chicago, Ill. Horse-checking device.....	511,460	Dec. 26	2801	678	65	1970
Rozell, Newton, Ponca, Nebr. Stock-brand.....	495,270	Apr. 11	1211	304	63	242
Rozelle, John G. (See Carner and Rozelle.)						
Rozès, Jean F. (See Dosmond and Rozès.)						
Rozier, Jules R., et al. (See Cole, Thomas, assignor.)						
Ruau, Marguerite, Paris, France. Safety-envelope.....	496,170	Apr. 25	2613	658	63	532
Rubenstein, Barnett. (See Shanovski and Rubenstein.)						
Ruble American Blower and Injector Company. (See Ruble, Martin R., assignor.)						
Ruble, Martin R., Newark, N. J. Centrifugal blower.....	494,991	Apr. 4	721	183	63	138
Ruble, Martin R., assignor of one-fourth to J. Vreeland, Newark, N. J. Ventilating-wheel.....	497,413	May 16	1663	420	63	951
Ruble, Martin R., assignor to Ruble American Blower and Injector Company, Newark, N. J. Induction apparatus for ventilating.....	505,231	Sept. 19	1511	394	64	1581
Ruble, Martin R., assignor to Ruble American Blower and Injector Company, Newark, N. J. Induction apparatus.....	509,400	Nov. 28	2376	576	65	1246
Ruby, Gabriel F., Columbus, Ohio. Tension device for sewing-machines.....	491,265	Feb. 7	322	82	62	810
Ruby Light Company. (See Stanth and Wiebach, assignors.)						
Ruch, Jacob, Mount Eaton, Ohio. Vehicle-seat.....	489,569	Jan. 10	912	238	62	206
Ruch, Theodore J., Bangor, Pa. Slate dressing or planing machine.....	508,579	Nov. 14	993	243	65	959
Rucker, George W., Belle Plaine, Iowa. Feeding attachment for thrashing-machines.....	501,366	July 11	1341	335	64	257
Rucker, James R. (See Clay and Rucker.)						
Rucker, Presley H., Pleasant Plains, Ill. Burglar-alarm.....	497,347	May 16	1566	394	63	932
Ruckmich, Alban V., New York, assignor to J. W. Chadwick, Brooklyn, N. Y. Type-setting machine.....	493,448	Mar. 14	1063	{ 274 275 }	62	1582
Rudd, Anslow B., et al. (See Robertson, James, assignor.)						
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Condenser telegraph system.....	504,367	Sept. 5	87	22, 23	64	1287

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Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Electrical testing apparatus	504,751	Sept. 12	730	182	64	1421
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Electrical signal device	504,752	Sept. 12	732	182	64	1421
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Electrical testing apparatus	504,753	Sept. 12	733	183	64	1422
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Electric measuring apparatus	504,754	Sept. 12	734	183	64	1422
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Safety device for electric circuits	511,461	Dec. 26	2802	678	65	1970
Rudd, Charles H., assignor to Western Electric Company, Chicago, Ill. Fire-alarm telegraph	511,462	Dec. 26	2803	678	65	1970
Rudderow, Morris W. (See Hall, Willis E., assignor.)						
Ruddock, Oliver S., London, England. Winch-fitting for fishing-rods	506,607	Oct. 10	1380	346	65	277
Ruddy, William J., Roberts, Ill. Corn-harvester	505,559	Sept. 26	2098	532 533	64	1704
Rudell, Augustus J., Grand Rapids, Mich. Ice-cream freezer	510,489	Dec. 12	1070	257	65	1627
Rudloff, August, Halle-on-the-Saale, Germany. Dough-dividing machine	508,984	Nov. 21	1643	404	65	1097
Rudolph, Alexander J., San Francisco, Cal. Card catalogue and index	499,441	June 13	1179	282	63	1610
Rudolph, Alexander J., San Francisco, Cal. Book index and file	499,442	June 13	1181	282	63	1611
Rudolph, Alexander J., San Francisco, Cal. Continuous file or index	499,443	June 13	1183	282	63	1611
Rudolph, Christian, assignor to Firm of K. Oehler, Offenbach-on-the-Main, Germany. Orange azo dye	497,032	May 9	1036		63	823
Rudolph, Franklin, Chicago, Ill. Manufacturing tin-plate	492,588	Feb. 28	2436		62	1283
Rue, George W. (See Moore, Rue, Smith, Roebuck, Mills, and Kirk.)						
Ruehs, Charles L., Chicago, Ill. Sandpapering-machine	489,093	Jan. 3	170	46, 47	62	40
Ruehs, Charles L., Chicago, Ill. Sandpapering-machine	495,104	Apr. 11	918	231 232 233	63	191
Ruehs, Charles L., Chicago, Ill. Block-setting rack for sandpapering-machines	495,758	Apr. 18	1987	502	63	400
Ruehs, Charles L., Chicago, Ill. Sandpapering-machine	497,895	May 23	2438	608 609	63	1105
Ruemelin, Gustav, Milwaukee, Wis. Tanning	503,987	Aug. 29	2885		64	1157
Ruffin, Thomas D., Dyersburg, Tenn. Cotton-grader and nail-arrester	508,842	Nov. 14	1375	340	65	1032
Ruffing, George W. F., assignor of two-thirds to J. Robb, Chicago, Ill. Floor-cleaner	496,619	May 2	356	97	63	084
Ruffles, Robert G., London, England. Steam-generator	507,169	Oct. 24	2340	576	65	478
Rugg, Charles W., assignor to Leslie Manufacturing Company, Boston, Mass. Traverse-ring	497,076	May 9	1104	284	63	836
Rugg, Ephraim T. (See Watkins and Rugg.)						
Rugg, Joseph K., Cincinnati, Ohio. Steam-boiler furnace	490,454	Jan. 24	2341	606	62	517
Ruggles, Charles H., Lynn, Mass., assignor of one-half to J. K. McCammon, Washington, D. C. Revolving fuse-holder	498,698	May 30	3755	927	63	1351
Ruggles, George W., Charlotte, N. Y. Track-cleaner	501,028	July 4	773	203	64	141
Ruhe, Henry A., Jeannette, Pa. Machine for engraving glassware	509,829	Nov. 28	3088	746	65	1383
Ruhnstroth, Henry. (See Bland, John M. D., assignor.)						
Rul, Manuel, Mexico, Mexico. Polyhedral lathe	495,839	Apr. 18	2115	532 533	63	424
Rule, Newton, Orilla, Iowa. Device for winding loose wire	498,307	May 30	3106	773	63	1236
Rumble, Harry H., assignor of one-half to J. F. East, Norfolk, Va. Mosquito-net frame	506,551	Oct. 10	1303	326	65	261
Rumely, William N., La Porte, Ind. Band-cutter and feeder for thrashing-machines	496,446	May 2	92	26	63	635
Rump, John H. (See Wells, James A., assignor.)						
Rumsey, Oscar C., Whitman, assignor to Atlas Tack Corporation, Boston, Mass. Die for forming metallic clamps	500,618	July 4	133	35	64	26
Rumsey, William D., Detroit, Mich. Carriage-pole	500,218	June 27	2470	602	63	1862
Runciman, John, Goderich, Canada. Apparatus for manufacturing salt	491,376	Feb. 7	528	134 135	62	849
Rundback, Joseph, New York, N. Y. Wardrobe-trunk	497,414	May 16	1664	420	63	951
Rundberg, Charles. (See Nixholm, Calle P., assignor.)						
Rundle, James E. (See Brisben, William W., assignor.)						
Rundle, Joseph P., Milwaukee, Wis. Water-closet seat	502,762	Aug. 8	884	217	64	743
Rundlett, Howard, South New Market, N. H., and F. A. Hoyt, Melrose, Mass., assignors to Swampscott Machine Company, South New Market, N. H. Water-heater	492,615	Feb. 28	2487	617	62	1293
Rundquist, William, Elgin, Ill. Jewel-setting machine	500,954	July 4	652	173 174	64	119
Runge, Augustus H., et al. (See Allan, John W., assignor.)						
Runge, Gustav, Sidney, Nebr. Car-coupling	494,030	Mar. 21	2046	522	62	1787
Runk, Fred G. W. (See Keck, Franklin J., assignor.)						
Runkel, Friedrich, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Triphenylmethane dye	501,104	July 11	919		64	182
Runyan, Andrew J. (See Robertson, Frank, assignor.)						
Runyan, James H., Iola, Kans. Loading apparatus	493,343	Mar. 14	903	231 232	62	1550
Runyan, John M. (See Rogers and Runyan.)						
Runyon, Edwin E., Pilot Point, Tex. Side rail for suspension-bridges	493,788	Mar. 21	1639	417 418	62	1710
Runyon, William W., Corning, Iowa. Cleaning attachment for type-writing machines	490,310	Jan. 24	2128	554	62	476
Rupe, Salathiel C., Garland, Tex. Stump-puller	507,935	Oct. 31	3640	900	65	734
Rupel, James M., assignor of two-thirds to E. J. Haynes, Kansas City, Kans., and R. G. Rhoades, Kansas City, Mo. Electric alarm-signal for railway-trains	507,170	Oct. 24	2342	576	65	478
Ruppe, Oskar B., Apolda, Germany. Machine for sowing seed	508,986	Nov. 21	1646	405	65	1098
Ruppel, Henry, Cleveland, Ohio. Gasoline or vapor stove	495,063	Apr. 11	834	212	63	174
Ruppel, Henry, assignor to Dangler Stove and Manufacturing Company, Cleveland, Ohio. Hydrocarbon-vapor burner	497,459	May 16	1738	438 439	63	963
Ruppel, Henry, assignor to Dangler Stove and Manufacturing Company, Cleveland, Ohio. Gas-radiator	497,460	May 16	1740	439	63	963
Ruppel, Henry, Cleveland, Ohio, assignor to Dangler Stove and Manufacturing Company. Tank for gasoline or vapor stoves	497,896	May 23	2441	609 610	63	1105
Ruppel, Henry, assignor to Dangler Stove and Manufacturing Company, Cleveland, Ohio. Gasoline or vapor stove	500,747	July 4	343	90, 91	64	64
Ruppenthal, Carl. (See Rink and Ruppenthal.)						
Ruppert, Friedrich O., Chemnitz, Germany. Mechanical stoker	503,985	Nov. 21	1645	404	65	1098
Ruppert, Mathew. (See Beyer, Louis, assignor.)						
Ruprecht, Charles, Cleveland, Ohio. Workman's time-recorder	496,005	Apr. 25	2362	597 598	63	485
Ruprecht, Frank, assignor of one-half to I. D. Abrams, Syracuse, N. Y. Minnow-pail	506,017	Oct. 3	334	89	65	65

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Ruse, Joseph, <i>et al.</i> (See Ellis, John T., assignor.)						
Rush, David G., Chicago, Ill. Revolving storm-door	501,538	July 18	1593	401	64	321
Rush, E. W., <i>et al.</i> (See Anderson, Lee, assignor.)						
Rush, John T., assignor of two-thirds to J. G. McCamant and C. Guyer, Tyrone, Pa. Shingle-marker	499,889	June 20	1920	466	63	1753
Rush, Stephen P., assignor to W. T. Henderson, Tyrone, Pa. Meat-block attachment	504,115	Aug. 29	3082	771	64	1195
Rushforth, Alexander P., Canning Town, England. Cupola or blast furnace	509,450	Nov. 23	2478	597	65	1267
Rushmore, Robert, Plainfield, N. J. Bottle-washer	507,330	Oct. 24	2621	645	65	530
Rushmore, Samuel W., Brooklyn, N. Y. Electric-lighting system	493,842	Mar. 21	1725	440	62	1726
Rushton, John W., Waltham, Mass. Stem winding and setting mechanism for watches	499,754	June 20	1695	406	63	1713
Rushworth, Luke, Droylsden, and I. M. Livsey, Ashton-under-Lyne, England. Speed-governor	494,894	Apr. 4	586	147	63	113
Rusing Edward, I. R. Donecho, and H. E. Rusing, Marietta, Pa. Curtain-raising device for vehicles	491,665	Feb. 14	985	248	62	961
Rusing, Henry E. (See Rusing, Donecho, and Rusing.)						
Rusk, William A., Malta, Ohio. Coin receiver or tray	500,955	July 4	656	174	64	120
Russ, John D., assignor to E. H. Lemley, Ravenswood, W. Va. Lathe attachment	501,469	July 11	1487	374	64	286
Russel, Thurber F., and J. Brady, assignors to H. Gibb, Brooklyn, N. Y. Cash-control-ling machine	501,962	July 25	2221	571	64	459
Russell, Alva P., Janesville, Wis. Horse-blanket strap	500,619	July 4	133	36	64	26
Russell, Andrew H., U. S. Army. Straight-pull magazine-gun	501,367	July 11	1343	335	64	257
Russell, Andrew J., Edgerton, Ohio. Gate	502,206	July 25	2672	675	64	533
Russell, Charles A., Otsego, Mich. Foot-rest for sulkies	494,648	Apr. 4	190	48	63	39
Russell, Charles B. (See Clark and Russell.)						
Russell, Charles H., Ennis, Tex. Gate	492,237	Feb. 21	1876	468	62	1155
Russell & Company. (See Heggem, Charles O., assignor.)						
Russell & Erwin Manufacturing Company. (See Burgess, Charles M., assignor.)						
Russell & Erwin Manufacturing Company. (See Jones, Horace K., assignor.)						
Russell, George E. (See Russell, William H. and G. E.)						
Russell, George H., Newburg, Pa. Sandal	494,598	Apr. 4	117	27	63	25
Russell, George H., Pittsfield, Mass. Locomotive attachment	505,851	Oct. 3	73	18	65	16
Russell, George L., Middletown, Conn., assignor to Schuyler Electric Company, of Connecticut. Connector for electrical conductors	490,755	Jan. 31	2851	731	62	631
Russell, George W., Jr., Denver, Colo. Switch	499,646	June 13	1505	361	63	1667
Russell, Gilbert E., <i>et al.</i> (See Whalley, Nathan, assignor.)						
Russell, James H., Manistee, Mich. Clothes-pin	495,518	Apr. 18	1603	404	63	334
Russell, James H., Manistee, Mich. Caster	495,519	Apr. 18	1604	404	63	335
Russell, John H. (See Risser, Morris H., assignor.)						
Russell, John H., Melrose, Mass. Blotter	502,640	Aug. 1	656	160	64	688
Russell, John Q. A., Superior, Nebr., assignor of one-half to M. A. Dickey, Eskridge, Kans. Hame	490,615	Jan. 24	2599	669	62	569
Russell, John T., Carthage, Mo. Hay-press	508,843	Nov. 14	1376	341	65	1032
Russell, Josephine, Tabor, Iowa. Tag-holder for umbrellas	490,365	Jan. 24	2215	577	62	494
Russell, Milo M., New Richmond, Wis. Sled	493,184	Mar. 7	640	163	62	1484
Russell, Milo M., Augusta, Wis. Sled	493,185	Mar. 7	642	163	62	1484
Russell, Philip G., <i>et al.</i> (See Hopkins, Jason R., assignor.)						
Russell, Robert L. (See Scott, John E., assignor.)						
Russell, W. C. (See Armstrong, John H., assignor.)						
Russell, William F., New York, N. Y. Cabinet-clamp	497,550	May 16	1883	475	63	989
Russell, William H. and G. E., Jersey City, N. J. Electric igniting device	499,596	June 13	1426	341	63	1654
Rust, James H. (See Davis, Abbott A., assignor.)						
Rust, Mortimer R. (See Rust, Walter H. and M. R.)						
Rust, Walter H. and M. R., Fulton, N. Y. Direct-acting engine	502,502	Aug. 1	428	102	64	645
Ruth, David C., Halstead, Kans. Band-cutter and feeder for thrashing-machines	503,002	Aug. 8	1289	315	64	817
Ruth, Martin M., Philadelphia, Pa. Rocking-chair fan attachment	498,365	May 30	3207	797	63	1254
Ruth, Sylvester, Baltimore, Md. Can-soldering machine	489,269	Jan. 3	447	123	62	98
Ruthven, John, Topeka, Kans. Gas cooking apparatus	489,762	Jan. 10	1197	313	62	263
Ruthven, John, Topeka, Kans. Carbureting apparatus	494,442	Mar. 28	2719	681	62	1925
Ruthven, John, Topeka, Kans. Gas-regulating and advertising cabinet	505,372	Sept. 19	1743	451	64	1624
Rutter, Andrew L., Washington, D. C. Electric elevated railway	489,330	Jan. 3	528	143	62	114
Rutter, Richard S., Warsaw, Ind. Submerged water-heater	504,247	Aug. 29	3303	825	64	1235
Ruud, Edwin, Kenosha, Wis. Excavator	502,469	Aug. 1	368	88	64	634
Ruud, Edwin. (See Westinghouse and Ruud.)						
Ruud, Edwin, Pittsburg, Pa. Automatic distilling apparatus	496,488	May 2	148	42	63	646
Ryan, Daniel W. (See Fietsch, Herman, Jr., assignor.)						
Ryan, Frank A., Sherman, Tex. Hoof-pad	506,941	Oct. 17	1939	480	65	392
Ryan, Frank M., assignor of one-half to W. T. Smith, San Francisco, Cal. Car-coupling	498,575	May 30	3541	876	63	1314
Ryan, Harris J., Ithaca, N. Y. Dynamo-electric machine or motor	502,384	Aug. 1	228	54	64	608
Ryan, James H., Sycamore, Ill. Animal mouth opener	490,602	Jan. 24	2575	664	62	564
Ryan, Jeremiah, Philadelphia, Pa. Hammer	510,049	Dec. 5	352	79	65	1476
Ryan, Laurence F., New York, N. Y. Guard for doors, windows, &c	498,574	May 30	3539	876	63	1314
Ryan, Michael B., St. Louis, Mo., and P. Ward, Madison, Ill. Tree-protector	490,309	Jan. 24	2127	554	62	476
Ryan, Patrick, New York, N. Y. Dumping-scow	502,142	July 25	2566	644	64	512
Ryan, Patrick S., Rutland, Vt. Milk cooler and aerator	506,942	Oct. 17	1940	480	65	393
Ryan, Thomas P. (See Marchand, Henry E., assignor.)						
Ryan, Thomas J., Buffalo, N. Y. Receiver and stench-trap	505,130	Sept. 19	1358	349	64	1553
Ryder, Edgar F., assignor to Atlantic Manufacturing Company, Providence, R. I. Hub-protector	492,436	Feb. 28	2182	546	62	1230
Ryder, Edgar F., assignor to Atlantic Manufacturing Company, Providence, R. I. Bicycle-tire	493,650	Mar. 21	1413	358	62	1665
Ryder, Morris L., Albany, N. Y. Entrance for refuse-conduits in buildings	503,685	Aug. 22	2399	599	64	1047
Rygg, Lewis A., St. Paul, Minn. Mechanical horse	491,927	Feb. 14	1393	348	62	1042
Ryland, Thomas, Brixton, England. Machinery for carving or engraving wood	511,712	Dec. 26	3196	783	65	2042
Ryman, Frank, Avalon, Pa. Power-hammer	498,752	May 30	3863	952	63	1371

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S. A. Woods Machine Company. (See Osteman, Carl G., assignor.)						
S. A. Woods Machine Company. (See Roberts, James, assignor.)						
S. A. Woods Machine Company. (See Tillison, Hosea R., assignor.)						
S. A. Woods Machine Company. (See Woods and Tillison, assignors.)						
S. F. Heath Cycle Company. (See Johnson, Hastings H., assignor.)						
S. H. Sinclair Company. (See Thorsen, Thor A., assignor.)						
S. N. Brown & Company. (See Brown, Meyer, and Schiewetz, assignors.)						
S. N. Long Syrup Company. (See Long, Samuel N., assignor.)						
S. Obermayer Company. (See Paquet, Frank, assignor.)						
S. S. White Dental Manufacturing Company. (See Brown, Benoni S., assignor.)						
S. S. White Dental Manufacturing Company. (See Browne, Arthur W., assignor.)						
S. S. White Dental Manufacturing Company. (See Davidson, John C., assignor.)						
S. S. White Dental Manufacturing Company. (See Doriot, Constant, assignor.)						
S. S. White Dental Manufacturing Company. (See How, Woodbury S., assignor.)						
S. S. White Dental Manufacturing Company. (See Johnston, Albert W., assignor.)						
S. S. White Dental Manufacturing Company. (See Johnston and Browne, assignors.)						
S. S. White Dental Manufacturing Company. (See Johnston and Davidson, assignors.)						
S. S. White Dental Manufacturing Company. (See Johnston, Browne, and Davidson, assignors.)						
S. S. White Dental Manufacturing Company. (See Richardson, Charles H., assignor.)						
S. S. White Dental Manufacturing Company. (See Starr, Eli T., assignor.)						
S. S. White Dental Manufacturing Company. (See Teal, Levi, assignor.)						
S. S. White Dental Manufacturing Company. (See Towne, William H., assignor.)						
S. W. Jamison Boot and Shoe Crimping Machine Company. (See Frost, Walter E., assignor.)						
Saakmiller, George, South Chicago, Ill. Switch-stand	496,066	Apr. 25	2464	622	63	504
Saati, Nowman M., assignor of one-tenth to W. A. Walton, Providence, R. I. Mechanical movement	510,557	Dec. 12	1214	294	65	1653
Sabin, Horace D. (See Baldner and Sabin.)						
Sabold, John, Boyertown, Pa. Paper-bag machine	493,524	Mar. 14	1190	{ 304 305 }	62	1605
Sabold, John, Boyertown, Pa. Dumping-wagon	509,184	Nov. 21	1971	480	65	1161
Sacco, Carlo, Turin, Italy. Car starter and brake	497,551	May 16	1884	{ 475 476 }	63	989
Sachs, Gustav A., Eugene, Oreg. Breakdown breech-loading gun	495,639	Apr. 18	1795	451	63	367
Sachs, Gustave, St. Louis, Mo. Electric-lamp socket	501,580	July 18	1661	415	64	335
Sachs, Joseph, New York, N. Y. System of conductors for electric fire-engines	497,552	May 16	1889	476	63	990
Sachs, Joseph, New York, N. Y. Fire-alarm system	498,448	May 30	3327	828	63	1277
Sachs, Joseph, New York, N. Y. Electric signal for fire-alarm systems	502,207	July 25	2673	675	64	534
Sachs, Joseph, New York, N. Y. Signal for cable railways	511,163	Dec. 19	2281	558	65	1862
Sachs, Martin, New York, N. Y. Machine for scraping the ends of whalebone stays	508,987	Nov. 21	1647	405	65	1098
Sachse, Ernest G., Austin, Minn. Cylinder-hood for thrashing-machines	506,444	Oct. 10	1129	281	65	228
Sack, Joseph, Berlin, Germany. Automatic individual telephone-call apparatus	492,110	Feb. 21	1668	{ 415 416 }	62	1112
Sackett, Frank L., Fredonia, N. Y. Coal-screen	508,345	Nov. 7	589	145	65	868
Sackett, John W., St. Augustine, Fla. Hydraulic dredging-machine	508,766	Nov. 14	1258	314	65	1011
Sackett, Orville R., and J. Pfetsch, Niagara Falls, N. Y. Fire-hose coupling	508,844	Nov. 14	1380	342	65	1033
Saddine, Louisa B., Hot Springs, Ark. Water-cooler	498,817	June 6	116	30	63	1412
Sadler, Hymenus G., et al. (See McClintock, Charles E., assignor.)						
Sadler, James R. (See Sadler, Samuel B. and J. R.)						
Sadler, Ralph A., et al. (See McClintock, Charles E., assignor.)						
Sadler, Samuel B. and J. R., Fairfield, assignor of one-half to M. Makely, Edenton, N. C. Car-coupling	505,608	Sept. 26	2184	552	64	1721
Sadtler, Samuel P., Philadelphia, Pa., and J. H. Grimm, Wilmington, Del.; said Grimm assignor to W. W. Skiddy, Stamford, Conn. Licorice extract and making same	495,271	Apr. 11	1212	.....	63	242
Saenger, Woldemar H., Augustusbad, Germany. Cartridge	505,297	Sept. 19	1630	421	64	1604
Saettler, Ernest S., Giddings, Tex. Trace	494,443	Mar. 28	2720	682	62	1926
Safety Car Heating and Lighting Company. (See Dolan, Charles E., assignor.)						
Safety Car Heating and Lighting Company. (See Quayle, Robert, assignor.)						
Safety Steam Appliance Company. (See Hatch, Charles A., assignor.)						
Safety Vapor Engine Company of New Jersey. (See Tremper, Frank E., assignor.)						
Safford, James B., Chicago, Ill. Wear-plate for head blocks of car-couplings	501,963	July 25	2284	572	64	459
Sage, George F., Cleveland, Ohio. Workman's time-recorder	500,037	June 20	2138	518	63	1792
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic ceiling-plate	489,236	Jan. 3	393	108	62	88
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic ceiling-plate	505,852	Oct. 3	74	18	65	16
Sager, James H. (See Rich and Sager.)						
Sager, James H., assignor to Rich & Sager Company, Rochester, N. Y. Saddle for bicycles	500,156	June 27	2367	573	63	1843
Sager, James H., assignor to Rich & Sager Company, Rochester, N. Y. Supplementary seat for bicycles	500,157	June 27	2369	573	63	1841
Sager, James H., assignor to Rich & Sager Company, Rochester, N. Y. Bicycle-saddle	500,158	June 27	2370	574	63	1844
Sager, James H., assignor to Rich & Sager Company, Rochester, N. Y. Saddle for velocipedes	511,363	Dec. 26	2628	639	65	1939
Sager, John W., Joliet, Ill. Automatic cut-off for engines	506,943	Oct. 17	1942	481	65	393
Sager, Marcus S., Washington Court-House, Ohio. Flour bin and sifter	499,252	June 13	834	198	63	1550
Sague, Samuel A., Cleveland, Ohio. Machine for cleaning metal plates	493,560	Mar. 14	1262	324	62	1619
Sague, Samuel A., Cleveland, Ohio. Brushing-machine	500,219	June 27	2471	602	63	1862
Sague, Samuel A., Cleveland, Ohio. Galvanizing sheet metal	505,131	Sept. 19	1362	350	64	1554
Sague, Samuel A., Cleveland, Ohio. Apparatus for the manufacture of sheet iron or steel	505,132	Sept. 19	1364	350	64	1554
Sailer, John M., assignor to J. R. Mole, Janesville, Wis. Transplanting-machine	491,597	Feb. 14	888	{ 223 224 }	62	940
Saint-Denis, Henri M., Paris, France. Centrifugal drier	510,298	Dec. 5	764	185	65	1554
Saint-Martin, William, Paris, France. Apparatus for maturing and improving fermented alcoholic liquids	497,033	May 9	1037	{ 264 265 }	63	823
Saitz, John F., Baldwin, assignor of two-thirds to T. A. Noble, Pittsburg, and F. G. Kay, Allegheny, Pa. Trolley for electric railways	493,789	Mar. 21	1640	418	62	1710
Saladin Pneumatic Malting Company. (See Dornfeld, John F., assignor.)						
Saladin Pneumatic Malting Construction Company. (See Prinz, William H., assignor.)						
Salenius, Erik G. N., Lofholmen, assignor to Aktiebolaget Radiator, Stockholm, Sweden. Centrifugal butter-extractor	509,185	Nov. 21	1974	481	65	1161
Salisbury, Enoch, Blue Mound, Ill. Spring-clevis	497,553	May 16	1892	477	63	990
Salisbury, Wilber S., Chicago, Ill., assignor, by mesne assignments, to Electric Cutting Machine Company, of Illinois. Cloth-cutting machine	502,052	July 25	2425	611	64	485

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Salmon, Wilmer W. (See Wilson and Salmon.)						
Salomon, Edouard, Paris, France. Carburetor	499,597	June 13	1427	{ 341 342 }	63	1654
Salomon, Fritz, assignor to Firm of F. Krupp, Essen, Germany. Obtaining hydrogen and carbonic-acid gas	507,331	Oct. 24	2622		65	530
Salsbury, Henry, London, England. Cycle-lamp	506,135	Oct. 3	530	137	65	103
Salter Brothers. (See Merker, Herman C., assignor.)						
Salter, George, and J. Hughes, West Bromwich, England. Coin-freed machine for the automatic sale of newspapers	494,444	Mar. 28	2721	{ 682 683 }	62	1926
Saltsman, Ida A., et al. (See Becker, Henry S., assignor.)						
Saltzkorn, Emil, and L. Nicolai, Dresden, Germany. Knife for cutting or scoring paste-board. (Reissue)	11,365	Sept. 12	1285	331	64	1526
Saltzkorn, Emil, and L. Nicolai, Dresden, Germany. Machine for cutting pasteboard and the like. (Reissue)	11,381	Nov. 7	682	167	65	884
Salvatico, Antonio, Garesio, Italy. Wood-tile flooring	503,876	Aug. 22	2682	672	64	1102
Salzman, Christian A., et al. (See Seip, Thomas A., assignor.)						
Samelson, Moses, New York, N. Y. Interior or exterior decoration	494,724	Apr. 4	310	78, 79	63	62
Sammis, Seth K. (See Roberts, Jesse W., assignor.)						
Samohod, Pedro, Lima, Peru. Stopping device for marine vessels	496,700	May 2	488	131	63	708
Sampson Patent Railway Sleeper and Steel Plant Syndicate. (See Rideal, Samuel, assignor.)						
Sample, George W., York, Pa. Draft-tube for soda-water fountains	498,962	June 6	375	90	63	1458
Sample, James, Wallsend, England. Davit for putting out or taking in ships' boats	505,779	Sept. 26	2472	623	64	1774
Sample, Newton C., Philadelphia, Pa. Garment-hook	504,090	Aug. 29	3037	758	64	1187
Sample, Newton C., Philadelphia, Pa. Rein-holder	506,944	Oct. 17	1943	481	65	393
Sample, Newton C., Philadelphia, assignor of one-half to S. R. Sample, Intercourse, Pa. Plow	500,513	June 27	2924	718	63	1942
Sample, Samuel R. (See Sample, Newton C., assignor.)						
Sample, Thomas W., New Washington, Ind. Fertilizer-distributer for planters	506,552	Oct. 10	1304	326	65	261
Sampson, Lewis S., New York, N. Y. Combination cuff-button and link	502,586	Aug. 1	565	135	64	670
Sampson, Nels, Norwood Park, Ill. Combined curb and conduit	506,018	Oct. 3	335	89	65	66
Sampson, Thomas, Gawler, South Australia. Tension device for harvesters	500,778	July 4	393	103	64	73
Sams, Samuel C., assignor of one-half to L. D. Sweet, Aspen, Colo. Car-coupling	494,941	Apr. 4	648	166	63	125
Samson, Julia, Salt Lake City, Utah Ter. Portable binder for sheet-music, &c	492,238	Feb. 21	1878	469	62	1155
Samson, Julia, Salt Lake City, Utah Ter. Fastener	495,710	Apr. 18	1917	482	63	387
Samuel, Edward, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Fish-plate joint for street-railway rails	489,878	Jan. 10	1356	{ 353 354 }	62	296
Samuel, Edward, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Box-bridge joint for railway-rails	502,587	Aug. 1	566	135	64	670
Samuel, Edward, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Brace tie-plate	503,806	Aug. 22	2592	647	64	1085
Samuel, Edward, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Tongue-switch	503,807	Aug. 22	2592	648	64	1085
Samuel, Edward, assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Stringer-plate	504,176	Aug. 29	3184	795	64	1214
Samuel, Edward, and V. Angerer, assignors to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Railway-track structure	497,554	May 16	1893	477	63	990
Samuel Law & Sons. (See Fawcett and Jones, assignors.)						
Samuels, Marks, New York, N. Y. Base or support for furniture	506,553	Oct. 10	1307	326	65	262
Sanborn, Alden W., San Francisco, Cal. Axle-lubricator	496,325	Apr. 25	2865	715	63	580
Sanborn, Frank F., Saxonville, Mass. Box	505,253	Sept. 19	1545	403	64	1527
Sancto, William, Chicago, Ill. Hobby-horse	509,451	Nov. 28	2479	598	65	1267
Sandbach, Richard E. (See Baughman, Nathan, assignor.)						
Sandberg, Charles J., St. Louis, Mo. Shutter-fastener	501,696	July 18	1852	461	64	368
Sandberg, John E. (See Johnston and Sandberg.)						
Sandel, Sam D., assignor of one-half to A. B. Miller, Austin, Tex. Delivery apparatus for printing-presses	492,054	Feb. 21	1584	394	62	1095
Sandelin, Johan E., New York, N. Y. Safety-lock for railway-switches	490,616	Jan. 24	2600	670	62	569
Sander, Johannes. (See Stech, Johann T. C., assignor.)						
Sanders, Alexander, Poplar Bluff, Mo. Whip	509,452	Nov. 28	2480	598	65	1268
Sanders, David P., Williamsport, Pa. Motor for cars or other purposes	511,652	Dec. 26	3102	{ 757 758 }	65	2025
Sanders, Frank, Brooklyn, N. Y. Numbering-machine	497,729	May 16	2162	541	63	1040
Sanders, George A. (See Clark, Franklin A., assignor.)						
Sanders, John F. and S. J., Portland, Oreg. Electrode for arc lamps	496,701	May 2	490	131	63	708
Sanders, John F. and S. J., Portland, Oreg. Electric-arc lamp	496,702	May 2	492	{ 131 132 }	63	708
Sanders, John M., Dalton, Ga. Baling-press	510,821	Dec. 12	1668	414	65	1737
Sanders, Louis, Brooklyn, N. Y. Belt-support	490,166	Jan. 17	1868	487	62	413
Sanders, Richard H., and C. T. Thompson, Philadelphia, Pa. Process of magnetic separation and apparatus therefor	499,253	June 13	835	199	63	1550
Sanders, Sarah J. (See Sanders, John F. and S. J.)						
Sanderson, Benjamin A., San Marcos, Tex. Permutation-padlock	495,840	Apr. 18	2119	533	63	424
Sanderson, Frederick, Chicago, Ill. Coin-actuated gaming device	496,211	Apr. 25	2678	672	63	544
Sanderson, George R. (See Failor, Ezra K., assignor.)						
Sandford, William, Lithgow, W. Thornley, Marrickville, and E. Silcocks, Sydney, New South Wales. Fish-joint for railways	507,595	Oct. 31	3090	754	65	630
Sandgren, Arvid J., Hartford, Conn. Bicycle-bell	501,665	July 18	1802	{ 448 449 }	64	359
Sandherr, Frederick H., St. Louis, Mo. Brush for dynamos or electric motors	504,177	Aug. 29	3184	796	64	1214
Sandino y Barcon, Augusto, Corunna, Spain. Boiler-feeder	501,315	July 11	1235	{ 311 312 }	64	239
Sandner, Emil, West Haven, Conn. Tone-regulator for pianos	496,171	Apr. 25	2614	658	63	532
Sandoz-Sandoz, Henri. (See Audemars and Sandoz-Sandoz.)						
Sands, Arthur J., Merton, Wis. Machinery for inserting stopper-retainers into bottles	495,640	Apr. 18	1798	{ 451 452 453 }	63	367
Sands, Arthur J., assignor of one-half to E. D. Joyner, Schenectady, N. Y. Coupling and valve for water or gas mains	499,043	June 6	527	123	63	1453
Sands, Thomas J., Utica, N. Y. Device for catching and removing bunches from yarn	500,243	June 27	2503	612	63	1868
Sandwich Enterprise Company. (See Branson, Joseph H., assignor.)						
Sandy, Wallace J. L. (See Sugden and Sandy.)						
Sanford, Addison V., Elmira, N. Y. Game apparatus	506,407	Oct. 10	1062	264	65	215
Sanford, Albert, Galena, Mo. Velocipede	505,373	Sept. 19	1745	452	64	1624
Sanford, Alfred C., The Dalles, Oreg. Caster axle and wheel	496,620	May 2	358	97	63	684

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Sanford, David B., Watertown, N. Y., assignor to H. P. Sanford, Medway, Mass. Can-opener	507,171	Oct. 24	2344	577	63	479
Sanford, David B., Watertown, N. Y., assignor to H. P. Sanford, Medway, Mass., and A. L. Upham, Watertown, N. Y. Ash-sifter	506,263	Oct. 10	804	199	65	165
Sanford, Frederick A., Westfield, Mass. Whip	503,332	Aug. 15	1838	455	64	930
Sanford, Harlan P. (See Sanford, David B., assignor.)						
Sanford, Harlan P., <i>et al.</i> (See Sanford, David B., assignor.)						
Sanford, Hopkins A., assignor of one-half to F. Knight, Derby, Conn. Wad-setter for paper-shell cartridges	497,103	May 9	1144	293	63	843
Sanford, Thomas F., Buffalo, N. Y. Framework for elevators	498,576	May 30	3542	877	63	1314
Sanger, George E., Beloit, assignor of one-half to A. C. Blackburn, Baraboo, Wis. Display-tray	497,254	May 9	1374	349	63	884
Sanger, Whiting P. (See Kingsland and Sanger.)						
Sangerhäuser Aktien-Maschinenfabrik und Eisengiesserei, vormals Hornung & Rabe. (See Weiss, Franz J., assignor.)						
Sangster, James, Buffalo, N. Y. Gas lighting or extinguishing apparatus	498,492	May 30	3395	845	63	1289
Sanguinetti, Percy A., Chicago, Ill., assignor of two-thirds to A. J. Hewlings and W. R. Bowles. Folding bed and toilet-case	490,888	Jan. 31	3055	784 } 785 }	62	674
Sansoucy, Charles E., Duluth, Minn. Fire-escape	507,455	Oct. 24	2822	690	65	569
Santilana, Juan F., assignor of one-fourth to E. Calderon, San Francisco, Cal. Leveling and measuring telemeter	499,939	June 20	1927	483	63	1765
Sarchet, George B., Butte, Mont. Dust-pan	509,689	Nov. 28	2858	690	65	1340
Sargent, Allan C. (See Sargent, Frederick G. and A. C.)						
Sargent, Ara L. (See Piper, Charles E., assignor.)						
Sargent & Company. (See Carnell, Frederick W., assignor.)						
Sargent & Company. (See Page, Albert A., assignor.)						
Sargent & Company. (See Page and Sparks, assignors.)						
Sargent & Company. (See Shaw, John H., assignor.)						
Sargent & Company. (See Sparks, William E., assignor.)						
Sargent & Company. (See Wright, Granville W., assignor.)						
Sargent, Edward L., <i>et al.</i> (See Slocum, Orsillus W., assignor.)						
Sargent, Frederick G., Graniteville, Mass. Wool-washing machine	507,333	Oct. 24	2625	645 } 646 }	65	530
Sargent, Frederick G. and A. C., Graniteville, Mass. Wool-washing machine	498,308	May 30	3107	774	63	1237
Sargent, Frederick G. and A. C., Graniteville, Mass. Wool-washing machine	498,889	June 6	248	59	63	1436
Sargent, Frederick G. and A. C., Graniteville, Mass. Machine for opening and preparing wool or other fibers	506,445	Oct. 10	1130	281 } 282 }	65	228
Sargent, Frederick G. and A. C., Graniteville, Mass. Metallic roller	507,332	Oct. 24	2623	645	65	530
Sargent, Frederick G. and A. C., Graniteville, Mass. Wire-cloth apron	510,558	Dec. 12	1215	295	65	1653
Sargent, Fitz William, Aurora, assignor to Congdon Brake Shoe Company, Chicago, Ill. Brake-shoe	490,756	Jan. 31	2852	732	62	632
Sargent, Fitz William, assignor to Congdon Brake Shoe Company, Chicago, Ill. Car-coupling	502,532	Aug. 1	479	115	64	654
Sargent, George F., New York, N. Y. Adjustable book-rack	489,693	Jan. 10	1087	281	62	242
Sargent, Howard, Cambridge, Mass. Electric hose-coupling	499,254	June 13	838	200	63	1550
Sargent, Isaac C. (See Carpenter, Monroe, assignor.)						
Sargent, James T., assignor to American Washboard Company, Cleveland, Ohio. Wash-board	501,444	July 11	1455	364	64	280
Sargent, James T., assignor to American Washboard Company, Cleveland, Ohio. Wash-board	508,346	Nov. 7	591	145	65	868
Sargent, John W., Scranton, Pa. Steam-engine	502,763	Aug. 8	825	217	64	743
Sargent, Richard S., <i>et al.</i> (See Brower, John H., assignor.)						
Sargent, Sumner B., <i>et al.</i> (See Slocum, Orsillus W., assignor.)						
Sargent, William D., Chicago, Ill. Key for brake-shoes	492,839	Mar. 7	100	25	62	1377
Sargent, Willis H., assignor to E. & T. Fairbanks & Company, St. Johnsbury, Vt. Drug-gist's weighing-scales	489,331	Jan. 3	531	144	62	114
Sarsfield, Michael J., assignor of one-third to R. H. Cullen, Bridgeport, Conn. Barber's cash-register	494,087	Mar. 21	2137	547	62	1803
Sartell, Egbert P., St. Cloud, Minn. Door-check	490,504	Jan. 24	2432	627	62	536
Sartorius, Henry, St. Louis, Mo. Machine for mixing and cooling lard	490,505	Jan. 24	2433	628	62	536
Sassaman, Morgan. (See Smawley, Sassaman, and Bowser.)						
Sasser, Abner C. (See Dickinson and Sasser.)						
Sater, Hans H., Madison, Wis. Sulky-plow	501,607	July 18	1707	425	64	343
Sater, Hans H., Madison, Wis. Harrow	503,166	Aug. 15	1561	384	64	880
Sattelkau, Paul. (See Winkelmänn and Sattelkau.)						
Sattelkau, Paul, Philadelphia, Pa. Vacuum water-elevator	507,334	Oct. 24	2628	646 } 647 }	65	531
Sattelkau, Paul, and H. R. Winkelmänn, Philadelphia, Pa. Steam vacuum water-elevator	507,335	Oct. 24	2630	647	65	531
Satterwhite, John T., Five Points, Ala. Mop	492,339	Feb. 21	2027	564	62	1186
Sauer, Rudolf, Suhl, Germany. Gun	505,006	Sept. 12	1152	295	64	1502
Sault, Thomas, New Haven, Conn. Photographic film	494,306	Mar. 28	2503	632	62	1887
Saun, David F., Washington, D. C. Writer's aligning-guide	490,086	Jan. 17	1738	453	62	387
Saum, David F., assignor of one-half to J. C. Donaldson, Washington, D. C. Facing for walls	501,029	July 4	777	203 } 204 }	64	142
Saum, Edwin E., and F. E. Blackman, Stamford, Conn. Chuck for screw-machines	510,191	Dec. 5	585	137	65	1520
Saum, Perry A., assignor of one-half to H. S. Haight, Washington, D. C. Gage attachment for rules	496,748	May 2	569	153	63	721
Saum, Perry A., assignor of one-half to H. S. Haight, Washington, D. C. Adjustable head and back rest for beds	499,147	June 6	675	162	63	1508
Saunders, Alanson H., Burnside, assignor of one-half to F. J. Mack and G. W. Hayden, Essex, Conn. Car-coupling	497,608	May 16	1977	495	63	1005
Saunders, Alfred J., Port Arthur, Canada. Bed for mortising-machines	506,945	Oct. 17	1944	481 } 482 }	65	393
Saunders, Cecil L., Cleveland, Ohio. Hoisting and conveying apparatus	489,682	Jan. 10	1036	270	62	231
Saunders, Henry, Perry, Mo. Car-replacer	497,927	May 23	2489	621	63	1113
Saunders, Leslie M., assignor to D. Saunders' Sons, Yonkers, N. Y. Nipple-chuck	500,820	July 4	455	120	64	84
Saunders' Sons, D. (See Saunders, Leslie M., assignor.)						
Saunders, William, London, England. Compensator for signal or other wires	507,596	Oct. 31	3090	754	65	630
Saupp, Frank D. (See Reagan, Saupp, and Hibbs.)						
Saurer, Adolph. (See Buss and Saurer.)						
Sauter, John. (See Shoettle, Charles, assignor.)						
Sautter, Gaston, assignor to Sautter, Harlé & Co., Paris, France. Electric light	499,473	June 13	1226	292	63	1610

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Sautter, Harlé & Co. (See Sautter, Gaston, assignor.)						
Savage, Arthur W., assignor to J. M. Childs, R. S. Reynolds, and E. H. Risley, Utica, N. Y. Magazine-firearm	491,138	Feb. 7	115	31,32	62	771
Savage, Arthur W., Bay Ridge, assignor to J. M. Childs, R. S. Reynolds, and E. H. Risley, Utica, N. Y. Magazine-gun	502,018	July 25	2367	{ 594 595 }	64	475
Savage, George W., Norwalk, Ohio. Elastic-tread horseshoe	501,167	July 11	1020	258	64	200
Savage, James S., Jr., assignor of twenty-seven one-hundredths to G. Farnsworth, Detroit, Mich. Danger-signal for railway-crossings	495,913	Apr. 18	2230	562	63	445
Savage, Richard, Chicago, Ill. Apparatus for operating confectionery-kettles	499,890	June 20	1921	{ 466 467 }	63	1754
Savage, Richard, assignor of one-half to I. L. Merrell, San Francisco, Cal. Chimney or smoke-stack	500,779	July 4	394	104	64	73
Savary, Eugene A., West Hoboken, N. J. Chipping or ornamenting glass	495,375	Apr. 11	1370	342	63	271
Savell, William B. (See Graham and Savell.)						
Savill, Edward, assignor of two-thirds to J. W. Newman and J. C. Oliver, Lexington, Ky. Carburetor	504,137	Aug. 29	3115	780	64	1201
Savill, Joseph H., Philadelphia, Pa. Cock for water-coolers	498,366	May 30	3208	798	63	1254
Savill, Joseph H., Philadelphia, Pa. Flushing-tank	501,368	July 11	1348	336	64	259
Savill, Joseph H., Philadelphia, Pa. Cock or faucet	507,456	Oct. 24	2823	691	65	569
Sawyer, Charles E., Boston, Mass. Machine for cutting tags, cards, &c	509,854	Nov. 28	3133	{ 757 758 }	65	1392
Sawyer, Charles E., Boston, Mass. Platen printing-machine	510,146	Dec. 5	512	{ 117 118 }	65	1506
Sawyer, Charles H., et al. (See Simpson, John A., assignor.)						
Sawyer, Harry, assignor to Shaw Electric Crane Company, Muskegon, Mich. Switch for controlling electric motors	505,064	Sept. 12	1246	320	64	1519
Sawyer, Horace A., Lynn, Mass. Inner sole	492,994	Mar. 7	351	88	62	1428
Sawyer, Howard M., et al. (See Simpson, John A., assignor.)						
Sawyer, James, Duquoin, Ill. Blasting apparatus	506,136	Oct. 3	531	137	65	103
Sawyer, John, London, England. Multiplying-machine	502,425	Aug. 1	296	{ 70, 71 199 }	64	262
Sawyer, Orren A., and M. M. Lahue, Lowell, Mass. Take-up mechanism for looms	506,264	Oct. 10	806	{ 199 200 }	65	165
Sawyer Spindle Company. (See Allen, William E., assignor.)						
Sawyer Spindle Company. (See Day, Florence M., assignor.)						
Sawyer Spindle Company. (See Draper, Eben S., assignor.)						
Sawyers, Eldridge H., Unionville, Iowa. Whiffletree-clip	490,683	Jan. 31	2740	706	62	610
Sax, John K., Pittston, Pa. Car-wheel mold	496,100	Apr. 25	2515	636	63	514
Saxe, Alfred J., Chicago, Ill. Pump-governor	503,776	Aug. 22	2552	636	64	1077
Saxe, William, Port Huron, Mich. Saw-setting gage	489,039	Jan. 3	93	26	62	23
Saxon, Frank, Worthington, Minn. Boiler	495,841	Apr. 18	2120	533	63	425
Saxon, George W. (See Teate, Thomas A., assignor.)						
Saxon, Samuel. (See Boden, Peers, and Saxon.)						
Saxon, Silas J., Colfax, Wash. Churn	489,833	Jan. 10	1295	338	62	285
Saxon Worsted Company. (See Wiggins, John, assignor.)						
Saxton, Harry, assignor by mesne assignments, to J. H. Ouhrabka and M. P. Drury, St. Louis, Mo. Curling-iron	502,385	Aug. 1	230	54	64	608
Sayer, William, Derby, England. Air-propeller or ventilating-fan	494,307	Mar. 28	2504	632	62	1887
Sayers, Annie, Chicago, Ill. Gasoline-burner attachment	493,166	Mar. 7	643	164	62	1484
Sayers, William B., Glasgow, Scotland. Junction-box	501,445	July 11	1456	365	64	2-0
Saylor, A. R., et al. (See Manderfield, George J., assignor.)						
Saylor, Freeman N., Strathroy, Canada. Speed-regulator for governors	499,255	June 13	839	200	63	1550
Sayr, William G., La Harpe, Ill. Planter	502,832	Aug. 8	1006	245	64	767
Sayre, Winthrop M., South Orange, N. J. Nut-lock	495,520	Apr. 18	1605	404	63	335
Sayres, Konn B. (See Schwander, Jacob N., assignor.)						
Scadden, Frank, et al. (See Hanson, Joseph H., assignor.)						
Scales, Carmi H., Leominster, Mass. Furniture clamp or press	502,533	Aug. 1	480	115	64	654
Scales, William S., Everett, assignor of two-thirds to J. B. Humphrey and J. H. Clarke, Somerville, Mass. Raisin-seeding device	506,340	Oct. 10	941	234	65	191
Scammon, John C. F., Strong, Me. Machine for manufacturing wooden toothpicks	501,105	July 11	920	235	64	182
Scanlan, Edward, Louisville, Ky., and J. Zipp, New Albany, Ind. Grate and means for operating same	496,006	Apr. 25	2365	598	63	486
Scanlan, Frank J., Philadelphia, Pa. Cable-grip	497,555	May 16	1894	477	63	991
Scarborough, James A., and C. Bardwell, Wesson, Miss. Whiffletree	492,560	Feb. 28	2397	596	62	1275
Scarbrough, Lemuel A., Memphis, Tenn. Wire-stretcher	494,895	Apr. 4	587	147	63	114
Scarinci, Beniamino, Philadelphia, Pa. Shoe	505,298	Sept. 19	1631	421	64	1604
Scarles, Alfred H., Springfield, Mass. Grater	507,287	Oct. 24	2542	626	65	513
Scarles, Benjamin J., Clinton, Mass. Wire-netting	502,470	Aug. 1	370	88	64	634
Scarlett, Charles H., Augusta, Ill. Hame-tug	495,617	Apr. 18	1763	444	63	362
Scates, George R., assignor to himself, R. Knaff, W. D. Hume, and W. O. White, Knoxville, Tenn. Furnace	502,208	July 25	2678	{ 675 676 }	64	535
Scates, William P., Knoxville, assignor of one-half to J. N. Freels, Scarborough, Tenn. Steam-engine	503,988	Aug. 29	2886	722	64	1157
Scattergood, Charles F., Albany, N. Y. Telephone-transmitter	498,309	May 30	3108	774	63	1237
Secarce, Edward M., assignor of two-thirds to G. P. Grimes, J. H. and T. T. Rhodes, Paris, Mo. Folding seesaw	505,485	Sept. 26	1925	{ 496 497 }	64	1673
Schaack, John, West Hoboken, N. J. Sewing-machine	507,243	Oct. 24	2470	{ 608 609 }	65	501
Schaaf, Edward, et al. (See Cole, Thomas, assignor.)						
Schaaf, William, and G. A. Ritz, Rochester, N. Y., assignors to M. Angele. Game apparatus	506,797	Oct. 17	1698	427	65	348
Schaake, Henry. (See Kendall and Schaake.)						
Schaake, Henry, assignor to C. B. Kendall, San Francisco, Cal. Cap-making machine	493,525	Mar. 14	1198	306	62	1606
Schaal, Eugen, Stuttgart, Germany. Process of and apparatus for thickening linseed-oil	493,187	Mar. 7	644	164	62	1485
Schaal, Eugen, Stuttgart, Germany. Manufacture of resin-acid esters	501,446	July 11	1458	365	64	280
Schade, Henry F., Milwaukee, Wis. Securing attachment for ladies' hats	494,599	Apr. 4	118	28	63	25
Schade, John, Brooklyn, N. Y. Coin-operated mechanism	496,749	May 2	571	153	63	722
Schaefer, Charles K. (See Heitmann, Henry, assignor.)						
Schaefer, Friederich A., Truckee, Cal. Sled-propeller	506,079	Oct. 3	434	114	65	84
Schaefer, Friederich A., Truckee, Cal. Sleigh	506,080	Oct. 3	436	114	65	85
Schaeffer & Budenburg. (See Carpenter, Rolla C., assignor.)						
Schaeffer, Levi R., assignor to F. M. Wetter, Philadelphia, Pa. Exercising and strength-testing machine	493,561	Mar. 14	1264	324	62	1620

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Schaeffer, Morton. (See Patten, James S., assignor.)						
Schaellibaum, Robert, Lowell, Mass. Damper for cotton openers and lappers	503,255	Aug. 15	1701	418	64	906
Schaellibaum, Robert, Lowell, Mass. Bearer for cotton-openers	503,256	Aug. 15	1703	419	64	907
Schaeuffelen, Carl, Heilbronn, Germany. Drawing-paper	500,081	June 20	2204	538	63	1803
Schafer, Adam, Weston, Ohio. Hydrocarbon-burner	505,374	Sept. 19	1745	452 453	64	1624
Schäfer, Ernst, Iserlohn, assignor to J. Schmitz-Schlagloth, Cologne, Germany. Adjustable back for books, &c.	508,988	Nov. 21	1648	405	65	1099
Schafer, Frank H., Beaver Falls, Minn. Band-cutter and feeder for thrashing-machines	503,877	Aug. 22	2683	672	64	1103
Schäfer, Frederick W. (See Rogers, Charles, assignor.)						
Schafer, John F., San Francisco, Cal. Check, draft, or the like	493,223	Mar. 7	701	179	62	1496
Schafer, Theodore, Maroa, Ill. Extensible measuring-stick	510,991	Dec. 19	2019	498	65	1811
Schaff, Peter. (See Gleixner and Schaff.)						
Schäffer & Budenberg. (See Prüssmann, Carl, assignor.)						
Schaffer, John A., Kensington, Ill. Puzzle	490,757	Jan. 31	2853	732	62	632
Schaffer, John P., Pittsburg, Pa. Hot-air pipe	499,854	June 20	1862	452	63	1742
Schaffer, Morse B. (See Goltra and Schaffer.)						
Schairer, George E., Saline, Mich. Hay and stock rack	489,094	Jan. 3	171	47	62	40
Schalitz, Carl L., San Francisco, Cal. Vacuum-pan	498,085	May 23	2727	682	63	1155
Schalk, Anthony, and A. Weinandy, New Riegel, Ohio. Wire-stretcher	504,368	Sept. 5	90	23	64	1287
Schallehn, Theodore C. (See Tarrant, William P., assignor.)						
Schaller, Michael D., Lowell, N. Y. Snow-plow	493,899	Mar. 21	1812	461	62	1742
Schaller, Michael D., Lowell, N. Y. Ratchet-wrench	508,845	Nov. 14	1381	342	65	1033
Schallioli, William H., Chester, Pa. Auxiliary car-motor	500,432	June 27	2801	689	63	1920
Schamber, Martin, <i>et al.</i> (See Smith, Augustus, assignor.)						
Schamps, George M., Jamestown, N. Y. Suspenders	491,191	Feb. 7	214	54	62	788
Schammel, Henry, San Francisco, Cal. Fastening for covers of jars or bottles	497,077	May 9	1105	284	63	836
Schanck, Henry L., Holmdel, and C. B. Ellis, Freehold, N. J. Sprinkling device	491,377	Feb. 7	529	135	62	849
Schenck, William A., Richmond, Va. Combination-lock	491,598	Feb. 14	892	224	62	941
Schandoney, Peter V., Sacramento, Cal. Draft-equalizer	490,214	Jan. 17	1954	512	62	429
Schapiro, Aisik. (See Hurwitz and Schapiro.)						
Scharf, Paul, Vienna, Austria-Hungary. Electric incandescent lamp	502,322	Aug. 1	119	27	64	587
Scharf, Samuel R., Washington, D. C. Apparatus for treating asphaltic mixtures	499,256	June 13	839	201	63	1550
Scharf, Samuel R., Washington, D. C. Sand or gravel drier	501,639	July 18	1594	401	64	321
Scharf, Thomas, <i>et al.</i> (See Kahl, Adolph, assignor.)						
Scharling, John H., Newark, N. J. Depositing layers of metal on glass	505,576	Sept. 26	2129	539 540	64	1711
Scharling, John H., Newark, N. J. Producing raised metallic designs on bottles, vases, or similarly-shaped articles and means therefor	492,840	Mar. 7	101	25	62	1377
Scharringhausen, William. (See Prochazka and Scharringhausen.)						
Schatz, Joseph M., St. Louis, Mo. Summer-car	496,232	Apr. 25	2709	679	63	550
Schaub, Adolph, assignor of three-fifths to F. Gillet and J. C. Scott, Philadelphia, Pa. Automatic railway-signal setting and releasing mechanism	497,556	May 16	1895	477 478	63	991
Schaub, John D., Pittsburg, Pa. Portable altar	493,790	Mar. 21	1642	418	62	1711
Schaub, Julius W., Detroit, Mich. Harness	496,284	Apr. 25	2790	698	63	566
Schaub, Louis, Wheeling, W. Va. Apparatus for attaching stems and feet to glass articles	509,250	Nov. 21	2095	505	65	1183
Schaum, Otto W., Philadelphia, Pa. Shedding mechanism for looms	492,908	Mar. 7	221	55	62	1402
Schaum, Otto W., Philadelphia, Pa. Swivel-loom	493,651	Mar. 21	1414	358 359	62	1665
Schaum, Otto W., Philadelphia, Pa. Swivel-loom	493,652	Mar. 21	1417	360 361	62	1665
Schaum, Otto W., Philadelphia, Pa. Swivel-loom	493,653	Mar. 21	1420	361 362	62	1666
Schaum, Otto W., Philadelphia, Pa. Swivel-loom	493,654	Mar. 21	1422	362	62	1666
Schaum, Otto W., Philadelphia, Pa. Combination-gage	494,169	Mar. 28	2287	579	62	1845
Schaum, Otto W., Philadelphia, Pa. Take-up mechanism for narrow-ware looms	497,823	May 23	2313	581	63	1082
Schaum, Otto W., Philadelphia, Pa. Loom	497,824	May 23	2315	581	63	1083
Schaum, Otto W., Philadelphia, Pa. Jacquard mechanism for looms	507,635	Oct. 31	3157	773 774	65	644
Schaum & Uhlinger. (See Hillas, Isaac, assignor.)						
Schaum & Uhlinger. (See Markee, Reuel T., assignor.)						
Schaum & Uhlinger. (See Zimmermann, John, assignor.)						
Scheckelhoff, Henry, assignor to W. W. White, Dayton, Ohio. Manifold-copying book	495,521	Apr. 18	1606	404	63	335
Scheckelhoff, Henry, assignor to W. W. White, Dayton, Ohio. Manifold-copying book	495,522	Apr. 18	1607	405	63	335
Scheen, Thomas, Oakland, Cal. Lawn-sprinkler	502,641	Aug. 1	658	160	64	628
Scheetz, Charles N., and J. Ringle, Philadelphia, Pa. Superheater	500,514	June 27	2926	718	63	1943
Scheetz, Oliver R., <i>et al.</i> (See Winner, William P., assignor.)						
Scheffer, David M., New Castle, Ind., assignor to Chas. Truax, Greene & Company, Chicago, Ill. Veterinary forceps	502,386	Aug. 1	231	55	64	608
Schefold, Frank. (See Nortner and Schefold.)						
Scheid, Adam, Harrison, N. J. Hydrant	490,311	Jan. 24	2129	554	62	476
Scheid, Adam, Harrison, N. J. Hydrant	495,711	Apr. 18	1917	482	63	387
Scheid, Adam, Harrison, N. J. Fire-escape	496,958	May 9	924	242	63	804
Scheid, Adam, Harrison, N. J. Water-crane	498,818	June 6	117	30	63	1412
Scheidler, John, Coldwater, Mich. Barn	506,732	Oct. 17	1597	402	65	329
Scheillein, John. (See Seebick, George, assignor.)						
Scheinberg, Louis, New York, N. Y. Coat	497,928	May 23	2490	621	63	1113
Schelin, Hjalmar C. (See Persson, Otto F., assignor.)						
Schell, Frank M., Perry, Kans. Grain-purifier	499,598	June 13	1429	342	63	1655
Schell, Natalie, San Francisco, Cal. Bust-form	505,133	Sept. 19	1367	350	64	1554
Schellhammer, Alfred L., <i>et al.</i> (See Schellhammer, Christian, assignor.)						
Schellhammer, Christian, assignor of two-thirds to A. L. Schellhammer and R. Edmonds & Son, Warren, Pa. Heater	496,750	May 2	573	153 154	63	722
Schellhorn, John, Fairport, Iowa. Molding pottery	499,148	June 6	677	162	63	1508
Schenck, Charles S., New York, N. Y. Conveyer	502,588	Aug. 1	567	136	64	670
Schenck, Henry. (See Minzev, William L., assignor.)						
Schenck, John D. P., Nashville, Tenn., assignor of one-half to G. Matthews, Cincinnati, and W. W. Peabody, Madisonville, Ohio. Pumping-engine	490,312	Jan. 24	2130	554	62	477
Schenck, John D. P., Nashville, Tenn., assignor of one-half to G. Matthews, Cincinnati, and W. W. Peabody, Madisonville, Ohio. Automatic valve for air-brakes	492,841	Mar. 7	104	25, 26	62	1378
Schenck, William T. Y., San Francisco, Cal. Hose-carriage	504,624	Sept. 5	501	129	64	1364
Scherer, Charles, Brooklyn, N. Y. Bodice for belts	494,896	Apr. 4	588	148	63	114
Scherer, John, assignor of one-half to G. J. Farnsworth, Nahma, Mich. Device for side-swaging and setting saws	489,663	Jan. 10	1037	270	62	231

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Scherer, Maria C., New York, N. Y. Burial apparatus	507,043	Oct. 17	2103	521	65	422
Scherer, William. (See Abert and Scherer.)						
Scherffius, Jacob, Winona, Minn. System of heating and ventilation	495,567	Apr. 18	1678	423	63	348
Scherffius, Jacob, Winona, Minn. System of ventilation and heating	495,568	Apr. 18	1680	424	63	348
Schermerhorn, Alexander B., Athens, Pa. Wall-cabinet	506,554	Oct. 10	1308	327	65	262
Schermerhorn, Charles, assignor of one-half to J. W. Mitchell, New York, N. Y. Towel-rack	504,053	Aug. 29	2980	745	64	1175
Schermerhorn, David M., P. V., and S. P., Warren, Pa.; said David M. and P. V. Schermerhorn assignors to S. F. Schermerhorn. Apparatus for the manufacture of gas-black	489,332	Jan. 3	532	145	62	115
Schermerhorn, Edcel J., Toledo, Ohio. Harness	509,690	Nov. 28	2859	690	65	1340
Schermerhorn, Peter V. (See Schermerhorn, David M., P. V., and S. P.)						
Schermerhorn, Simon P. (See Schermerhorn, David M., P. V., and S. P.)						
Scherer, Adolphe, New York, N. Y. Window	508,347	Nov. 7	592	145	65	868
Scherzer, Albert H., administrator. (See Scherzer, William.)						
Scherzer, William, deceased, Chicago, Ill.; A. H. Scherzer, administrator. Lift-bridge	511,713	Dec. 26	3198	784 785	65	2042
Scheuber, August W., New York, N. Y. Frame for pocket-books, &c.	507,457	Oct. 24	2824	691	65	569
Scheuer & Brother. (See Ross, Edward, assignor.)						
Scheuer, Herman. (See Katzer, Richard, assignor.)						
Scheuer, Herman New York, N. Y. Fan	494,032	Mar. 21	2049	523	62	1787
Scheuer, Isaac, New York, N. Y. Pocket-book	502,143	July 25	2569	644	64	513
Scheuer, Joseph F., Kewanee, assignor of one-half to G. Schumaker, Chilton Wis. Recording and receipting machine	489,040	Jan. 3	94	26, 27	62	24
Scheuer, Max, New York, N. Y. Bodice-belt	501,300	July 11	1214	307	64	235
Scheuerecker, Joseph, assignor of seven-eighths to J. W. Hahn, Toledo, Ohio, and E. E. Perry, Indianapolis, Ind. Refrigerating apparatus	493,120	Mar. 7	542	135 136	62	1466
Schicht, Johann, Aussegg-on-the-Elbe, Austria-Hungary. Manufacturing soap	509,049	Nov. 21	1741		65	1116
Schickler, Heinrich, Esslingen, Germany. Pocket-knife	497,897	May 23	2443	610	63	1106
Schiele & Co., Lewis. (See Kops, Daniel, assignor.)						
Schiemann, Max. (See Philipsborn and Schiemann.)						
Schier, Adolph, Chicago, Ill. Soda-fountain	491,272	Feb. 7	332	84	62	812
Schier, Adolph, Chicago, Ill. Water-heating apparatus	499,940	June 20	1990	483	63	1766
Schiewetz, Henry. (See Brown, Meyer, and Schiewetz.)						
Schiffbauer, Charles E., et al. (See Preston, Ferrell, and Schiffbauer, assignors.)						
Schiffbauer, Henry. (See Preston, Ferrell, and Schiffbauer, assignors.)						
Schiffbauer, Sarah A., et al. (See Preston, Ferrell, and Schiffbauer, assignors.)						
Schiffer, Henry, New York, N. Y. Stall-drain	505,232	Sept. 19	1512	394	64	1581
Schifferly, Conrad, Fort Wayne, Ind. Bake-pan	504,480	Sept. 5	275	71	64	1321
Schill, John. (See Schill, Joseph, J., and P.)						
Schill, Joseph, J., and P., Crestline, Ohio. Air-warming furnace	511,164	Dec. 19	2283	559	65	1862
Schill, Peter. (See Schill, Joseph, J., and P.)						
Schilling, Adam. (See Hirsch and Schilling.)						
Schilling, Charles R. (See Schraubsstadter and Schilling.)						
Schilling, Charles R., St. Louis, Mo. Wrapping-machine	498,992	June 6	434	101 102	63	1467
Schilling, George W., and J. G. Haslam, Philadelphia, Pa. Automatic alarm device	490,684	Jan. 31	2741	706	62	611
Schilling, Henry B. (See McBryer, Charles W., assignor.)						
Schilling, William, Hartford, Conn. Knob attachment	490,685	Jan. 31	2743	706	62	611
Schimmel, Fridolin, and S. F. Nelson, Minneapolis, Minn. Fall-board for pianos	495,122	Apr. 11	971	243	63	199
Schimmel, Fridolin, and S. F. Nelson, Minneapolis, Minn. Agraffe	503,167	Aug. 15	1562	384	64	881
Schimper & Co., William. (See Oldenbusch, Ernst, assignor.)						
Schindler, Andrew J., Chicago, Ill. Reversing mechanism for engines	510,094	Dec. 5	426	95	65	1490
Schindler, Hugo, Maria-Schein, Austria-Hungary. Bust-support	504,054	Aug. 29	2982	745	64	1175
Schinkel, Adolph. (See Hahn, John J., assignor.)						
Schippers, Heinrich, Paterson, N. J. Swivel-loom	496,668	May 2	443	119	63	700
Schirck, Edward. (See Rosentreter, Albert J., assignor.)						
Schirmer, Conrad. (See Moser and Schirmer.)						
Schirmacher, Theodor, Bradford, Pa. Oil can	508,767	Nov. 14	1266	315	65	1012
Schlabach, Daniel C., Farmerstown, Ohio. Saw-gage	496,233	Apr. 25	2711	679	63	550
Schladr, Joseph. (See Cross, Frank W., assignor.)						
Schlaffer, Albert J. (See Martin, Charles C., assignor.)						
Schlaffer, Albert J. (See Martin and Schlaffer.)						
Schlared, Charles, Columbus, Ohio. Fluid-pressure brake mechanism	509,330	Nov. 21	2231	539 540	65	1209
Schlechter, Gustavus A., Reading, Pa. Spoon	499,332	June 13	970	234	63	1573
Schlee, August, Hagenow, Germany. Flour-sifting sieve	502,764	Aug. 8	886	217 218	64	743
Schlegel, Augustus, and H. Mayer, Decatur, Ind. Device for protecting unburned brick	500,620	July 4	134	36	64	26
Schleicher, Otto, Magdeburg, Germany. Feed-water-utilizing device	510,615	Dec. 12	1318	321	65	1671
Schleicher, Schumm & Co. (See Winand, Paul A. N., assignor.)						
Schleicher, Ulrich, et al. (See Ziegler, Josef, assignor.)						
Schleichert, Frank C., Bridgeport, Conn. Meat-holder	499,804	June 20	1770	429	63	1727
Schleiff, Francis A., Jr., et al. (See Pisko, Emanuel, assignor.)						
Schlesicky, Gustav, Frankfort-on-the-Main, Germany. Watchcase	499,891	June 20	1924	467	63	1754
Schlesinger, Julius M., San José, Cal. Fringe or trimming holder	503,752	Aug. 22	2518	626	64	1071
Schlesinger, Julius M., San José, Cal. Lace, veiling, or ribbon holder	509,691	Nov. 28	2860	691	65	1340
Schleuter, Theodore A., Oakland, Cal. Oil-can or other liquid-receptacle	493,877	Mar. 21	1776	453	62	1736
Schlichting, Wilhelm, assignor to C. Claussen, Hamburg, Germany. Pavement	500,273	June 27	2546	692	63	1875
Schlickeyen, Carl, Berlin, Germany. Coupling for pulleys	490,313	Jan. 24	2131	555	62	477
Schloesing, Emile and E. H., Marseilles, France. Insecticide	498,819	June 6	118		63	1412
Schloesing, Emile H. (See Schloesing, Emile and E. H.)						
Schlosser, Wilhelm, Wiesbaden, Germany. Operating mechanism for station-indicators	505,609	Sept. 26	2185	552	64	1721
Schloss, Joseph W., New York, N. Y. Braiding-machine	492,437	Feb. 28	2183	546	62	1230
Schlusser, George J., Leadville, Colo. Feed-box	490,045	Jan. 17	1675	435	62	374
Schlueter, Adolph H. and T. A., Oakland, Cal. Faucet for oil-cans	509,769	Nov. 28	2984	722	65	1363
Schlueter, Heinrich, Stapleton, N. Y. Christmas-tree candle-holder	495,641	Apr. 18	1806	453	63	369
Schlueter, Theodore A. (See Schlueter, Adolph H. and T. A.)						
Schlumberger, Albert, Paris, France. Making safety-paper	491,858	Feb. 14	1286		62	1021
Schmadeke, John F., Brooklyn, N. Y. Coal-chute	503,439	Aug. 15	1991	494	64	957
Schmahl, Paul, Biberach, Germany. Window	508,348	Nov. 7	593	145 146	65	868
Schmaltz, Friedrich, Offenbach-on-the-Main, Germany. Machine for sharpening saws	490,927	Jan. 31	3127	802	62	687
Schmaltz, Paul I., Hamburg, Germany. Refrigerating and ice-making machinery	504,091	Aug. 29	3038	759	64	1187
Schmaltz, Paul I., Hamburg, Germany. Automatic pressure-regulator for refrigerating-machines	504,092	Aug. 29	3040	759	64	1187

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Schmaltz, Paul I., Hamburg, Germany. Compression and vacuum pump.....	504,093	Aug. 29	3041	759	64	1187
Schmaltz, Paul I., Hamburg, Germany. Compression and vacuum pump.....	504,094	Aug. 29	3043	{ 760 761 }	64	1188
Schmalz, François, assignor to Photo-Litho Transfer Company, New York, N. Y. Ornamenting vitreous wares.....	493,449	Mar. 14	1068	.....	62	1583
Schmalz, François, assignor to Photo-Litho Transfer Company, New York, N. Y. Ornamentation.....	493,450	Mar. 14	1069	.....	62	1583
Schmerber, Jules, Eilenburg, Germany. Centrifugal machine.....	493,900	Mar. 21	1812	461	62	1742
Schmid, Albert, Zurich, Switzerland. Air-moistening apparatus.....	497,034	May 9	1039	{ 265 266 }	63	824
Schmid, Albert, Pittsburg, Pa. Armature for electric machines.....	505,926	Oct. 3	193	49	65	38
Schmid, Albert, Pittsburg, Pa. Alternating-current generator.....	505,927	Oct. 3	194	49	65	38
Schmid, Albert, Allegheny, assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Electric locomotive.....	498,577	May 30	3543	{ 877 878 }	63	1314
Schmid, Charles, Chicago, Ill., assignor of one-half to P. Friedrich, Jeannette, Pa. Electric-arc lamp.....	505,233	Sept. 19	1513	395	64	1581
Schmid, Gottlob F., assignor of one-half to G. W. Duchardt Beardstown, Ill. Boiler-cleaner.....	511,064	Dec. 19	2111	522	65	1829
Schmid, Jakob. (See Guehm and Schmid.)						
Schmid, Jakob, assignor to Society of Chemical Industry in Basle, Basle, Switzerland. Blackish-blue azo dye.....	493,563	Mar. 14	1268	.....	62	1620
Schmid, Jakob, assignor to Society of Chemical Industry in Basle, Basle, Switzerland. Gray-black tetrazo dye.....	493,564	Mar. 14	1269	.....	62	1620
Schmid, Jakob, assignor to Society of Chemical Industry in Basle, Basle, Switzerland. Medical compound.....	504,626	Sept. 5	503	.....	64	1365
Schmid, Jakob, and J. Mohler, assignors to Society of Chemical Industry in Basle, Basle, Switzerland. Violet-blue induline dye.....	491,378	Feb. 7	531	.....	62	849
Schmid, Jakob, and R. Paganini, assignors to Society of Chemical Industry in Basle, Basle, Switzerland. Monosulpho-dioxynaphthoic acid.....	493,562	Mar. 14	1267	.....	62	1620
Schmid, Jonas, Mill Creek, Pa. Ice-velocipede.....	504,625	Sept. 5	502	129	64	1364
Schmid, Theodor, and W. Kinkel, Denver, Colo. Means for preventing railway-express robberies.....	493,600	Mar. 14	1336	{ 340 341 }	62	1634
Schmidlin, Emil, Brantford, Canada. Coffee-grinding mill.....	493,655	Mar. 21	1423	362	62	1666
Schmidt, Adam, Saalfeld-on-the-Saale, Germany. Adjustable seat.....	507,044	Oct. 17	2107	{ 521 522 }	65	423
Schmidt, Adolph H. (See Sieker and Schmidt.)						
Schmidt, Albert G., Newark, N. J. Portable stove.....	499,892	June 20	1925	467	63	1754
Schmidt, Albrecht. (See Majert and Schmidt.)						
Schmidt, Charles G., Cincinnati, Ohio. Meat-chopper.....	499,755	June 20	1695	406	63	1713
Schmidt, Eugene, Stillwater, Minn. Cigarette-rolling case.....	494,445	Mar. 28	2725	685	62	1926
Schmidt, Frank, Baraboo, Wis. Stovepipe attachment.....	498,310	May 30	3110	775	63	1237
Schmidt, Frederick M., Brooklyn, assignor to Self Winding Clock Company, New York, N. Y. Self-winding electric clock.....	502,935	Aug. 8	1180	291	64	798
Schmidt, Frederick T., Bradford, England. Electric-arc lamp.....	495,601	Apr. 18	1735	437	63	357
Schmidt, Frederick T., Bradford, England, assignor to Mutual Engineering Company, Limited. Parallel vise.....	490,603	Jan. 24	2576	664	62	564
Schmidt, Friedrich. (See Schmidt, Gustav, assignor.)						
Schmidt, Friedrich, New York, N. Y. Grinding-mill.....	501,106	July 11	922	236	64	183
Schmidt, Fritz G., New York, N. Y. Eyeglasses.....	499,756	June 20	1697	406	63	1714
Schmidt, Gottlieb, et al. (See Parkinson, John, assignor.)						
Schmidt, Gustav, Ammendorf-Radewell, Germany, assignor to F. Schmidt, Brooklyn, N. Y. File-cutting machine.....	509,949	Dec. 5	168	39, 40	65	1441
Schmidt, Henry, A. Merunka, and C. J. Werner, New York, N. Y. Cigar-bunching machine.....	492,438	Feb. 28	2184	{ 546 547 }	62	1231
Schmidt, Jacob A., Barmen, Germany. Animal-shears.....	502,865	Aug. 8	1055	259	64	776
Schmidt, John F., Blue Earth City, Minn. Clothes-drier.....	502,913	Aug. 8	1134	{ 279 280 }	64	790
Schmidt, Joseph, Cleveland, Ohio. Barrel-washer.....	493,044	Mar. 7	427	107	62	1443
Schmidt, Julius, deceased; J. C. Pennie, Washington, D. C., administrator. Joint for railway-rails.....	501,159	July 11	1009	{ 256 257 }	64	197
Schmidt, Louis A. (See Fischer and Schmidt.)						
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue alizarin dye.....	502,765	Aug. 8	888	.....	64	744
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Hexaoyanthraquinone and making it.....	503,295	Aug. 15	1768	.....	64	918
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Alizarinhexacyanin.....	506,265	Oct. 10	807	.....	65	185
Schmidt, Robert E., and P. Tust, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Alizarin dye.....	496,139	Apr. 25	2566	.....	63	523
Schmidt, Theodore F. W., assignor of one-half to Dayton Paper Novelty Company, Dayton, Ohio. Paper box.....	490,167	Jan. 17	1869	487	62	414
Schmidt, Wilhelm. (See Roth and Schmidt.)						
Schmidt, William. (See Unzicker, Hermann, assignor.)						
Schmied, Adolf, Waiblingen, Germany. Shoe-fastening.....	501,301	July 11	1215	{ 307 308 }	64	236
Schmiedel, Oscar, Bethany, W. Va. Bicycle.....	502,866	Aug. 8	1055	259	64	776
Schmieder, Otto E., assignor of one-half to R. C. Christy, Chicago, Ill. Hook and eye.....	489,095	Jan. 3	172	47	62	41
Schmill, Joseph V. (See Noonan and Schmill.)						
Schmirk, Maurice, Fayette, Mo. Easel.....	498,578	May 30	3544	878	63	1315
Schmitt, Mathias S. (See Lucas, Zindel, and Schmitt.)						
Schmitt, Christian M. (See Allen, George R., assignor.)						
Schmitt, Edward D. (See Babcock and Schmitt.)						
Schmitt, Edward D., and G. N. Hinchman, assignors to Falls Rivet and Machine Company, Cuyahoga Falls, Ohio. Clutch.....	508,052	Nov. 7	105	30, 31	65	778
Schmitt, Henry G., Hendy Creek, N. Y. Plow.....	491,599	Feb. 14	893	224	62	941
Schmitt, Henry J. (See Drill and Schmitt.)						
Schmitt, Wilhelm, assignor to M. H. and E. H. Marcus, Baltimore, Md. Spring bed-bottom.....	499,941	June 20	1991	483	63	1766
Schmitz, Albert, Elberfeld, Germany. Air-tight can and cover therefor.....	505,853	Oct. 3	75	18	65	17
Schmitz, Albert, assignor to Firm of F. Krupp, Essen, Germany. Improving the quality of steel armor-plates.....	506,446	Oct. 10	1132	.....	65	229
Schmitz, Henry, Wymore, Nebr. Harness-saddle.....	496,447	May 2	93	26	63	636
Schmitz, Jacob, Hennef, Germany. Clothes-drier.....	508,969	Nov. 21	1649	406	65	1099
Schmitz, Johann P., Aachen, Germany. Fleece-dividing attachment for carding-engines.....	508,148	Nov. 7	282	70	65	810
Schmitz-Schlagloth, Josef. (See Schäfer, Ernst, assignor.)						
Schnackenburg, Leopold, Schwetz, Germany. Weeding-machine.....	498,311	May 30	3111	775	63	1237

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Schneekloth, Hans A., New York, N. Y. Punching, shearing, and forging machine	490,401	Jan. 24	2266	589	62	504
Schneible, Joseph, Brooklyn, N. Y. Pressure-regulator	492,111	Feb. 21	1671	416	62	1112
Schneider, August, Bethlehem, Pa. Valve for beer-tanks	507,636	Oct. 31	3161	774	65	645
Schneider, Carl O., Dresden, Germany. Writing-desk	494,649	Apr. 4	191	48	63	39
Schneider, Frederick, and J. Foley, Leavenworth, Kans. Faucet-valve	504,755	Sept. 12	735	183	64	1492
Schneider, Frederick L. (See Armantrout, Peter, assignor.)						
Schneider, George P., Cleveland, Ohio. Valve-gear	507,597	Oct. 31	3092	755	65	631
Schneider, George P., Cleveland, Ohio. Air-drying apparatus	511,217	Dec. 19	2369	578	65	1878
Schneider, Guido, Rochlitz, Germany. Apparatus for moistening and sealing the flaps of envelopes	510,616	Dec. 12	1320	321	65	1671
Schneider, Gustav H., Hamburg, Germany. Brewing beer	503,168	Aug. 15	1563	385	64	881
Schneider, Henri, Paris, France. Recoil-check for ordnance	510,650	Dec. 12	1380	{ 337 338 }	65	1683
Schneider, Herman B. (See Krause and Schneider.)						
Schneider, Hermann J. (See Ditton and Schneider.)						
Schneider, Leopold E., Galena, Ill. Permutation-lock	498,820	June 6	119	30, 31	63	1413
Schneider, Louis, Williamsport, Pa. Keyhole-guard	505,299	Sept. 19	1631	422	64	1604
Schneider, Robert J., New York, N. Y. Rake	494,897	Apr. 4	589	148	63	114
Schneider, Theodor, Vienna, Austria-Hungary. Shoe-fastening	498,579	May 30	3545	878	63	1315
Schuell, Clemens, Paterson, N. J. Apparatus for the manufacture of re-pressed cement pipes	500,675	July 4	233	62	64	44
Schnello, Otto, Berlin, Germany. Shaking, bolting, or sifting machine	507,756	Oct. 31	3336	817	65	677
Schnellen, Adolf, Crefeld, assignor to M. Bie, Charlottenburg, Germany. Display-card for textile fabrics	494,650	Apr. 4	193	48, 49	63	40
Schnepf, John, assignor of one-half to W. H. Bellamy, New York, N. Y. Pneumatic annunciator	491,027	Jan. 31	3300	842	62	721
Schniedeberg, Oswald. (See Marfori and Schniedeberg.)						
Schnur, Charles. (See Staiger and Schnur.)						
Schnürch, Carl, Alt Chemnitz, Germany. Apparatus for steaming shag	505,725	Sept. 26	2386	603	64	1757
Schoaf, John W., McKeesport, Pa. Axle-lubricator	493,121	Mar. 7	544	136	62	1466
Schoaf, John W., McKeesport, Pa. Nut-lock	493,122	Mar. 7	546	136	62	1467
Schoaf, John W., McKeesport, Pa. Car-brake	503,003	Aug. 8	1292	316	64	817
Schoch, Martin L., New Berlin, Pa. Buckle	505,992	Oct. 3	299	77	65	58
Schoen, Charles T., Allegheny, Pa. Manufacture of center-bearing plates	491,192	Feb. 7	215	55	62	78
Schoen, Charles T., Allegheny, Pa. Metallic post	497,134	May 9	1196	305	63	852
Schoen, Charles T., Allegheny, Pa. Draw-bar-spring pocket	497,825	May 23	2318	581	63	1083
Schoen, Charles T., Allegheny, Pa. Combined rail-brace and tie-plate	509,607	Nov. 28	2734	660	65	1317
Schoen, Charles T., Allegheny, Pa. Combined rail-brace and tie-plate	509,608	Nov. 28	2735	660	65	1317
Schoeneck, Charles, <i>et al.</i> (See Buckley, John P., assignor.)						
Schoenecker, Joseph J. (See Bender and Schoenecker.)						
Schoening, Adolph. (See Marqua, George, assignor.)						
Schoenmehl, Charles B., assignor of one-half to A. M. Young, Waterbury, Conn. Treatment of metal plates prior to electrolysis	494,231	Mar. 28	2388	603	62	1865
Schoenmehl, Charles B., assignor of one-half to A. M. Young, Waterbury, Conn. Apparatus for electrolyzing copper	494,232	Mar. 28	2390	{ 603 604 }	62	1865
Schoenner, Jean, Nuremberg, Germany. Toy steam-engine	506,447	Oct. 10	1133	282	65	229
Schoenstein, Felix F., San Francisco, Cal. Pneumatic action for pipe-organs	510,521	Dec. 12	1120	271	65	1636
Schoettel, Edward A. (See Remson and Schoettel.)						
Schofield, Albert B., Brooklyn, N. Y. Tack or nail puller	490,402	Jan. 24	2267	589	62	504
Schofield, Albert B., Brooklyn, N. Y. Fastening device	490,403	Jan. 24	2268	589	62	504
Schofield, Albert B., Brooklyn, N. Y. Wrench	506,832	Oct. 17	1759	443	65	359
Schofield, Charles E., Greenup, Ill. Window-screen	507,848	Oct. 31	3506	{ 862 863 }	65	709
Schofield, Eugene H., Chicago, Ill., assignor of one-half to O. Dunham, Ludington, Mich. Machine for winding fabrics	494,491	Mar. 28	2793	{ 700 701 }	62	1939
Schofield, Eugene H., Chicago, Ill., assignor of one-half to O. Dunham, Ludington, Mich. Cloth drying, tentering, and trimming machine	494,492	Mar. 28	2797	701	62	1940
Schofield, Eugene H., Chicago, Ill., assignor of one-half to O. Dunham, Ludington, Mich. Cloth-painting machine	494,493	Mar. 28	2800	702	62	1940
Schofield, James D., Dallas, Tex. Combined cotton and corn planter	497,688	May 16	2101	{ 524 525 }	63	1028
Schofield, James D., assignor of two-thirds to C. W. Parker and P. Furst, Dallas, Tex. Cotton-chopper	504,756	Sept. 12	737	{ 183 184 }	64	1422
Schofield, James D., assignor of two-thirds to C. W. Parker and P. Furst, Dallas, Tex. Corn and cotton planter	509,950	Dec. 5	170	40, 41	65	1441
Schofield, John, assignor of one-half to J. F. Noble, Bridgeport, Conn. Vending and fortune-telling machine	503,686	Aug. 22	2402	599	64	1048
Schofield, John M. (See Stackpole, Charles F., assignor.)						
Schofield, Margaret, Camden, N. J. Toy	503,387	Aug. 15	1919	476	64	945
Scholding, John H., Yonkers, N. Y. Furnace or stove	493,947	Mar. 21	1900	484	62	1759
Scholl, Carl, Göppingen, Germany. Wire-corrugating machine	497,826	May 23	2319	582	63	1083
Scholle, Charles H., Cincinnati, Ohio. Flue-stopper	503,388	Aug. 15	1920	476	64	945
Schollhorn, August L., assignor to W. Schollhorn & Co., New Haven, Conn. Pliers	500,105	June 20	2243	546	63	1809
Schollhorn & Co., William. (See Schollhorn, August L., assignor.)						
Scholtz, Charles, assignor to E. L. Clark, Pittsburg, Pa. Manufacture of bale-tie hooks and apparatus therefor	495,208	Apr. 11	1104	{ 274 275 }	63	223
Scholz, Ernest, McKeesport, Pa. Tool for reaming the ends of pipe	505,960	Oct. 3	241	65	65	48
Scholz, Samuel G., Billings, Mo. Band-cutter and feeder	511,463	Dec. 26	2806	679	65	1971
Schott, Charles H., <i>et al.</i> (See Bayler, Adolph, assignor.)						
Schönig, Gustav, Vienna, Austria-Hungary. Pedal-zither	495,759	Apr. 18	1988	{ 502 503 }	63	401
Schönberger, Gebrüder. (See Laumann, Josef, assignor.)						
Schoondermark, Johannes A. A., Leeuwarden, Netherlands. Dental plate	493,843	Mar. 21	1728	440	62	1727
Schoppe, Theodor, Bonn, Germany. Refrigerator	510,192	Dec. 5	587	137	65	1521
Schott, Anton, Turner Junction, Ill. Cover for household utensils	495,684	Apr. 18	1869	469	63	379
Schott Brothers. (See Dyer, Lucius, assignor.)						
Schott, Gustavus A. J., Bradford, England. Loom for weaving cut pile fabrics	499,474	June 13	1928	293	63	1620
Schott, William, Brooklyn, N. Y. Toy puzzle	499,333	June 13	971	234	63	1573
Schout, Mathias, Kinsley, Kans. Wind-engine	508,990	Nov. 21	1650	406	65	1099
Schrader, George H. F., New York, N. Y. Valve	495,064	Apr. 11	836	213	63	175
Schrader, George H. F., New York, N. Y. Water-bottle stopper	504,138	Aug. 29	3116	780	64	1201
Schrader, George H. F., New York, N. Y. Valve	505,466	Sept. 26	1927	497	64	1673
Schrader, Jean F. D., Paris, France. Apparatus for mapping or drawing lands	491,193	Feb. 7	216	55	62	789
Schrader, William, Richmond Hill, N. Y. Fork	509,103	Nov. 21	1847	452	65	1136

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Schrag, John J., Valentine, Kans. Heat-regulator	491,600	Feb. 14	894	223	62	942
Schrag, John J., Valentine, Kans. Unloading and stacking apparatus	510,937	Dec. 19	1911	468	65	1792
Schram, Frank, South Bethlehem, Pa. Motor	503,878	Aug. 22	2684	673	64	1103
Schramm, John A., Chicago, Ill. Gate	495,272	Apr. 11	1214	304	63	242
Schramm, Oscar J., Minneapolis, Minn. Camera-shutter	504,425	Sept. 5	187	49	64	1306
Schrandner, Frederick, St. Louis, Mo. Meat-rack	500,956	July 4	637	174	64	120
Schraubstadter, Carl, Jr., and C. R. Schilling, assignors to Western Engravers' Supply Company, St. Louis, Mo. Belt-shifter	492,752	Feb. 28	2691	668	62	1333
Schraubstadter, Carl, Jr., and C. R. Schilling, assignors to Western Engravers' Supply Company, St. Louis, Mo. Block-shaving machine	511,277	Dec. 19	2471	603	65	1897
Schreiber, Philip J., Dayton, Ohio. Automatic elevator-gate	491,601	Feb. 14	895	225	62	942
Schreick, Jacob, Louisville, Ky. Apparatus for distributing solutions for destroying insects	502,766	Aug. 8	888	218	64	744
Schrepfer, Conrad, Paterson, N. J. Mechanism for driving spinning-spindles	501,666	July 18	1805	449	64	360
Schreyer, Henry, Toledo, Ohio. Car-coupling	492,342	Mar. 7	106	26	62	1478
Schrivver, Oliver P., Newport, Ky. Wire-cloth reel and cutter	506,019	Oct. 3	336	89	65	66
Schrivver, Oliver P., Newport, Ky. Wire-cloth holder	506,020	Oct. 3	337	90	65	66
Schröder, Albert, Hamburg, Germany. Carriage	505,234	Sept. 19	1516	390	64	1582
Schröder, Ehregott, Berlin, Germany. Manufacture of metal foil	509,951	Dec. 5	173		65	1442
Schröder, Ferdinand, Pritzwalk, Germany. Rotary motor or pump for steam, water, or compressed air	493,844	Mar. 21	1729	441	62	1727
Schrödlein, Richard, Auscha, Austria-Hungary. Car starter and brake	501,447	July 11	1459	365 366	64	280
Schroeder, Conrad, Milwaukee, Wis. Harness-pad	489,270	Jan. 3	448	124	62	99
Schroeder, Conrad, assignor of one-half to F. Achtenhagen, Milwaukee, Wis. Harness-pad	497,255	May 9	1375	349	63	884
Schroeder, Conrad, assignor of one-half to F. Achtenhagen, Milwaukee, Wis. Fastener for bottle-stoppers	509,586	Nov. 28	2699	653	65	1310
Schroeder, Conrad, assignor of two-thirds to A. Stollenwerk and F. Achtenhagen, Milwaukee, Wis. Stopping bottles	505,300	Sept. 19	1633	422	64	1604
Schroeder, Conrad, assignor of two-thirds to A. Stollenwerk and F. Achtenhagen, Milwaukee, Wis. Stopping bottles	505,301	Sept. 19	1634	422	64	1604
Schroeder, Conrad, assignor of two-thirds to A. Stollenwerk and F. Achtenhagen, Milwaukee, Wis. Corking bottles	505,677	Sept. 26	2304	585	64	1743
Schroeder, Frank O., Oak Harbor, Ohio. Sawmill-carriage feed	489,988	Jan. 17	1573	412	62	353
Schroeder, Frederick C., Alameda, Cal. Guide-strip for window-shades	507,288	Oct. 24	2543	626	65	513
Schroeder, Frederick W., assignor to Eclipse Patent Nut-Lock Washer Company, Limited, Newtown, New South Wales. Lock-washer	497,348	May 16	1567	394	63	932
Schroeder, John, Amity, assignor of one-half to C. H. Reupke and W. Getty, Davenport, Iowa. Means for operating washing-machines	498,031	May 23	2651	662 663	63	1141
Schroeder, John C., Onekama, Mich. Clay-screen	503,619	Aug. 22	2309	576	64	1030
Schroeder, John C., Onekama, Mich. Brick-cutting machinery	505,678	Sept. 26	2306	585	64	1743
Schroeder, John H., Rush City, Minn. Bedclothes-clamp	499,855	June 20	1864	452	63	1745
Schroeder, Otto, Denver, Colo. Tobacco-pipe	501,302	July 11	1216	308	64	236
Schroeder, William S., and A. P. Lindholm, Chicago, Ill. Car-coupling	509,104	Nov. 21	1548	452 453	65	1136
Schröter, Günther F. C., Redding, Cal. Snap-buckle	503,489	Aug. 15	2086	521	64	975
Schroyer, Charles A., Chicago, Ill. Steam-trap	510,651	Dec. 12	1381	338	65	1683
Schubert, August, Onida, N. Y. Fifth-wheel for spring-vehicles	506,376	Oct. 10	1010	251 252	65	204
Schubert, George, Walnut, Tex. Knotting mechanism for grain-binders	489,096	Jan. 3	173	48	62	41
Schubert, George, Walnut, Tex. Feeding-chamber and door for baling-presses	496,981	May 9	154	250	63	809
Schubert, George, Walnut, Tex. Baling-press	498,032	May 23	2652	663	63	1141
Schubert, George, Walnut, Tex. Bale-wiring tool	501,667	July 18	1806	449	64	360
Schubert, George, Walnut, Tex. Bale or bundle wiring tool	502,323	Aug. 1	120	27	64	587
Schubert, George, Walnut, Tex. Baling-press	502,833	Aug. 8	1008	246	64	767
Schubert, George, Walnut, Tex. Metal-banding or bale-wiring tool	503,257	Aug. 15	1704	419	64	907
Schubert, George, Walnut, Tex. Baling-press	504,481	Sept. 5	276	71	64	1321
Schubert, Julius, Brooklyn, N. Y. Apparatus for mixing asphalt cement	501,215	July 11	1025	275 276	64	214
Schubert, Louis H., Wheeling, W. Va. Musical instrument	500,433	June 27	2803	690	63	1920
Schuckert & Co. (See Utzinger, August, assignor.)						
Schudy, Charles E. (See Rodger and Schudy.)						
Schuelkens, Bernard W., Jr. (See Bosch, William U., assignor.)						
Schuermann, Anton, Decatur, Ill. Screw-driver	504,757	Sept. 12	740	184	64	1423
Schuessler, Heinrich, College Point, N. Y. Frame	496,703	May 2	493	132	63	709
Schuev, John L., Rochester, N. Y. Trousers	501,964	July 25	2225	572	64	460
Schuhlein, George, assignor of one-half to T. Lederle, New York, N. Y. Combined piano and organ	505,235	Sept. 19	1517	396	64	1582
Schultz, Henry J., St. Paul, Minn. Fire-escape	511,218	Dec. 19	2371	579	65	1879
Schüle, Gottlieb. (See Burkhardt and Schüle.)						
Schulenburg, Adolph, San Francisco, Cal. Ore-crushing mortar	492,634	Feb. 28	2515	623	62	1298
Schulenburg, Charles, Detroit, Mich. Billiard-cushion	505,007	Sept. 12	1153	295	64	1502
Schuler, Johann, Bochum, Germany. Rail-joint	508,580	Nov. 14	994	244	65	959
Schüler, Lina, Whitestone, N. Y., assignor to M. Bachert, Boston, Mass. Fireproofing compound	502,867	Aug. 8	1057		64	776
Schulhoff, John F., New Bremen, Ohio. Safe	499,257	June 13	841	201	63	1551
Schulte, Catherine, Port Huron, Mich. Convertible chair	491,602	Feb. 14	897	225	62	942
Schulte, Frank H., Racine, Wis. Excavator	508,437	Nov. 14	748	184 185	65	911
Schulte, Hermann, Vienna, Austria-Hungary. Rag-engine	492,239	Feb. 21	1879	469 470	62	1156
Schultz, Adolphe L. G. (See Vallée and Schults.)						
Schultz, Charles H. S. (See Ophoven, Alois, assignor.)						
Schultz, Fred, Jr., Braceville, Ill. Frogless railway-switch	503,440	Aug. 15	1992	494	64	958
Schultz, Frederick B., New York, N. Y. Doll	504,627	Sept. 5	504	129	64	1365
Schultz, Gustav, assignor to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Blue dye	511,653	Dec. 26	3106		65	2025
Schultz, Horatio N., Union Bridge, assignor of one-half to A. Jones, Baltimore, Md. Fruit or vegetable drier	505,610	Sept. 26	2186	553	64	1722
Schultz, John L., and A. C. Westlake, Brooklyn, N. Y.; said Schultz assignor to said Westlake. Stove-board	494,968	Apr. 4	690	177	63	132
Schultz, Louis, New York, N. Y. Quilting-machine	507,757	Oct. 31	3337	817 818	65	777
Schultze, Frederick W., Philadelphia, Pa. Padlock	492,240	Feb. 21	1880	470	62	1156

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Schultze, Frederick W., assignor to Schultze Lock Manufacturing Company, Limited, Philadelphia, Pa. Padlock	496,369	Apr. 25	2950	737	63	596
Schultze, Gustav F. W., Berkeley, Cal. Coin-controlled apparatus	502,891	Aug. 8	1094	269	64	782
Schultze Lock Manufacturing Company. (See Schultze, Frederick W., assignor.)						
Schulz, Alexander H. (See Gay and Finke, assignors.)						
Schulze-Berge, Franz G. A. (See Schulze-Berge, Hermann and F. G. A.)						
Schulze-Berge, Hermann, Brooklyn, N. Y. Apparatus for the manufacture of glassware	493,302	Mar. 14	845	{ 215 216 }	62	1539
Schulze-Berge, Hermann and F. G. A., Brooklyn, N. Y. Manufacture of electric lamps	506,733	Oct. 17	1598	402	65	329
Schumacher, Carl R. (See Dawson and Schumacher.)						
Schumacher, George F. (See Dawson and Schumacher.)						
Schumacher, Godfried, Batesville, Ind. Vehicle	505,946	Oct. 17	1946	482	65	394
Schumacher, Nicolas, La Motte, Iowa. Folding table	499,599	June 13	1431	343	63	1655
Schumaker, Gustave. (See Scheuer, Joseph F., assignor.)						
Schumann, Charles B., South Norwalk, Conn. Hat-tip-stretching machine	497,969	May 23	2550	637	63	1123
Schumann, Francis, Philadelphia, Pa. Grinding-machine	489,333	Jan. 3	535	{ 145 146 }	62	116
Schumann, Otto F., Brooklyn, N. Y. Bolt for attaching articles to walls	499,444	June 13	1186	233	63	1612
Schumm, Friedrich, Stuttgart, Germany. Flower-card	508,149	Nov. 7	283	71	65	810
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Valve-gear for gas or petroleum motor engines	495,376	Apr. 11	1371	342	63	271
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Apparatus for supplying oil or other liquids under pressure	496,751	May 2	574	154	63	722
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Gas or oil motor engine	497,689	May 16	2105	{ 525 526 }	63	1029
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Gas or oil motor engine	510,712	Dec. 12	1480	{ 365 366 }	65	1702
Schupp, Frederick J., Marshall, Mo. Bolting-reel	501,898	July 18	2178	540	64	424
Schupp, Frederick J., Marshall, Mo. Bolting-reel	501,899	July 18	2180	540	64	424
Schupp, Frederick J., Marshall, Mo. Bolting-chest	505,801	Sept. 26	2504	632	64	1780
Schurig, Carl H., and C. Prüfer, Mülheim, Germany. Flower-pot	491,786	Feb. 14	1177	{ 294 295 }	62	998
Schurig, Hermann, Offenbach, Germany. Punching-machine	493,791	Mar. 21	1642	419	62	1711
Schürmann, Gustav A. (See Blome, Adolph, assignor.)						
Schutte, Louis. (See Korting, Ernst, assignor.)						
Schutte, Louis, Philadelphia, Pa. Condenser	493,123	Mar. 7	547	{ 136 137 }	62	1467
Schutte, Louis, Philadelphia, Pa. Valve for reversible steam-engines	501,965	July 25	2286	572	64	460
Schutte, Louis, Philadelphia, Pa. Apparatus for preventing the backflow of water from condensers	508,246	Nov. 7	435	106	65	839
Schutz, Adolph C. (See Borgfeldt, Nicholas H., assignor.)						
Schutz, Adolph C., assignor to himself and N. H. Borgfeldt, Brooklyn, N. Y. Cigar-bunching machine	497,415	May 16	1666	{ 420 421 }	63	951
Schützinger, Carl T., Hamburg, Germany. Hydraulic air-compressing apparatus	508,150	Nov. 7	284	71	65	811
Schuyler, Abram, assignor of one-half to A. Schuyler, Scott's, Mich. Churn-dasher	508,768	Nov. 14	1267	315	65	1012
Schuyler, Adely. (See Schuyler, Abram, assignor.)						
Schuyler Electric Company. (See Knowles, Edward R., assignor.)						
Schuyler Electric Company. (See Knowles and Park, assignors.)						
Schuyler Electric Company. (See Lemp and Wightman, assignors.)						
Schuyler Electric Company. (See Offrell, Olof, assignor.)						
Schuyler Electric Company. (See Russell, George L., assignor.)						
Schuyler Electric Company. (See Wightman and Lemp, assignors.)						
Schwab, Charles M. (See Keiser and Schwab.)						
Schwab, Gustave, New York, N. Y. Album	494,031	Mar. 21	2049	522	62	1787
Schwab, Rudolph J., C. A. Sercomb, and J. K. Tremain, Milwaukee, Wis. Engineer's instructor	508,247	Nov. 7	437	106	65	839
Schwab, Samuel M., Jr., New York, N. Y. Construction of images	502,589	Aug. 1	568	136	64	670
Schwab, Willy, Cologne, Germany. Machine for eliminating stones, &c., from coffee	505,487	Sept. 26	1929	497	64	1674
Schwabe, Gustav, Berlin, Germany. Contrivance for setting traveling objects in motion	495,273	Apr. 11	1215	304	63	242
Schwabe, Hermann, Verviers, Belgium. Apparatus for drying, &c.	504,758	Sept. 12	740	184	64	1423
Schwabach, Edward, Jr., Brooklyn, N. Y. Glove-turning device	493,656	Mar. 21	1424	363	62	1667
Schwalen, John N., assignor of one-half to L. Knott, Hudson, Wis. Automatic vehicle-brake	496,540	May 2	236	62	63	662
Schwaller, William L., Halbur, Iowa. Belt-guide	499,334	Jan. 3	537	146	62	116
Schwander, Jacob N., assignor to himself and K. B. Sayres, Cincinnati, Ohio. Shoe-fastening	506,341	Oct. 10	941	235	65	191
Schwanhäusser, Frederick, Jersey City, N. J. Window-shade	508,151	Nov. 7	285	71	65	811
Schwartz, Charles, Brooklyn, N. Y. Sign	493,045	Mar. 7	429	108	62	1143
Schwartz, Charles, Brooklyn, N. Y. Sign	497,035	May 9	1041	266	63	824
Schwartz, Charles, Brooklyn, N. Y. Letter for signs	503,620	Aug. 22	2310	576	64	1030
Schwartz, Jacob, assignor of one-half to A. Maurer, San Antonio, Tex. Composite lamp-chimney	506,734	Oct. 17	1599	403	65	329
Schwarz, Josef. (See Hauptmann and Schwarz.)						
Schwarze, William, Brooklyn, N. Y. Organ-action	498,066	May 23	2729	682	63	1155
Schwarze, William, Brooklyn, N. Y. Means for operating pressure-box bellows of organs	498,087	May 23	2731	683	63	1156
Schwarzer, Franz, Washington, Mo. Zither	502,767	Aug. 8	890	{ 218 219 }	64	744
Schwegler, Frederick R. (See Blake, Edward T., assignor.)						
Schweiger, William J., assignor of one-half to H. Apfelbaum, New York, N. Y. Fire-alarm bell	489,237	Jan. 3	394	109	62	84
Schweiger, William J., assignor of one-half to H. Apfelbaum, New York, N. Y. Electric bell	509,050	Nov. 21	1741	431	65	1116
Schweim, Herman, Detroit, Mich. Lawn traverser and sprinkler	492,843	Mar. 7	107	26	62	1378
Schweinburg, Emil. (See Koenig, Emil, assignor.)						
Schweinburg, Emil, New York, N. Y. Corset	490,455	Jan. 24	2303	607	62	517
Schweinsinger, Otto, Dresden, assignor of one-half to L. Hoffmann, Hamburg, Germany. Making extract of hops	496,752	May 2	576		63	722
Schweitzer, Joseph, Jr. (See Roehm and Schweitzer.)						
Schweitzer, Wilhelm, Freiburg, Germany. Newspaper-holder	508,769	Nov. 14	1268	315	65	1012
Schweizer, Conrad, and J. Nüesch, Schaffhausen, Switzerland; said Schweizer assignor to said Nüesch. Cigaret or cigarette machine	501,620	July 18	1743	{ 434 435 }	64	349
Schweizer, Emil, Sumiswald, Switzerland. Electric clock	504,095	Aug. 29	3047	762	64	1189
Schwendemann, Joseph, Reutlingen, Germany. Parallel vise	491,817	Feb. 14	1221	305	62	1008
Schwendler, William, Milwaukee, Wis. Lemon-squeezer	497,078	May 9	1106	244	63	836
Schwennicke, Carl, assignor to Siemens & Halske, Berlin, Germany. Electric signal device	503,709	Aug. 22	2443	608	64	1055

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Scientific Suspender Company. (See Post, Charles W., assignor.)						
Scotfield, F. M., <i>et al.</i> (See Ellis, Seele H., assignor.)						
Scotfield, Frederic R., Penfield, Pa. Harness-snap	493,188	Mar. 7	645	164	62	1485
Scotfield, G. S., <i>et al.</i> (See Ellis, Seele H., assignor.)						
Scotfield, Levi, Grand Haven, Mich. Actuating mechanism for planters	509,453	Nov. 28	2481	598	65	1268
Scoggin, James H., Petersburg, Va. Car-coupling	506,644	Oct. 10	1435	360	65	287
Scollay, George W., New York, N. Y. Refining vegetable oils	498,821	June 6	121		63	1413
Scollay, George W., New York, N. Y. Treating cotton-seed oil, &c	498,822	June 6	122	31	63	1413
Scollay, George W., New York, N. Y. Making siccatives	510,050	Dec. 5	353		65	1476
Scollay, George W., New York, N. Y. Preserving clam extracts	511,551	Dec. 26	2935		65	1995
Scollay, John A., Brooklyn, N. Y. Thermometer	494,651	Apr. 4	194	49	63	40
Scott, Alice E., Hardesty, Okla. Ter. Automatic folding trunk	504,248	Aug. 29	3304	826	64	1236
Scott, Barton W., San José, assignor to himself, and W. Rice, Saratoga, Cal. Writing-tablet and manuscript-holder	508,349	Nov. 7	594	146	65	869
Scott, Bluford T., Milford, Ill. Cultivator	493,124	Mar. 7	549	137	62	1467
Scott, Charles. (See Cook, John W., assignor.)						
Scott, Charles D., Corry, Pa. Tramway-locomotive	504,541	Sept. 5	382	96	64	1341
Scott, Charles F. (See Wurts and Scott.)						
Scott, Charles F., Pittsburg, Pa. Laminated converter-core	509,770	Nov. 28	2985	722	65	1363
Scott, Charles F., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Lightning-arrester	492,544	Feb. 28	2370	588	62	1270
Scott, Charles F., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Station potential-indicator	500,543	June 27	2970	729	63	1951
Scott, Charles F., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. System of electrical distribution	505,928	Oct. 3	196	50	65	39
Scott, Charles F., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Device for indicating synchronism	508,489	Nov. 14	837	207	65	929
Scott, Christophus C., Celina, Ohio. Napkin or paper holder	505,726	Sept. 26	2387	603	64	1757
Scott, Erastus W., Danielsonville, Conn. Bicycle	496,007	Apr. 25	2366	598	63	486
Scott, Frank L. (See Dufour, John J., assignor.)						
Scott, Frank M., and A. F. Seymour, Brooklyn, N. Y. Making dolls	508,770	Nov. 14	1268	315	65	1013
Scott, George B. (See Eckert and Scott.)						
Scott, George W., Belton, Mo. Harvester	502,534	Aug. 1	482	116	64	655
Scott, George W., Belton, Mo. Lister for sod-land	509,952	Dec. 5	174	41	65	1442
Scott, Jacob G. (See Nye, Ralph W., assignor.)						
Scott, Jacob R., New York, N. Y. Skiving-machine	493,189	Mar. 7	646	164	62	1485
Scott, Jacob R., New York, N. Y. Skiving-machine	494,898	Apr. 4	589	148	63	114
Scott, Jacob R., New York, N. Y. Sewing-machine	497,690	May 16	2107	526	63	1029
Scott, James. (See Boening and Sjöström, assignors.)						
Scott, James, Bethany, Cal. Tug-clip for hames	489,989	Jan. 17	1575	412	62	354
Scott, James, and J. R. Granton, Scotland. Steam-boiler furnace	498,580	May 30	3546	879	63	1315
Scott, James A., <i>et al.</i> (See Hacker, Charles F., assignor.)						
Scott, James H., Bath, Me. Fire-bridge for railway-crossings	505,488	Sept. 26	1930	497	64	1674
Scott, James R. (See Scott, James and J. R.)						
Scott, James S., New York, N. Y. Car-coupling	511,278	Dec. 19	2477	603	65	1897
Scott, James S., New York, N. Y. Car-coupling	511,279	Dec. 19	2478	603	65	1897
Scott, John. (See Richard, Jean E., assignor.)						
Scott, John, <i>et al.</i> (See Smith and Cassidy, assignors.) (Reissue.)						
Scott, John, Willimantic, Conn. Bobbin for sewing-machines	493,845	Mar. 21	1731	441	62	1727
Scott, John, Willimantic, assignor to Willimantic Linen Company, Hartford, Conn. Wood-turning lathe	492,112	Feb. 21	1672	417	62	1112
Scott, John C., <i>et al.</i> (See Schaub, Adolph, assignor.)						
Scott, John E., assignor of one-half to R. L. Russell, Philadelphia, Pa. Ice-creeper	502,324	Aug. 1	121	28	64	587
Scott, John W., Tonica, Ill. Hay-rack	494,695	Apr. 4	265	67	63	53
Scott, Morse P., Woodville, Miss. Car-coupling	501,734	July 18	1912	475	64	378
Scott, Robert M., Balmain, near Sydney, New South Wales. Apparatus for removing harbor and river bars and shoals and preventing the formation of the same	510,713	Dec. 12	1482	366	65	1702
Scott, Robert P., Cadiz, Ohio. Gathering and hulling green peas from the vines	499,397	June 13	1097	264	63	1597
Scott, Robert P., Baltimore, Md. Fruit-pitting machine	501,608	July 18	1709	426	64	343
Scott, Robert P., Baltimore, Md., C. P. and J. A. Chisholm, Oakville, Canada. Pea-hulling machine	500,299	June 27	2589	633	63	1882
Scott, Robert W. (See Williams, Louis N. D., assignor.)						
Scott, Robert W., assignor of one-half to L. N. D. Williams, Philadelphia, Pa. Sleeve for knitted garments	493,224	Mar. 7	701	179	62	1496
Scott, Theodor N., New York, N. Y. Steam-cooker	489,718	Jan. 10	1125	290	62	248
Scott, Thomas G. (See Murray and Scott.)						
Scott, Walker A., Evansville, Ind. Folding bed	503,989	Aug. 29	2889	722	64	1158
Scott, Walter, Plainfield, N. J. Multicolor-printing machine	490,456	Jan. 24	2344	607	62	518
Scott, Walter, Plainfield, N. J. Pasting mechanism for printing-presses	494,233	Mar. 28	2393	604	62	1865
Scott, Walter, Plainfield, N. J. Associating and folding printed sheets	498,033	May 23	2653	663	63	1142
Scott, Walter, Plainfield, N. J. Printing-machine	505,961	Oct. 3	242	65	65	48
Scott, Walter, Plainfield, N. J. Folding-machine	506,448	Oct. 10	1134	283	65	229
Scott, Walter, Plainfield, N. J. Feeding and cutting mechanism for printing-presses	506,798	Oct. 17	1700	427	65	348
Scott, Walter, Plainfield, N. J. Printing-machine	507,758	Oct. 31	3340	818	65	678
Scott, Walter, Plainfield, N. J. Grupper-operating mechanism for printing-machines	508,053	Nov. 7	107	31	65	779
Scott, Walter, Plainfield, N. J. Printing-machine	510,193	Dec. 5	588	137	65	1521
Scott, Walter, Plainfield, N. J. Printing-machine	511,095	Dec. 19	2167	534	65	1840
Scott, William, Medford, Mass. Float-valve	509,401	Nov. 28	2377	576	65	1247
Scott, William, Medford, Mass. Standard for lavatories	539,402	Nov. 28	2379	576	65	1247
Scott, William E., and A. Micks, Wichita, Kans. Earth-auger	501,630	July 18	1745	435	64	350
Scott, William G., Liverpool, England. Interlocking railway-point and signal apparatus	506,266	Oct. 10	810	200	65	165
Scott, William H., and G. W. Wisner, Manhattan, Kans. Stovepipe and thimble fastener	504,269	Sept. 5	91	23	64	1288
Scottron, Samuel R., Brooklyn, N. Y. Supporting-bracket	505,008	Sept. 12	1154	296	64	1502
Seongale, Malcolm, Fort Worth, Tex. Envelope	506,555	Oct. 10	1309	327	65	262
Seoufar, William, Johannesburg, South African Republic. Separator	502,144	July 25	2571	645	64	513
Scouler, James, San Francisco, Cal. Negative and screen holder	505,331	Sept. 19	1676	432	64	1611

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Scovill Manufacturing Company. (See Lines, John, assignor.)						
Scovill Manufacturing Company. (See Wolff, Adrian, assignor.)						
Scovill Manufacturing Company. (See Wolff, Alfred J., assignor.)						
Scoville, Andrew F., and J. E. Genung, Athens, Pa. Stanchion	498,862	June 6	195	48	63	1427
Scoville, Washington L., Chicago, Ill. Can-opener	496,448	May 2	94	27	63	636
Scranton, Albert H., Fremont, Ohio. Cash register and indicator	502,387	Aug. 1	233	55	64	608
Scranton, George H., and L. Spillman, Columbus, Ohio. Trolley-wire support	489,097	Jan. 3	179	48	62	42
Scranton, George H., Jr., assignor to Belden Machine Company, New Haven, Conn. Nail-extractor	502,914	Aug. 8	1135	280	64	791
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing apparatus for multiple switchboards	489,098	Jan. 3	180	49	62	42
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing apparatus for multiple switchboards	489,099	Jan. 3	181	49	62	42
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switchboards	489,100	Jan. 3	183	49, 50	62	43
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Spring-jack switch	489,570	Jan. 10	913	238	62	206
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-board system. (Reissue)	489,990	Jan. 17	1575	412	62	354
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing apparatus for multiple-switchboard systems	11,306	Feb. 7	735	186	62	890
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Duplex electric-arc lamp	491,250	Feb. 7	301	77	62	806
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Duplex electric-arc lamp	491,251	Feb. 7	303	77	62	807
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	491,603	Feb. 14	808	225	62	942
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	491,604	Feb. 14	900	226	62	943
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Cut-out for arc lamps	491,605	Feb. 14	901	226	62	943
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Switching system for telephone-exchanges	491,688	Feb. 14	1021	258	62	970
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard apparatus	496,904	May 9	842	224	63	789
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system	496,905	May 9	848	224, 225	63	790
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard testing apparatus	496,906	May 9	851	225	63	791
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing apparatus for multiple-switchboard systems	496,907	May 9	854	225, 226	63	792
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electrode-shield for arc lamps	497,898	May 23	2444	610	63	1106
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-lighting system	498,312	May 30	3112	775, 776	63	1238
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switch	501,168	July 11	1021	259	64	200
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	501,169	July 11	1023	259	64	200
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Duplex electric-arc lamp	501,170	July 11	1025	259	64	201
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple switchboard for telephone-exchanges	501,847	July 18	2088	516	64	409
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	502,471	Aug. 1	371	89	64	634
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Circuit-controlling mechanism for arc lamps	502,535	Aug. 1	482	116	64	655
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	502,536	Aug. 1	485	116	64	656
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switchboards	502,768	Aug. 8	892	219	64	744
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Lock-switch for electric switchboards	502,769	Aug. 8	894	219	64	745
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	502,770	Aug. 8	895	220	64	745
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Transfer system for switchboards	502,771	Aug. 8	897	220	64	746
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-signal for multiple switchboards	502,772	Aug. 8	900	220	64	746
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing system for multiple switchboards	502,773	Aug. 8	902	221	64	747
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switchboards	502,774	Aug. 8	904	221	64	747
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing apparatus for multiple switchboards	502,775	Aug. 8	907	221	64	748
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system	503,099	Aug. 8	1434	354	64	844
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Cabling system for multiple switchboards	503,555	Aug. 15	2181	546	64	992
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard keyboard apparatus	504,249	Aug. 29	3305	825	64	1236
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange testing apparatus	504,250	Aug. 29	3306	826	64	1236
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Vibrating circuit-breaker and retardation-coil for test systems	504,251	Aug. 29	3308	826	64	1237
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system for telephone-exchanges	508,054	Nov. 7	111	31, 32	65	779
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	509,186	Nov. 21	1978	481	65	1162
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Regulator for dynamo-electric machines	509,953	Dec. 5	175	41	65	1442
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Dynamo-electric machine	509,954	Dec. 5	177	42	65	1443
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Regulator for dynamo-electric machines	509,955	Dec. 5	179	42	65	1443

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Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Annunciator for telephone-switchboards	509,956	Dec. 5	181	43	65	1443
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board system for telephone-exchanges	511,464	Dec. 26	2808	679	65	1971
Scribner, Charles E., and W. R. Patterson, assignors to Western Electric Company, Chicago, Ill. Spring-jack switch for telephone-exchanges	489,571	Jan. 10	915	239	62	206
Scribner, Charles E., and E. P. Warner, assignors to Western Electric Company, Chicago, Ill. Perforated pole-piece for dynamo-electric machines	496,449	May 2	95	27	63	636
Scriven, Caroline A., New York, N. Y. Waist or blouse	490,686	Jan. 31	2744	707	62	611
Scriven, Charles, Leeds, England. Door-closing device	490,990	Jan. 31	3233	826	62	707
Scriven, Jeremiah A. (See Tracy, William H. H., assignor.)						
Scriven, Jeremiah A., New York, N. Y. Undergarment	492,055	Feb. 21	1585	394	62	1095
Scroggin, William. (See Pope, Charles E., assignor.)						
Scruggs, Lawrence H. (See Young and Scruggs.)						
Scruggs, Richard M. (See Pulliam, Luther, assignor.)						
Scaudder, Wilber S., Brooklyn, N. Y. Space-bar for line-casting machines	494,899	Apr. 4	591	149	63	115
Scaudder, Wilbur S., Brooklyn, N. Y., assignor to Monoline Composing Company, Washington, D. C. Line-casting machine	506,198	Oct. 3	659	167 168 169 170 171	65	127
Scullen, G. Arthur. (See Curtis, Andrew J. and W. H., assignors.)						
Scurr, James M., and S. R. Cotton, Creston, Iowa, assignors to Simplex Car Coupler Company, St. Joseph, Mo. Car-coupling	493,792	Mar. 21	1644	419	62	1711
Scurr, James M., and E. D. Whipple, Creston, Iowa, assignors to Simplex Car Coupler Company, St. Joseph, Mo. Car-coupling	493,793	Mar. 21	1646	419	62	1711
Se Cheverell, Jean H., assignor to H. N. Bancroft, Jefferson, Ohio. Electric belt	502,776	Aug. 8	909	221 222 223 429	64	748
Seabury, Charles L., Nyack, N. Y. Steam-boiler	497,432	May 16	1699	429	63	956
Seabury & Johnson. (See Shaw, Charles H., assignor.)						
Seagrave, Frank E., Toledo, Ohio. Electric railway-signal	504,542	Sept. 5	384	96, 97	64	1342
Seal, William P. (See McCook and Seal.)						
Seaman, Charles J. J., et al. (See Stamp, John G., assignor.)						
Seaman, George Q., assignor to himself, A. Wilson, and W. Jones, Brooklyn, N. Y. Construction of trolley-lines	508,771	Nov. 14	1269	316	65	1013
Seaman, John A., Chicago, Ill. Crozing and howeling machine	490,314	Jan. 24	2133	555	62	477
Seaman, John A., Chicago, Ill. Crozing and howeling machine	490,315	Jan. 24	2134	553 556	62	477
Seaman, John A., Chicago, Ill. Machine for hooping barrels	490,316	Jan. 24	2134	556	62	478
Seamans, Irving M., Buffalo, N. Y. Thermostat	489,991	Jan. 17	1577	413	62	354
Seamless Rubber Company. (See Longden, Charles E., assignor.)						
Seamon, Andrew D. (See Wilson, Amos R., assignor.)						
Seamon, Andrew D., and A. Wilson, Martin's Ferry, Ohio. Manufacture of bull's-eye lanterns	507,849	Oct. 31	3507	863	65	709
Seaney, Ora E., Fort Wayne, Ind. Former for burial-robes	508,846	Nov. 14	1382	343	65	1033
Search, Casper F., assignor to Appleton Manufacturing Company, Appleton, Wis. Corn-sheller	500,159	June 27	2372	574 575	63	1844
Search, Casper F., assignor to Appleton Manufacturing Company, Appleton, Wis. Tread-power	500,220	June 27	2473	603	63	1862
Searcy, William E. H., Griffin, Ga. Convertible seed or fertilizer distributor	502,892	Aug. 8	1097	269 270	64	783
Searle, James W., assignor of one-half to W. L. White, Washington, D. C. Copy-holder and printer's guide	501,234	July 11	1114	282	64	218
Searle, John Q. C., Chicago, Ill. Steam-trap	495,377	Apr. 11	1372	342 343	63	271
Searle, John Q. C., and E. W. Jenks, Chicago, Ill. Combined hose-coupling and steam-trap	505,727	Sept. 26	2338	604	64	1757
Searls, Anson, Newark, N. J. Carriage dash rail and post	496,101	Apr. 25	2515	636	63	514
Searls, Anson, Newark, N. J. Whip-holder	511,165	Dec. 19	2285	559	65	1863
Sears, Charles, Cleveland, Ohio. Machine for making linotypes	489,503	Jan. 10	822	215 216	62	188
Sears, Charles, Cleveland, Ohio. Justifying matrix-lines	508,186	Nov. 7	332	82, 83 106	65	819
Sears, Charles, Cleveland, Ohio. Matrix-making machine	508,248	Nov. 7	439	107 108 109	65	840
Sears, R., et al. (See James, Homer, assignor.)						
Sears, Robert, and L. B. Lindsey, Spokane, Wash. Bridle-bit	492,241	Feb. 21	1781	470	62	1156
Sears, Willard T., Boston, Mass. Chock and guard for railway-cars	502,145	July 25	2572	645	64	513
Sears, William, Boston, Mass. Electric-circuit-closing device	501,258	July 11	1155	292	64	224
Seat, Samuel A., Hematite, Mo. Washing-machine	493,657	Mar. 21	1425	363	62	1667
Seaton, Albert E., Hull, England. Hydraulic jack	511,096	Dec. 19	2173	515	65	1842
Seaton, Benjamin C., Nashville, Tenn. Electrical railway-signal	503,100	Aug. 8	1437	354 355	64	845
Seaton, Benjamin C., Nashville, Tenn., assignor of one-half to W. S. Barkley, Indianapolis, Ind. Electric rail-bond	503,101	Aug. 8	1440	355	64	845
Seaton, Charles S., Cleveland, Ohio. Machine for finishing bolt-heads	503,879	Aug. 22	2686	673	64	1103
Seavor Sewing Machine Company. (See Gooding, Charles S., assignor.)						
Seaverns, George W., Cambridge, Mass. Pianoforte-action	489,615	Jan. 10	978	255	62	219
Seavey, George F., Boston, Mass. Shade for electric lamps	510,095	Dec. 5	428	95	65	1490
Sebastian, Charles, assignor to Rogers, Schwartz & Co., Salem, Ill. Fruit-evaporator	506,377	Oct. 10	1012	252 253	65	205
Sebenius, Johan L., Nykroppa, Sweden. Centrifugal apparatus for casting metals	510,995	Dec. 19	2020	498	65	1811
Schriest, Albert. (See Edmunds, Henry, Jr., assignor.)						
Seck & Co., W. (See Seck, Wilhelm, assignor.)						
Seck, Heinrich, Dresden, Germany. Dust-collector	493,565	Mar. 14	1269	325	62	1620
Seck, Wilhelm, assignor to W. Seck & Co., Oberursel, Germany. Hydrocarbon-motor	509,830	Nov. 28	3089	746	65	1384
Secker, Francis J., London, England. Game apparatus	498,367	May 30	3209	798	63	1254
Secord, Herbert C., et al. (See Rodwell, George J. B., assignor.)						
Seddon, Edward H., Brooklands, England. Flexible wheel-tire	508,991	Nov. 21	1651	407	65	1099
Sedgwick, Willis L., and H. M. Erwin, Sioux City, Iowa. Overshoe	511,166	Dec. 19	2287	559	65	1863
See, Alonzo B., and W. L. Tyler, Brooklyn, N. Y. Regulating-switch for electric elevators	500,274	June 27	2547	622	63	1875
See, Horace, New York, N. Y. Regulating plug-cock	505,489	Sept. 26	1931	498	64	1674
Seebach, George W., New York, N. Y. Game-board	499,351	June 13	1019	245	63	1583

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Seebeck, August H., North Redwood, Minn. Straw-stacker	492,113	Feb. 21	1674	417	62	1113
Seeberg, Rudolf R. S. von. (See Hubner and von Seeberg.)						
Seeberger, August, Fulton, Iowa. Stock-rack	499,757	June 20	1699	407	63	1714
Seebeck, George, Pittsburg, assignor of one-half to J. Scheillein, Allegheny, Pa. Coasting-sled	505,993	Oct. 3	300	77	65	58
Seebold, Julius, Brooklyn, N. Y. Station-indicator	495,123	Apr. 11	972	244	63	199
Seeley, Almeron S., Everett, Mich. Plow	500,691	July 4	253	68	64	43
Seeley, Almeron S., Everett, Mich. Cultivator gang-plow	506,556	Oct. 10	1310	327 328	65	262
Seeley, Joseph S., Fremont, Nebr. Belt-tightener	492,972	Mar. 7	317	80	62	1422
Seely, John A., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Metallic circuit for multiple-switchboard systems	491,252	Feb. 7	305	77, 78	62	807
Seely, Obadiah, assignor to E. C. Stearns & Co., Syracuse, N. Y. Spring-hinge	496,008	Apr. 25	2368	599	63	486
Seely, Obadiah, assignor to E. C. Stearns & Co., Syracuse, N. Y. Door-hanger	496,009	Apr. 25	2370	599	63	486
Seely, Obadiah, assignor to E. C. Stearns & Co., Syracuse, N. Y. Door-hanger	496,010	Apr. 25	2371	600	63	487
Seely, Obadiah, assignor to E. C. Stearns & Co., Syracuse, N. Y. Faucet	496,011	Apr. 25	2372	600	63	487
Seely, Obadiah, assignor to E. C. Stearns & Co., Syracuse, N. Y. Sash-balance	509,587	Nov. 28	2700	653	65	1310
Sefton, John L. (See Reber and Sefton.)						
Sefton, William E., assignor to Sherlock, Elmer & Sherlock, Canton, Ohio. Sewer-basin trap	506,267	Oct. 10	812	200	65	165
Segal, Adolph, <i>et al.</i> (See Mullin, Bernard A., assignor.)						
Seger, Eberhard, Stockholm, Sweden. Centering device for revolving shafts	510,938	Dec. 19	1913	468	65	1792
Seger, Garret, Buffalo, N. Y. Clothes-pouder	491,448	Feb. 7	643	160	62	870
Seger, Garret, assignor to A. P. F. and A. Swanson, Buffalo, N. Y. Washing-machine	502,802	Aug. 1	740	178	64	702
Seger, John C., Greenbrier, Ala. Nut-lock	511,465	Dec. 26	2811	680	65	1972
Sege-schneider, Gustav, assignor to Waring Hat Manufacturing Company, Yonkers, N. Y. Pile-wire for looms	500,275	June 27	2548	623	63	1875
Seib, George A. (See Dillman and Seib.)						
Seiberling & Co. J. F. (See Seiberling and Knecht, assignors.)						
Seiberling, Frank A., and C. H. Knecht, assignors to J. F. Seiberling & Co., Akron, Ohio. Grain-binder	496,797	May 2	648	172 173	63	734
Seibert, Nicholas, Boston, assignor of nineteen twenty-fifths to G. F. Malcolm, Allston, O. E. Simmons and S. Leipziger, Boston, Mass. Sanding device for cars	502,053	July 25	2428	611	64	486
Seibold, Albert C., Mount Vernon, N. Y. Electrode for arc lamps	498,141	May 23	2810	703	63	1170
Seidell, Mary V., Washington, D. C. Hair-curler	492,561	Feb. 28	2398	596	62	1276
Seidenberg, Joseph, <i>et al.</i> (See Pisko, Emanuel, assignor.)						
Seidenstricker, William H., Baltimore, Md. Ice-cream refrigerator	495,065	Apr. 11	839	213	63	175
Seidlitz, Nuta M., Baarn, Netherlands. Setting for diamonds and the like	506,268	Oct. 10	813	200	65	166
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, near Dresden, Germany. Dye from alpha oxyvitic acid	493,413	Mar. 14	1003		62	1572
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, near Dresden, Germany. Creosote compound	501,235	July 11	1115		64	218
Seiffert, Rudolf, Chicago, Ill. Earpiece	500,957	July 4	659	175	64	120
Seiler, Paul, San Francisco, Cal. Electric-railway danger signal and bell	493,125	Mar. 7	550	137	62	1468
Seiler, Philipp, Chicago, Ill. Match-box	509,051	Nov. 21	1742	431	65	1117
Seinecke, Adolph E., Cincinnati, Ohio. Float water-gage	495,523	Apr. 18	1608	405	63	335
Seip, Thomas A., Dayton, assignor to P. B. Holly and C. A. Salzman, Hamilton, Ohio. Machine for cleaning grain	489,501	Jan. 10	825	216	62	188
Seip, Thomas A., Dayton, assignor of one-half to P. B. Holly and C. A. Salzman, Hamilton, Ohio. Grain-cleaning machine	493,451	Mar. 14	1070	275	62	1583
Seitz, Earle W., Kansas City, Mo. Car-coupling	504,759	Sept. 12	742	185	64	1424
Seitz, Edward, Peoria, Ill. Beer-cooler	490,506	Jan. 24	2435	628	62	537
Seitz, Edward, Peoria, Ill. Beer-cooler	506,608	Oct. 10	1382	347	65	277
Seitz, Edward, Melbourne, Victoria. Centrifugal pump	495,760	Apr. 18	1990	503 504	63	401
Seitz, George, and W. B. McNulty, Hoboken, N. J.; said Seitz assignor to said McNulty. Pulley-covering	499,752	June 20	1700	407	63	1714
Seitz, John, Haysville, assignor of one-half to J. T. Corn, Jasper, Ind. Apparatus for forming leaders in blast-holes	507,759	Oct. 31	3342	818 819	65	678
Selby, Allen, assignor of one-half to H. P. Burgard, Buffalo, N. Y. Curtain-rod for sleeping-cars	496,621	May 2	359	97, 98	63	685
Selden, Edward G., and G. D. Chamberlain, Springfield, Mass. Brake mechanism for velocipedes	499,044	June 6	528	124	63	1483
Selden, Frank H., Harvey, Ill. Drawing-table	511,466	Dec. 26	2812	680	65	1972
Self Adjusting Shoe Company. (See Trice, William E., assignor.)						
Sell Winding Clock Company. (See Schmidt, Frederick M., assignor.)						
Selle, Joseph E. (See Hanks, William R., assignor.)						
Selleck, William E., Chicago, Ill. Form for bank-checks or the like	507,850	Oct. 31	3508	863	65	710
Sellers, Edwin J., <i>et al.</i> (See Geise, Henry, assignor.)						
Sellers, George H., Wilmington, Del. Twisting-machine	497,827	May 23	2320	582	63	1084
Sellers, George H., Wilmington, Del. Chuck	507,598	Oct. 31	3093	755	65	631
Sellers, John A., Gallitzin, Pa. Bracket	510,194	Dec. 5	590	138	65	1521
Sellers, William, Haverhill, assignor of one-half to H. E. Wales, Bradford, Mass. Horse-collar	497,502	May 16	1820	458	63	977
Selling, John. (See O'Connor and Reisky, assignors.)						
Sellon, Charles A., Pike, assignor to W. J. Sellon, Dansville, N. Y. Pump-handle	503,990	Aug. 29	2890	723	64	1158
Sellon, William J. (See Sellon, Charles A., assignor.)						
Selman, George. (See Maddin and Selman.)						
Selover, Charles B., Owasco, N. Y. Baling press	496,669	May 2	445	120	63	700
Selts, William A., <i>et al.</i> (See Olmsted, Levi assignor.)						
Seltzer, Uriah D., Lebanon, Pa. Cake-cutter	499,149	June 6	678	162	63	1509
Selvidge, Charles W. (See Bang and Selvidge.)						
Senmel, Howard S., assignor of one-half to J. W. Balliet, Slatington, Pa. Slate-frame	496,798	May 2	652	173	63	735
Semper, Conrad. (See Harrison and Semper.)						
Senderling, Martin L., Jersey City, N. J. Dump-wagon	492,562	Feb. 28	2399	596	62	1276
Senderling, Martin L., Jersey City, N. J. Dumping-wagon	505,236	Sept. 19	1518	397	64	1582
Senderling, Martin L., Jersey City, N. J. Vehicle-seat lock	505,854	Oct. 3	76	19	65	17
Senderling, Martin L., Jersey City, N. J. Dump-wagon	509,105	Nov. 21	1850	453	65	1137
Serdinko, John, New Braunfels, Tex. Automatic telephone-exchange system	510,195	Dec. 5	592	138 139	65	1522
Sendker, Louis, <i>et al.</i> (See Edmonds, Charles S., assignor.)						
Seng, Wendelin, Chicago, Ill. Chair	490,366	Jan. 24	2216	578	62	495
Senger, Herman, Jersey City, N. J. Machine for forming sheet metal	504,628	Sept. 5	505	130	64	1365
Sennett, Leonidas, and T. F. Arnett, assignors of one-half to C. C. Talley and C. Cobbs, Russell, Ky. Air-brake coupling	489,763	Jan. 10	1198	314	62	263

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Sensabaugh, Oscar F. (See Baum and Sensabaugh.)						
Senseney, Edgar M., St. Louis, Mo. Adjustable induction-coil	507,458	Oct. 24	2825	691	65	570
Sensenig, Aaron H., Farmersville, assignor of one-half to S. W. Horst, Hemmelstown, Pa. Axle-box	508,438	Nov. 14	750	185	63	912
Sentinella, Robert L., London, England. Metallic flux for use in refining iron or steel for castings	506,799	Oct. 17	1703	.....	65	349
Sercomb, Charles A. (See Schwab, Sercomb, and Tremain.)						
Sercombe-Bolte Manufacturing Company. (See Bolte, Frank H., assignor.)						
Sercombe, Parker H., et al. (See Bolte, Frank H., assignor.)						
Serebriakoff, Hespere, Paris, France. Slow-combustion stove	510,714	Dec. 12	1484	367	65	1702
Sergeant, Charles H., New York, N. Y. Power-auger for mining purposes	511,467	Dec. 26	2814	680	65	1972
Sergeant, Henry C., Westfield, N. J. Pile-driver	498,493	May 30	3402	845	63	1291
Serve, Jean P., Caluire et Cuire, France. Locomotive draft device	498,034	May 23	2654	663 664	63	1142
Servis, William S., et al. (See Rexicker, George W., assignor.)						
Sessions, Egbert G., Rice, and L. B. Embrey, Corsicana, Tex. Implement for tightening and splicing fencing-wire	510,299	Dec. 5	765	186	65	1554
Sessions, Loren B. (See Sweet and Sessions.)						
Setbacken, Peter J. (See Ness and Setbacken.)						
Settle, Emmette W., Slater, Mo. Churn	504,593	Sept. 12	958	247	64	1465
Settle, Thomas, Philadelphia, Pa. Work-carrying device for grinding-machines	510,196	Dec. 5	596	139	65	1522
Settle, Tom, Huddersfield, England. Safety device for elevators	497,433	May 16	1700	429	63	957
Severance Nail Machine Company. (See Severance, William N., assignor.)						
Severance, William N., Appleton, assignor to Severance Nail Machine Company, St. Paul, Minn. Machine for cutting nails	500,958	July 4	659	175 176	64	120
Severance, William N., Appleton, assignor to Severance Nail Machine Company, St. Paul, Minn. Machine for cutting nails	500,959	July 4	668	176 177	61	122
Severio, Frank, et al. (See Grisel, George, assignor.)						
Severy, Melvin L., et al., trustees (See Ohmart, Eli C., assignor.)						
Severy, Melvin L., assignor to F. Doane, C. F. Crowell, and M. L. Severy, trustees, Boston, Mass. Apparatus for obtaining continuous power from the sun	495,163	Apr. 11	1036	258 259	63	210
Severy, Melvin L., assignor to F. Doane, C. F. Crowell, and M. L. Severy, trustees, Boston, Mass. Steam-boiler	495,524	Apr. 18	1609	405	63	335
Severy, Melvin L., assignor to F. Doane, C. F. Crowell, and M. L. Severy, trustees, Boston, Mass. Reflector for radiant energy	503,004	Aug. 8	1293	316	64	818
Severy, Melvin L., assignor to F. Doane, C. F. Crowell, and M. L. Severy, trustees, Boston, Mass. Steam-boiler	503,005	Aug. 8	1294	316 317	64	818
Severy, Melvin L., Boston, assignor to himself, F. Doane, Norwood, and C. F. Crowell, Boston, Mass., trustees. Apparatus for utilizing solar heat	496,959	May 9	925	243	63	804
Severy, Melvin L., assignor to himself, F. Doane, and C. F. Crowell, trustees, Boston, Mass. Apparatus for the utilization of solar heat	497,079	May 9	1107	284 285	63	836
Servier, Moses N., Vernon, Tex. Scale-beam	490,507	Jan. 24	2436	628	62	537
Sevigny, Charles and Z., New Bedford, Mass. Washing-machine	494,282	Mar. 28	2472	623	62	1879
Sevigny, Zoel. (See Sevigny, Charles and Z.)						
Seville, Charles W. (See O'Rourke, John F., assignor.)						
Seward, Edward C. (See Thomas and Seward.)						
Sewell, Alfred L., Evanston, Ill. Envelope	494,170	Mar. 28	2287	580	62	1945
Sexton, Benjamin S., Cincinnati, Ind. Land-pulverizer	503,006	Aug. 8	1295	317	64	818
Sexton, Isaac, Somerville, Mass. Can-jacket	496,140	Apr. 25	2167	646	63	523
Sexton, James W., Leavenworth, Kans. Chin-rest for the dead	506,876	Oct. 17	1853	472	65	375
Sexton, Martin V., Hackett City, Ark. Agricultural implement	495,274	Apr. 11	1215	305	63	242
Sexton, William A., Boston, Mass. Self-closing can	502,537	Aug. 1	487	117	64	656
Seybert, Andrew J., Armstrong county, Pa. Warp-beam for looms	504,442	Sept. 5	211	55	61	1310
Seybold, Charles, Cincinnati, Ohio. Bookbinding-press	508,847	Nov. 14	1383	343	65	1033
Seydel, Richard, Untersachsenberg, Germany. Mouth-organ	495,842	Apr. 18	2122	533	63	425
Seyfang, George, et al. (See Newton, Oscar C., assignor.)						
Seyller, August H., Prophetstown, Ill. Stove-caster	497,557	May 16	1897	478	63	991
Seymour, Abner F. (See Scott and Seymour.)						
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Mortising-machine	495,309	Apr. 11	1105	275 276	63	223
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Bending-machine	497,060	May 9	1081	277 278	63	832
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Lathe	501,470	July 11	1488	374 375	64	286
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Molding-machine	509,331	Nov. 21	2236	540 541	65	1210
Seymour, Charles E., Lake Geneva, Wis. Means for and process of separating metals from ores	489,101	Jan. 3	186	50	62	43
Seymour, Charles E., Lake Geneva, Wis. Ore-concentrator	503,687	Aug. 22	2405	600	64	1048
Seymour, Charles E., Lake Geneva, Wis. Ore-concentrator	506,609	Oct. 10	1383	347	65	277
Seymour, Charles E., Lake Geneva, Wis. System for concentration of ores	510,051	Dec. 5	355	79, 80	65	1476
Seymour, Charles E., Lake Geneva, Wis., assignor to Seymour Concentrator Company, of Illinois. Ore-concentrator	498,823	June 6	124	31	63	1413
Seymour Concentrator Company. (See Seymour, Charles E., assignor.)						
Seymour, Edwin B. (See Hannen, John W., assignor.)						
Seymour, Frederick H., assignor of one-half to W. T. McGraw, Detroit, Mich. Cash-reg-ister	507,936	Oct. 31	3641	900	65	714
Seymour, Frederick S., Lake Geneva, Wis. Wrench	501,369	July 11	1350	336	64	259
Seymour, James M., Jr., Newark, N. J. Ventilating mechanism	494,264	Mar. 28	2439	614 615	62	1874
Seymour, James M., Newark, N. J. Rotary fan	495,525	Apr. 18	1611	406	63	336
Seymour, Squire D. (See McMahon, William H., assignor.)						
Seymour, Theodore H., Mount Vernon, Ohio. Button-detaching machine	510,197	Dec. 5	598	140	65	1523
Seymour, William S., Philadelphia, Pa., assignor to M. H. Marcus & Bro., Baltimore, Md. Head-support for beds	493,303	Mar. 14	848	216	62	1540
Seymour, William S., assignor of one-half to J. S. Keller, Philadelphia, Pa. Hook and eye	502,238	July 25	2732	689	64	544
Seymour, William S., assignor of one-half to J. S. Keller, Philadelphia, Pa. Hook and eye	506,735	Oct. 17	1600	403	65	329
Seymour, William S., assignor of one-half to J. S. Keller, Philadelphia, Pa. Hook and eye	506,736	Oct. 17	1601	403	65	330
Seymour, William S., assignor of one-half to J. S. Keller, Philadelphia, Pa. Hook and eye	506,737	Oct. 17	1602	403	65	330
Seymour, William S., assignor of one-half to J. S. Keller, Philadelphia, Pa. Hook and eye	506,738	Oct. 17	1603	404	65	330
Seymour, William S., Philadelphia, Pa., assignor to J. C. Bloom and J. F. Godley, Trenton, N. J. Woven-wire fabric for bed-bottoms	496,908	May 9	857	226	63	792
Shaaber, Mahlon, assignor of one-half to J. S. Ammon, Reading, Pa. Trolley-wire cleaner	504,405	Sept. 5	150	39	64	1298

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Shackelford, Howard D., assignor to T. G. Orwig, Des Moines, Iowa. Suspender-buckle	499,293	June 20	1926	467	63	1754
Shadbolt, Sydney H. (See Bate, Shadbolt, and Houghton.)						
Shade, R. A. (See Richards, George C., assignor.)						
Shadle, Christopher C., et al. (See Green, Ira L., assignor.)						
Shaeffer R. H. (See Kepner, Eugene T., assignor.)						
Shafer, Benjamin F., Sr., Wilkensburg, Pa. Nut-lock	503,808	Aug. 22	2593	648	64	1085
Shaffer, Henry E., Rochester, N. Y. Wick-raiser	494,171	Mar. 28	22-9	580	62	1245
Shaffer, Henry E., Rochester, N. Y. Lamp-burner	503,007	Aug. 8	1298	317	64	819
Shaffer, Henry E., Rochester, N. Y. Wick-raiser	506,408	Oct. 10	1064	264	65	215
Shaffer, John, Singer's Glen, Va. Washing-machine	504,946	Sept. 12	1049	269	64	1482
Shaffer, John B., Kearney, Nebr. Wrench	497,135	May 9	1197	305	63	852
Shaffer, John H. and E. Horovsky, Allegheny, Pa. Label-holder	511,167	Dec. 19	2288	559	65	1863
Shaffer, Richard M., assignor to C. W. Kennard and W. Bowie, Baltimore, Md. Water-motor	498,905	June 6	282	65	63	1442
Shaffer, Richard M., assignor to F. Ehlen, Baltimore, Md., and W. F. Beasley, Oxford, N. C. Thill-coupling	499,475	June 13	1229	293	63	1620
Shaffer, Richard M., assignor to E. P. Clark, Baltimore, Md., and S. Welsh, Philadelphia, Pa. Coin-controlled apparatus	508,848	Nov. 14	1385	343	65	1034
Shaffer, Stillman L., Worcester, Mass. Telephone-index	493,304	Mar. 14	850	344	62	1540
Shakespeare, William, Jr. (See Low and Shakespeare.)						
Shakespeare, William, Jr., and G. W. Low, Kalamazoo, Mich. Photographic-camera shutter	495,066	Apr. 11	840	213	63	175
Shallenberger, Charles S., and L. O. Rand, Fort Madison, Iowa. Air-brake	506,739	Oct. 17	1604	214	65	330
Shallenberger, Oliver B., Rochester, Pa. System of electrical distribution	503,621	Aug. 22	2310	404	64	1030
Shallenberger, Oliver B., Rochester, assignor to Westinghouse Electric Company, Pittsburg, Pa. Journal-bearing	499,334	June 13	971	576	63	1573
Shambow, John, et al. (See Pickering, Benjamin A., assignor.)						
Shamp, Henry B., assignor to Pettijohn California Breakfast Food Company, Minneapolis, Minn. Wheat-steamer	493,225	Mar. 7	702	179	62	1496
Shamp, Jesse M., assignor to D. D. Leiner, Wooster, Ohio. Wire fence	507,599	Oct. 31	3094	755	65	631
Shampay, Pascal J., Chicago, Ill. Washboiler	501,448	July 11	1461	366	64	291
Shand, James, assignor to H. Roehm, Detroit, Mich. Carriage-pole	498,581	May 30	3547	367	63	1315
Shanisey, Frederick, Dayton, Ohio. Adding-machine	510,522	Dec. 12	1122	271	65	1636
Shank, Charles A., Albany, N. Y. Turn-table	495,434	Apr. 11	1463	272	63	289
Shank, David A., Versailles, Mo. Double-harpoon clover-hay fork	499,258	June 13	843	201	63	1551
Shank, Orey D., Cincinnati, Ohio. Cover for pneumatic tires	496,909	May 9	858	202	63	792
Shanks, Frank F., Waukegan, Ill. Corn-planter	501,449	July 11	1462	226	64	281
Shannon, Andrew R., Watertown, N. Y. Fire-escape	509,106	Nov. 21	1851	367	65	1137
Shannon, John, Pittsburg, Pa. Wood-graining machine	501,668	July 18	1807	453	64	360
Shanovski, Lou's F., and B. Rubenstein, Chicago, Ill. Food-holder for bird-cages	502,146	July 25	2573	449	64	514
Shantz, Dilman B., Berlin, Canada. Machine for turning buttons	497,349	May 16	1568	450	63	932
Shantz, Dilman B., Berlin, Canada. Button-making machine	511,364	Dec. 26	2630	639	65	1939
Shapiro, Harris. (See Goldstein, Jacob, assignor.)						
Shapiro, Lazarus, San José, Cal. Bicycle	509,692	Nov. 28	2861	640	65	1340
Shapleigh, Frank, et al. (See Hacker, Charles F., assignor.)						
Share, William W., et al. (See Hesse, Gustaf E., assignor.)						
Sharp, Albert A., Memphis, Tenn. Vegetation-exterminator	492,635	Feb. 28	2517	601	62	1299
Sharp, George M. (See Shaw, Methven, and Sharp.)						
Sharp, James, et al. (See Bells, Robert T., assignor.)						
Sharp, John F., Spencer, Ohio. Car-coupling	506,833	Oct. 17	1760	443	65	359
Sharp, John W., Cave City, Ark. Combined land-roller and manure-distributor	508,123	Nov. 7	240	61	65	803
Sharp, Samuel P., Knoxville, Tenn. Angle attachment for dental engines	491,499	Feb. 7	714	180	62	886
Sharp, Warren M., Binghamton, N. Y. Furnace for fusing porcelain, &c.	499,476	June 13	1231	293	63	1620
Sharp, Warren M., Binghamton, N. Y. Apparatus for casting aluminium dental plates	502,209	July 25	2679	676	64	535
Sharp, William F., Lowell, Kans. Fence	493,527	Mar. 14	1200	306	62	1606
Sharpe, Chancey, Derrick City, Pa., and W. D. Coldren, Jamestown, N. Y. Washing-machine	500,160	June 27	2373	575	63	1845
Sharpe, Harry S., Seattle, Wash. Music-board	493,126	Mar. 7	552	137	62	1468
Sharpe, John and T., Thornton, R. I. Wool-combing machine	492,169	Feb. 21	1767	441	62	1133
Sharpe, John and T., Thornton, R. I. Wool-combing machine	492,170	Feb. 21	1768	441	62	1133
Sharpe, Joseph, Paterson, N. J. Machine for making pipes of cement, clay, &c.	506,557	Oct. 10	1312	328	65	263
Sharpe, Thomas. (See Sharpe, John and T.)						
Sharples, David T. (See Sharples, Philip M. and D. T.)						
Sharples, David T. (See Sharples, Philip M. and D. T.) (Reissue.)						
Sharples, Philip M., West Chester, Pa. Centrifugal butter-extractor	497,417	May 16	1670	421	63	952
Sharples, Philip M., West Chester, Pa., and D. T. Sharples, Elgin, Ill. Centrifugal separator. (Reissue)	11,311	Feb. 28	2731	620	62	1342
Sharples, Philip M., West Chester, Pa., and D. T. Sharples, Elgin, Ill. Centrifugal creamer	496,622	May 2	361	98	63	685
Sharples, Philip M., West Chester, Pa., and D. T. Sharples, Elgin, Ill. Centrifugal butter-extractor	497,416	May 16	1668	421	63	951
Sharples, William E., Fall River, Mass. Lap-roll for carding-machines	494,600	Apr. 4	119	28	63	25
Sharpneck, Eliel L., Evanston, Ill. Rock-drill	495,275	Apr. 11	1217	305	63	243
Shartle, Henry H., assignor to one-half to G. B. F. Chaffee, Ruthven, Iowa. Horse-collar	496,541	May 2	237	63	63	662
Shatto, George R. (See Hise, John H., assignor.)						
Shattuck, Charles S. (See Fyrberg, Andrew, assignor.)						
Shattuck, Edwin L., Brooklyn, assignor to R. Hoo, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Printer's galley	489,572	Jan. 10	918	239	62	207
Shattuck, John, et al. (See Shattuck, Samuel, assignor.)						
Shattuck, Samuel, Keith's, assignor to one-half to A. Groves and J. Shattuck, Morgan county, Ohio. Car-coupling	489,393	Jan. 3	625	169	62	135
Shaub, Ambrose B., Beach City, Ohio. Brooder	505,676	Sept. 26	2303	585	64	1742
Shave, Laura. (See McArthur, Thomas J., assignor.)						
Shaw, Ada B., La Harpe, Ill. Stove	507,937	Oct. 31	3642	900	65	735
Shaw, Alton J., Muskegon, Mich. Commutator-brush holder	501,193	July 11	1055	267	64	207
Shaw, Alton J., assignor to Shaw Electric Crane Company, Muskegon, Mich. Hoisting machinery	505,065	Sept. 12	1249	320	64	1519
Shaw, Alton J., assignor to Shaw Electric Crane Company, Muskegon, Mich. Hoisting machinery	505,066	Sept. 12	1252	321	64	1520

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Shaw, Alton J., assignor to Shaw Electric Crane Company, Muskegon, Mich. Hoisting machinery.....	505,067	Sept. 12	1254	{ 321 322 323 }	64	1520
Shaw, Alton J., assignor to Shaw Electric Crane Company, Muskegon, Mich. Hoisting machinery.....	505,068	Sept. 12	1257	{ 332 333 }	61	1521
Shaw, Alton J., assignor to Shaw Electric Crane Company, Muskegon, Mich. Soaking pit for steel ingots.....	505,728	Sept. 26	2390	604	64	1758
Shaw, Charles H., Brooklyn, N. Y. Stamp.....	494,172	Mar. 28	2389	580	62	1845
Shaw, Charles H., Denver, Colo. Steam-generator.....	498,699	May 30	3757	927	63	1351
Shaw, Charles H., Brooklyn, assignor to Seabury & Johnson, New York, N. Y. Sulphur candle.....	501,471	July 11	1491	375	64	287
Shaw, Daniel D., Denver, Colo. Pump.....	489,419	Jan. 3	662	179	62	142
Shaw, Daniel D., Denver, Colo. Motor.....	509,052	Nov. 21	1744	{ 431 432 }	65	1117
Shaw, David, and J. M. Miller, Union, Ohio. Washing-machine.....	496,910	May 9	859	226	63	793
Shaw, Don Carlos. (See Gates, Edwin B., assignor.)						
Shaw, Edgar, Swampscott, Mass. Hitching-strap.....	498,035	May 23	2656	664	63	1142
Shaw, Edgar, Swampscott, Mass. Broom.....	501,370	July 11	1351	337	64	259
Shaw, Edgar, Swampscott, Mass., assignor to Lariat Manufacturing Company, Jersey City, N. J. Lasso.....	504,055	Aug. 29	2983	745	64	1176
Shaw, Edward. (See Reed, Franklin M., assignor.)						
Shaw, Edward, Bristol, England. Clutch.....	495,602	Apr. 18	1736	{ 437 438 }	63	357
Shaw, Edwin F., and J. N. Lorio, Philadelphia, Pa. Elevator-gate-operating device.....	502,936	Aug. 8	1183	292	64	798
Shaw Electric Crane Company. (See Sawyer, Harry, assignor.)						
Shaw Electric Crane Company. (See Shaw, Alton J., assignor.)						
Shaw, Elisha D. (See Cooke and Shaw.)						
Shaw, Elisha D., assignor to H. A. Johns, Philadelphia, Pa. Hatchway mechanism.....	497,528	May 23	2322	582	63	1084
Shaw, Elton R., Los Gatos, Cal. Evaporating-pan.....	501,248	July 18	2091	516	64	409
Shaw, Frank M., J. R. Methven, and G. M. Sharp, Minneapolis, Minn. Self-adjusting friction-clutch.....	494,173	Mar. 28	2291	580	62	1846
Shaw, Frederick E., Providence, R. I. Pile-driver.....	510,198	Dec. 5	599	140	65	1523
Shaw, Harry C., assignor of two-thirds to J. Crone and D. C. Taylor, Sutton, England. Mounting for millstones.....	495,642	Apr. 18	1807	453	63	369
Shaw, Henry F., assignor to Shaw Radial Car Truck Company, Boston, Mass. Truck for street-cars.....	502,503	Aug. 1	429	102	64	645
Shaw, Henry R. (See Meldrum and Shaw.)						
Shaw, James, and M. Clancy, Jr., Racine, Wis. Device for destroying noxious plants.....	489,167	Jan. 3	278	78	62	64
Shaw, John, Bradford, England. Spinning-dier and attachment thereto.....	506,947	Oct. 17	1948	482	65	394
Shaw, John F., Auburn, N. Y. Fire-escape.....	511,714	Dec. 26	3205	{ 755 756 }	65	2043
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Spring-hinge.....	508,249	Nov. 7	447	109	65	840
Shaw, Joseph. (See Mellor and Shaw.)						
Shaw, Joseph W., Chicago, Ill. Self-feeding open-fireplace grate.....	496,326	Apr. 25	2866	715	63	580
Shaw, Lorenzo C., assignor of one-half to I. W. Hanson, Haverhill, Mass. Apparatus for turning shoes.....	494,601	Apr. 4	120	28	63	25
Shaw, Lorenzo D. B., Coney Island, N. Y. Propeller.....	507,459	Oct. 24	2826	691	65	570
Shaw Radial Car Truck Company. (See Shaw, Henry F., assignor.)						
Shaw, Samuel E., Scranton, Iowa. Calf-weaner.....	495,378	Apr. 11	1375	343	63	272
Shaw, Solomon, assignor of one-fourth to Edward P. Allis Company, Milwaukee, Wis. Apparatus for melting iron.....	504,282	Aug. 29	3354	838	64	1246
Shaw, Solomon, assignor of one-fourth to Edward P. Allis Company, Milwaukee, Wis. Apparatus for melting iron or iron ore.....	504,308	Aug. 29	3397	851	64	1254
Shaw, Thomas, Newark, N. J. Making knife-blades.....	489,719	Jan. 10	1126	{ 250 291 }	62	249
Shaw, Thomas, Newark, N. J. Grinding-machine.....	505,178	Sept. 19	1433	369	64	1566
Shaw, Thomas, Philadelphia, Pa. Apparatus for purifying water from air in the process of freezing.....	490,508	Jan. 24	2437	628	62	537
Shaw, Thomas F. (See Corbett, Joseph and E. R., assignors.)						
Shaw, Truman A., assignor of two-thirds to S. T. Sniffen, White Plains, and J. Tilton, New York, N. Y. Paint-keg.....	501,171	July 11	1026	260	64	201
Shaw, William, New York, N. Y. Apparatus for printing carpet-yarns.....	510,939	Dec. 19	1913	{ 468 469 }	65	1793
Shaw, William E., Charlotte, N. C. Trace-carrier.....	490,317	Jan. 24	2136	557	62	478
Shaw, William H. (See Norton, Edward J., assignor.)						
Shay, Hugh, and E. Keating, Detroit, Mich. Crossing device for street-car tracks.....	499,759	June 20	1701	{ 407 408 }	63	1715
Shea, James B. (See Fenner, Marvin M., assignor.)						
Shea, Samuel J. (See Brady, Whitehead, and Shea.)						
Shea, Thomas K., Cincinnati, Ohio. Car.....	497,829	May 23	2323	583	63	1084
Shea, Timothy, J. L. Woodbury, and F. A. Whipple, Milford, Mass. Stone-cutting machine.....	511,715	Dec. 26	3206	786	65	2043
Sheaffer, John D., Avilla, Ind. Wheat-scourer.....	502,915	Aug. 8	1136	280	64	791
Sheakley, Solomon R., Bradford, Pa. Oil-well rig.....	499,045	June 6	529	124	63	1483
Shearer, Albert W., Omaha, Nebr. Covering for steam-pipes.....	505,560	S. p. 26	2101	533	64	1705
Shearer, Andrew, Philadelphia, Pa. Grate.....	503,169	Aug. 15	1567	{ 385 386 }	64	882
Shearer, George B., Oneonta, N. Y. Piano practice-pedal.....	503,880	Aug. 22	2688	674	64	1104
Shearer, Mahlon A. (See Ort and Shearer.)						
Shearer, Robert M., Cincinnati, Ohio. Pencil and making it.....	497,350	May 16	1574		63	934
Shearn, Joseph H., Leeds, Mass. Up-spinner and twister for silk, &c.....	496,582	May 2	296	80	63	673
Shebbard, George R., Trenton, N. J. Envelope and stamp moistener.....	509,053	Nov. 21	1746	432	65	1117
Shedd, Charles W., Grand Rapids, Mich. Can-filling machine.....	510,652	Dec. 12	1382	339	65	1683
Shedlock, Alfred, Jersey City, N. J. Chain and the manufacture thereof.....	492,439	Feb. 28	2189	547	62	1231
Shedlock, Alfred, Jersey City, N. J. Spray-lamp.....	496,450	May 2	98	28	63	636
Sheedy, Dennis, and M. W. Iles, Denver, Colo. Apparatus for separating matte from slag.....	500,621	July 4	135	36	64	26
Sheedy, Dennis, and M. W. Iles, Denver, Colo. Blast-furnace.....	505,538	Sept. 26	2046	522	64	1694
Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Printing-telegraph.....	506,269	Oct. 10	814	201	65	166
Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Printing-telegraph.....	506,270	Oct. 10	817	{ 201 202 }	65	167
Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Apparatus for securing synchronous movement.....	506,271	Oct. 10	820	{ 202 203 }	65	167
Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Printing-telegraph exchange system.....	506,272	Oct. 10	823	203	65	168

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Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Printing-telegraph.	506,273	Oct. 10	826	203 204	65	169
Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Telegraphy.	506,274	Oct. 10	829	204 205	65	169
Sheehy, Robert J., assignor, by mesne assignments, to W. Goodwin, New York, N. Y. Autographic telegraph.	506,275	Oct. 10	832	205 206	65	170
Sheer, Henry M., assignor to himself and G. Ertel, Quincy, Ill. Incubator.	501,735	July 18	1914	476	64	379
Sheets, Hank R., St. Louis, Mo. Clothes-drier.	508,772	Nov. 14	1271	316	65	1013
Sheffield Car Company. (See Brunton, David W., assignor.)						
Sheffield, George S., assignor of one-half to A. C. Himebaugh, Burr Oak, Mich. Hand corn-planter.	502,239	July 25	2734	689	64	544
Sheffield, Lucius T., New York, N. Y. Razor-strop.	505,134	Sept. 19	1368	351	64	1555
Shehan, Millard F., Boulder, Colo. Gate.	502,263	July 25	2781	702	64	553
Sheild, F. W. (See Weymouth, William J., assignor.)						
Shelburn, Cephas C., Colorado, Tex. Pump. (Reissue.)	11,392	Nov. 28	3139	759	65	1393
Shelden, Philo B., Erie, Pa. Appliance for spinal complaints.	507,172	Oct. 24	2345		65	479
Sheldon Axle Company. (See Hall, Orlando C., assignor.)						
Sheldon, Balos F., Saginaw, Mich. Car-coupling.	500,961	July 4	674	177	64	123
Sheldon, Carson H., Kansas City, Mo. Combined screen and storm door.	487,899	May 23	2445	611	63	1106
Sheldon, Edward P., Brooklyn, assignor to R. Hoe, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding mechanism.	505,855	Oct. 3	77	19, 20	65	17
Sheldon, Harry E., assignor of one-half to J. W. Kirkpatrick, Leechburg, Pa. Feeding and discharging apparatus for rolling-mills.	499,259	June 13	844	202	63	1551
Sheldon, Henry A., Arcadia, R. I. Post-office box.	510,199	Dec. 5	600	140	65	1523
Sheldon, James B., D. J. Murnane, and G. L. Van Beek, St. Louis, Mo. Underground electric railway.	489,764	Jan. 10	1200	314 315	62	264
Sheldon, John, assignor to Nettlefolds, Limited, Birmingham, England. Die for forming threads of screws.	498,582	May 30	3548	879 880	63	1316
Sheldon, John G., Cleveland, Ohio. Fire-back.	505,237	Sept. 19	1519	397	64	1582
Sheldon, Mark A., Detroit, Mich. Tack-lifter.	491,818	Feb. 14	1222	306	62	1008
Sheldon, Samuel, and J. J. Rooney, Brooklyn, N. Y. Alternating-electric-current generator.	502,777	Aug. 8	910	222	64	748
Sheldon, Thomas K., Marion, and M. N. Lynn, Indianapolis, Ind. Finishing-tool for glass bottles.	500,960	July 4	673	177	64	192
Sheldon, Willard C., Grand Haven, Mich. Water seal for refrigerators.	501,371	Mar. 21	1426	363	62	1667
Sheldrick, David J., assignor to J. A. Jeffrey, Columbus, Ohio. Conveyer.	501,251	Nov. 21	2097	505	65	1184
Shelley, George A. (See Thompson, Charles H., assignor.)						
Shelley, George A., Detroit, Mich. Hydrocarbon-burner.	496,911	May 9	860	227	63	793
Shelbamer, George R., Ocheltree, Kans. Sulky-plow.	508,992	Nov. 21	1653	407	65	1100
Shell, Nathan, Beason, Ill. End-gate for wagons.	500,038	June 20	2141	519	63	1792
Shellabarger, Michael M., Beaver Falls, Pa. Elevator or conveyer.	495,685	Apr. 18	1870	469	63	379
Shellabarger, Michael M., De Kalb, Ill. Wire fence.	501,216	July 11	1087	276	64	214
Shellabarger, Michael M., De Kalb, Ill. Wire fence.	506,378	Oct. 10	1015	253	65	205
Shellard, Rachel A., Virginia City, Nev. Sewing-machine attachment.	491,194	Feb. 7	219	56	62	789
Shelly, James R., et al. (See Moulton, Luther V., assignor.)						
Shelton, Robert M. (See Sublett, James H., assignor.)						
Shemwell, Baxter. (See Bornheim, Charles H., assignor.)						
Shemwell, Baxter. (See Freeman, Horace L., assignor.)						
Shenk, Jacob M., et al. (See Coldren, William P., assignor.)						
Shepard, Amos, Plantsville, Conn. Wrench.	509,252	Nov. 21	2098	505	65	1184
Shepard, Charles G., et al. (See Hoefer, Frederick W., assignor.)						
Shepard, Charles H., North Plainfield, N. J. Bridle-bit.	506,834	Oct. 17	1761	443	65	360
Shepard & Co., Sidney. (See Tripp, Augustus F., assignor.)						
Shepard, Huldah A., Nelsonville, Ohio. Clothes-press.	511,097	Dec. 19	2174	535	65	1842
Shepard, Isabella, Niles, Mich. Hat.	500,962	July 4	676	177	64	123
Shepard, J. A. (See Williams, Sylvester M., assignor.)						
Shepard, Walter J., et al. (See Hoefer, Frederick W., assignor.)						
Shepard, Walter R., assignor of two-thirds to J. S. Cloud and W. Fowler, Spartanburg, S. C. Device for marking and gaging hinge-seats.	495,761	Apr. 18	1992	504	63	401
Shepard, William A., Elgin, Ill. Combined inhaler and spirometer.	492,973	Mar. 7	319	81	62	1422
Shepard, William E., Nebraska City, Nebr. Door-check.	514,715	Dec. 12	1486	367	65	1703
Shepardson, Charles S., Holyoke, Mass. Hat-pin guard for ladies' hats.	494,602	Apr. 4	121	28	63	25
Shepardson, Samuel, La Grange, Iowa. Car-coupling.	492,242	Feb. 21	1882	470	62	1157
Sheperd, Edwin S., Vincennes, Ind. Egg-carrier filler.	489,664	Jan. 10	1041	271	62	232
Shepherd, Francis J., Concord, and A. C. Hopkins, Ashippun, Wis. Bag-tie or analogous fastening.	490,457	Jan. 24	2349	608	62	519
Shepherd, Percival W., East Liberty, Pa. Folding pocket-rule.	503,008	Aug. 8	1299	318	64	819
Shepherd, Crutcher D., Orlando, Fla. Horseshoe.	507,637	Oct. 31	3162	775	65	645
Shepherd, George, and H. Midgley, Bacup, England, assignors, by mesne assignments, to Lowell Machine Shop, Lowell, Mass. Ring-spinning and doubling frame.	501,736	July 18	1916	476	64	379
Shepherd, George, and H. Midgley, Bacup, England, assignors, by mesne assignments, to Lowell Machine Shop, Lowell, Mass. Ring-spinning and doubling frame.	501,737	July 18	1922	477	64	380
Shepherd, George, and H. Midgley, Bacup, England, assignors, by mesne assignments, to Lowell Machine Shop, Lowell, Mass. Ring-spinning and doubling frame.	501,738	July 18	1928	477	64	381
Shepherd, James S., Cambridge, Md. Chart-board.	511,552	Dec. 26	2936	716	65	1995
Shepherd, John C., Tilsonburg, Canada. Road-cart.	496,912	May 9	862	227	63	793
Shepherd, Thomas W., Peabody, Mass. Thermostat.	493,601	Mar. 14	1337	341	62	1635
Shepherd, Thomas W., Peabody, Mass. Electric controlling device.	493,602	Mar. 14	1339	341	62	1635
Shepler, Cassius R., assignor to W. H. Latshaw, trustee, Pittsburg, Pa. Steam-generator.	490,928	Jan. 31	3129	803	62	687
Shepley, George B. (See Forbes and Shepley.)						
Sheppard, Adolph M., et al. (See Cameron, Joseph, assignor.)						
Sheppard, Franklin L., Philadelphia, Pa. Air-heating device for stoves or ranges.	494,388	Mar. 28	2645	662 663	62	1912
Sheppard, Howard R., Philadelphia, Pa. Horizontal circulating-boiler.	501,739	July 18	1931	478	64	381
Sheppard, Joseph W., St. Louis, Mo. Trousers.	509,693	Nov. 28	2863	691	65	1341
Shepperd, Sylvanus D., assignor to Backus Water Motor Company, Newark, N. J. Water-motor.	504,283	Aug. 29	3356	839	64	1247
Sheppman, John, San Francisco, Cal. Toy.	503,389	Aug. 15	1921	476	64	946
Sheram, Wade J. (See Sheram, Zack A. and W. J.)						
Sheram, Zack A. and W. J., East Point, Ga. Car-coupling.	511,654	Dec. 26	3107	759	65	2025
Sherbondy, Walter, Akron, Ohio. Pneumatic tire.	499,600	June 13	1433	343	63	1656
Sherburne, Charles W. (See Lauder, James N., assignor.)						
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus.	489,720	Jan. 10	1129	291 292	62	249

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Sherburne, Charles W., Boston, Mass. Track-sanding device for street-cars	494,283	Mar. 28	2473	623	62	1879
Sherburne, Charles W., Boston, Mass. Lubricator	498,944	June 6	342	81, 82	63	1452
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus	506,645	Oct. 10	1436	{ 360 361	65	288
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus	508,849	Nov. 14	1387	{ 344 345	65	1034
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus	508,850	Nov. 14	1389	{ 345 346	65	1035
Sheridan, Charles B., <i>et al.</i> (See Nugent, Edward, assignor.)						
Sheridan, James D., <i>et al.</i> (See Curtis, Frederic A., assignor.)						
Sheridan, James T., East Orange, N. J., and J. Draher, Waterbury, Conn., assignors to City Button Works, of New York. Button-making machine	493,794	Mar. 21	1648	420	62	1711
Sheridan, John, Quincy, Ill. Grain-door	500,963	July 4	677	178	64	123
Sheridan, Theodore W., <i>et al.</i> (See Nugent, Edward, assignor.)						
Sherlock, Elmer & Sherlock. (See Sefton, William E., assignor.)						
Sherman, Charles P., Toledo, Ohio, assignor to Sherman Nut Lock Company, Detroit, Mich. Nut-lock	490,458	Jan. 24	2350	608	62	519
Sherman, Elmer A., <i>et al.</i> (See Lambert, George A., assignor.)						
Sherman, George C., assignor to W. M. Sherman and F. H. Butler, Chicago, Ill. Flour bin and sieve	508,439	Nov. 14	751	185	65	912
Sherman, George C., assignor to W. M. Sherman and F. H. Butler, Chicago, Ill. Flour bin and sieve	510,996	Dec. 19	2021	499	65	1811
Sherman, George H., Detroit, Mich. Tunneling-machine	490,318	Jan. 24	2137	557	62	478
Sherman, Howard B., Battle Creek, Mich. Hose-clamp	499,760	June 20	1703	408	63	1715
Sherman, Isaac H., <i>et al.</i> (See Lambert, George A., assignor.)						
Sherman, James M., (See Spiegel, Otto, assignor.)						
Sherman, John E., assignor of one-half to W. A. Engley, Attleborough, Mass. Vise	500,039	June 20	2141	519	61	1792
Sherman, John S., Galena, Kans. Steam-engine	507,173	Oct. 24	2346	577	65	479
Sherman, Lewis P., Biddeford, assignor to G. Moore, Berwick, Me. Needle-operating and reed-dent-separating device for machines for drawing in warp-threads	500,964	July 4	677	178	64	123
Sherman, Lewis P., Biddeford, assignor to G. Moore, Berwick, Me. Harness-supporting and heddle-eye-selecting device for machines for drawing in warp-threads	500,965	July 4	679	{ 178 179	64	124
Sherman, Lewis P., Biddeford, assignor to G. Moore, Berwick, Me. Thread-selecting device for machines for drawing in warp-threads	500,966	July 4	684	{ 179 180	64	124
Sherman, Marcus D. L., Lowell, Mass. Urinary apparatus	501,372	July 11	1354	338	64	260
Sherman Nut Lock Company. (See Sherman, Charles P., assignor.)						
Sherman, Rollon, <i>et al.</i> (See Lambing, Isaac P., assignor.)						
Sherman, Samuel S., West McHenry, Ill. Farm-gate	505,332	Sept. 19	1677	432	64	1611
Sherman, Walter N., Merced, Cal. Adjustable ventilating canopy-frame for beds	493,305	Mar. 14	851	{ 216 217	62	1541
Sherman, Willis D., assignor of four-fifths to C. B. and F. B. Johnson, E. H. Baillie, and J. J. Wilson, Brooklyn, N. Y. Hoisting and transfer apparatus	494,289	Mar. 28	2646	{ 663 664	62	1912
Sherman, Willis M., <i>et al.</i> (See Sherman, George C., assignor.)						
Sherman, Willis S., Hermansville, Mich. Boring or drilling machine	497,434	May 16	1701	429	63	957
Sherrod, Fletcher, assignor to himself and H. B. Cage, Madison Station, Miss. Combined colter and scraper	504,252	Aug. 29	3311	827	64	1237
Sherwin-Williams Company <i>et al.</i> (See Roberts, John W., assignor.)						
Sherwood Manufacturing Company. (See Hart, Thomas J., assignor.)						
Sherwood, William J., Ashtabula, Ohio. Armature for electric motors	505,729	Sept. 26	2391	604	64	1758
Shetter, Egbert P., Butler, Pa. Tow	507,851	Oct. 31	3511	863	65	710
Shetty, John A., Paterson, N. J. Metallic fastener for envelopes	490,814	Jan. 31	2942	755	62	650
Shewlin, George F., (See Baker, Shewlin, and Baker.)						
Shiel, John F., (See Keller, James D., assignor.)						
Shields Company. (See Hine, Charles M., assignor.)						
Shields, David, assignor to Griswold Manufacturing Company, Erie, Pa. Means for uniting tools to handles, &c.	492,474	Feb. 28	2247	561	62	1244
Shields, David, Erie, Pa., assignor to M. Griswold. Wafile-iron	502,086	July 25	2481	{ 623 624	64	496
Shields, Frank J., (See Corkhill and Shields.)						
Shields, George A., Anderson, Ind. Safety-guard for rip-saws	509,253	Nov. 21	2099	506	65	1184
Shields, Samuel, London, England. Tobacco-pipe	497,351	May 16	1574	395	63	934
Shiflet, Lemuel. (See Silvey and Shiflet.)						
Shilling, George, and C. G. Smith, Washington, D. C. Apparatus for moistening and cooling the atmosphere of rooms	494,494	Mar. 28	2206	703	62	1942
Shimer, Milton J., Freemansburg, Pa. Sad-iron	497,136	May 9	1198	306	63	852
Shinn, John, Philadelphia, Pa. Hammock	500,692	July 4	254	68	64	48
Shipe, Walter S., (See Garretson and Shipe.)						
Shipe, Walter S., Toronto, Canada. Machine for forming rolled longitudinal joints in cylinders	508,350	Nov. 7	599	{ 147 148	65	869
Shipe, Walter S., Toronto, Canada. Uniting the heads to the bodies of boilers, &c.	508,351	Nov. 7	605	148	65	870
Shipe, Walter S., Brooklyn, N. Y. Safety emery or corundum wheel	508,773	Nov. 14	1272	316	65	1013
Shipperd, Sarah E., (See Shipperd, William C., assignor.)						
Shipperd, William C., assignor to S. E. Shipperd, Cleveland, Ohio. Pencil-sharpening device	508,055	Nov. 7	115	32	65	780
Shippler, P. E., (See Langdon, William C., assignor.)						
Shipley, Morris S., Cincinnati, Ohio. Supplementary seat for bicycles	489,147	Aug. 15	1568	326	64	82
Shipley, Ralph J., assignor to Holmes, Booth & Haydens, Waterbury, Conn. Punching and riveting machine	503,570	Jan. 10	881	{ 230 231	62	200
Shipman, George W., Washington, D. C. Folding bed	496,172	Apr. 25	2615	{ 658 659	63	533
Shipman, John W., assignor of one-half to E. J. Weber, Kirkwood, Mo. Swing	491,379	Feb. 7	532	{ 135 136	62	850
Shipman, Joseph H., Whippany, N. J. Sash-balance	500,967	July 4	687	180	64	125
Shipman, M. D., <i>et al.</i> (See Reynolds, Samuel D., assignor.)						
Shipman, Madison D., (See Patten, Frank C., assignor.)						
Shipman, Richard A., Chicago, Ill. Car-coupling	489,765	Jan. 10	1202	{ 315 316	62	264
Shipman, Samuel H., Waxahachie, Tex. Sulky-plow	511,168	Dec. 19	2289	560	65	1863
Shipp, Henry A., Atwater, Cal. Cable-grip	495,843	Apr. 18	2123	534	63	425
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Machine for marking circular articles	496,489	May 2	150	42	63	646
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Rolling-machine	496,490	May 2	152	43	63	647
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Rolling-machine	496,491	May 2	153	43, 44	63	647
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Blank-feeding mechanism for drill-rolling machines	496,623	May 2	363	98, 99	63	685

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Shippen, Francis, Hoboken, N. J. Liquid-meter.	508,774	Nov. 14	1273	317	65	1013
Shipway, Jesse, Memphis, Tenn. Machine for straightening scrap-iron, &c.	494,603	Apr. 4	122	29	63	26
Shively, Charles W. (See Barclay and Shively.)						
Shively, Charles W., and S. W. Barclay, Morris, assignors to S. S. Barclay, Covel, Ill. Scrubbing and mopping machine.	500,221	June 27	2474	603	63	1862
Shively, Daniel M., Fostoria, Ohio. Locomotive-engine.	496,542	May 2	238	63	63	662
Shleppy, Ettie E. B., Crawfordsville, Ind. Combination beef-mangler.	490,367	Jan. 21	2217	578	62	495
Shoe, William W., Nether Providence, Pa. Combination-wrench.	496,913	May 9	863	227	63	793
Shoemaker, Clement W. (See Crickler, Charles D. and H. F., assignors.)						
Shoemaker, Franklin C., Three Rivers, Mich. Car-coupling.	497,418	May 16	1671	422	63	952
Shoemaker, George H., South Bend, Ind. Spark-arrester.	503,171	Aug. 15	1569	346	64	882
Shoemaker, Jacob S., New Lothrop, Mich. Road-cart.	505,333	Sept. 19	1678	433	64	1612
Shoemaker, John, <i>et al.</i> (See Boyer, John M., assignor.)						
Shoettle, Charles, assignor of one-half to J. Sauter, Chicago, Ill. Lamp-extinguisher and wick-trimmer.	499,398	June 13	1098	265	63	1597
Sholl Steel Whiffletree Manufacturing Company. (See Pedersen and Melin, assignors.)						
Shone, James W., Rochester, N. Y. Folding mud-guard for bicycles.	509,771	Nov. 28	2986	723	65	1363
Shoninger, Bernard. (See Lomas, John R., assignor.)						
Shonolin, Patrick, <i>et al.</i> (See Minogue, Martin T., assignor.)						
Shorey, George E. (See Shorey, Reuben A. and G. E.)						
Shorey, George L., Lynn, Mass. Heating apparatus.	500,693	July 4	255	69, 70	64	48
Shorey, Reuben A. and G. E., Fairfield, Me. Swing.	501,740	July 18	1932	478	64	382
Shorey, Samuel W., Boston, Mass. Button.	505,962	Oct. 3	250	67	65	49
Shorrocks, John H., Darwen, and J. Martin, Calder Grove, England. Paper-making machine.	495,950	Apr. 18	2280	575	63	455
Short Electric Railway Company. (See Short, Sidney H., assignor.)						
Short, John N., Johnstown, Pa. Metal-straightening press.	489,102	Jan. 3	189	50, 51	62	44
Short, John N., Johnstown, Pa., assignor to Cambria Iron Company, of Pennsylvania. Machine for forming rake-teeth.	501,217	July 11	1088	{ 276 277 }	{ 64 64 }	{ 214 214 }
Short, Lacrota L., Russellville, Mo. Folding device for carriage-tops.	506,558	Oct. 10	1314	328	65	263
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Electric locomotive.	491,666	Feb. 14	986	249	62	961
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Directly-connected motor for cars.	491,667	Feb. 14	989	249	62	962
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Dynamo-electric machine.	506,740	Oct. 17	1606	{ 404 405 }	{ 65 65 }	{ 330 330 }
Shortle, Christopher M. (See George and Shortle.)						
Shortleeve, William H., Chicopee Falls, Mass., assignor to Overman Wheel Company, Hartford, Conn. Wheel-carrying frame for sulkies.	490,929	Jan. 31	3131	803	62	628
Shoup, Almon. (See Tucker, George, assignor.)						
Shoup, James C., New York, N. Y. Autographic register.	507,760	Oct. 31	3344	819	65	679
Shoup, Samuel, Clifton Heights, Pa. Sales or order book.	499,046	June 6	530	125	63	1462
Showalter, J. Benjamin F., Valparaiso, Ind. Musical key and transposition guide.	490,509	Jan. 24	2438	629	62	537
Shrader, Jacob C. (See Thomas, Henry E., assignor.)						
Shrague, Gustavus A. (See Shrague, John W. and G. A.)						
Shrague, John W. and G. A., Cincinnati, Ohio. Booth or stall for voting.	502,778	Aug. 8	912	222	64	748
Shreiner, Edward M. (See Leininger and Shreiner.)						
Shreiner, Edward M., and A. Leininger, Canton, Ohio. Toy.	490,319	Jan. 24	2139	558	62	479
Shriver, William, Philadelphia, Pa. Folding seat for schools, theaters, &c.	493,452	Mar. 14	1072	276	62	1584
Shuart, Benjamin F., Bozeman, Mont. Scraper.	499,477	June 13	1232	294	63	1620
Shue, Frank E. (See Bowen, Jesse, assignor.)						
Shulin, Neal P., Butte City, Mont. Combined writing-desk, bureau, and book and dressing case.	492,877	Mar. 7	168	40	62	1391
Shull, John H., Findlay, Ohio. Matched lumber.	492,736	Feb. 28	2665	660	62	1322
Shultz, Charles A., Rondout, N. Y. Brick-mold.	511,098	Dec. 19	2175	536	65	1842
Shultz, Edward L., Hartford, Conn. Wrench.	491,606	Feb. 14	902	226	62	944
Shultz, Edward L., Springfield, Mass. Saddle for velocipedes.	502,681	Aug. 1	743	179	64	702
Shultz, Edward L., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Pedal for velocipedes.	506,276	Oct. 10	837	206	65	170
Shultz, Jacob F., San Jacinto, assignor of one-half to G. F. Kernaghan, Pasadena, Cal. Plow-shovel.	493,389	Mar. 14	974	251	62	1566
Shumaker, Charles F., assignor to Shumaker Manufacturing Company, Silver Creek, N. Y. Separating-machine.	494,800	Apr. 4	441	109	63	86
Shumaker Manufacturing Company. (See Shumaker, Charles F., assignor.)						
Shumaker, William H., Bay Horse, Idaho. Billiard-cue.	497,929	May 23	2491	621	63	1113
Shuman, Charles. (See Rasner, Frank, assignor.)						
Shuman, Frank, Philadelphia, Pa. Machine for embedding wire in glass.	510,716	Dec. 12	1486	367	65	1703
Shuman, Frank, Philadelphia, Pa. Manufacturing wire-glass.	510,822	Dec. 12	1670	415	65	1737
Shuman, Frank, Philadelphia, Pa. Machine for manufacturing wire-glass.	510,823	Dec. 12	1671	415	65	1737
Shumway, Perry H., Sizerville, Pa. Apparatus for filling barrels.	491,195	Feb. 7	220	56	62	789
Shumway, Perry H., Corry, Pa. Device for shaking crated bottles.	493,046	Mar. 7	429	108	62	1443
Shur, George H., <i>et al.</i> (See Arkland, Henry D., assignor.)						
Shurtleff, Asahel M., assignor to Codman & Shurtleff, Boston, Mass. Valve for pneumatic tires.	494,088	Mar. 21	2138	547	62	1804
Shurtleff, Asahel M., assignor to Codman & Shurtleff, Boston, Mass. Valve for pneumatic tires.	494,089	Mar. 21	2140	547	62	1804
Shurtz, Frank H., and H. G. Swan, San Francisco, Cal. Safety device for elevators.	504,629	Sept. 5	507	{ 130 131 }	{ 64 64 }	{ 1365 1365 }
Shuster, Lawrence, Jr., Philadelphia, Pa. Air-inlet for plumbing purposes.	503,809	Aug. 22	2594	648	64	1086
Shuster, William D. (See Freeman, Albert A., assignor.)						
Shutt, Henry D., and E. T. Ragland, Winston, N. C. Spraying apparatus.	494,652	Apr. 4	196	49	63	40
Shutting, Julius, Nashville, Tenn. Photographic-printing frame.	497,691	May 16	2109	526	63	1029
Sibbald, Charles J., Cohoes, N. Y., assignor to C. Cooper, Bennington, Vt. Stop-motion attachment for knitting-machines.	489,420	Jan. 3	664	180	62	143
Sibley, Dennis E., assignor to J. A. Sibley, Chicago, Ill. Grain-scouring machine.	493,603	Mar. 14	1340	341	62	1635
Sibley, Edward L., Bennington, Vt. Carpet-tack.	507,722	Oct. 31	3289	805	65	669
Sibley, James A. (See Sibley, Dennis E., assignor.)						
Sibley, John D. (See Vaughan, Fred W., assignor.)						
Sichel, Max, San Francisco, Cal. Producing dental cement.	492,056	Feb. 21	1586		62	1095
Siehelschmidt, Hermann, Dortmund, Germany. Axle-bearing for vehicles.	508,775	Nov. 14	1274	317	65	1014
Sichtermann, Fritz. (See Thiele, Kipferling, and Sichtermann.)						
Sickles, Garret F., Coxsackie, N. Y. Refrigerator-box.	492,503	Feb. 28	2310	573	62	1256
Sidway, Henry T. (See Grotenhuis and Sidway, assignors.)						
Sidway Manufacturing Company. (See Grotenhuis and Sidway, assignors.)						
Sieben, Henry, Chicago, Ill. Steam boiler furnace.	507,938	Oct. 31	3643	901	65	735

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Sieber, John H., Henderson, Ky. Box or canister	492,878	Mar. 7	169	40	62	1392
Siebert, Alfred, New York, N. Y. Refrigerating apparatus	489,335	Jan. 3	539	{ 146 147 }	{ 62 62 }	116
Siebert, Frederick, St. Louis, Mo. Pulley	490,835	Jan. 31	2970	762	62	656
Siebert, Gustave, St. Paul, Minn. Dress-holder	508,352	Nov. 7	606	149	65	870
Siebler, George E., Dayton, Ohio. Letter-box	509,254	Nov. 21	2100	506	65	1184
Siebert, Hugo G., Chemnitz, Germany. Apparatus for the ventilation of closed rooms, &c.	509,141	Nov. 21	1907	466	65	1147
Siegrist, Pauline L. (See Lawrence, Robert S., assignor.)						
Siegley, Jacob, Wilkes-Barre, Pa. Bench-plane	510,096	Dec. 5	429	96	65	1491
Sieker, Edward A., and A. H. Schmidt, Brownwood, Tex. Sheep-dipper	494,265	Mar. 28	2441	615	62	1874
Siemens, Alexander, London, England, assignor to Siemens & Halske, Berlin, Germany.				{ 131 132 }	{ 64 64 }	1366
Operating electric motors by alternating currents	504,630	Sept. 5	509	{ 236 237 }	{ 64 64 }	183
Siemens, Frederick, Dresden, Germany. Regenerative gas furnace and producer	501,107	July 11	922	{ 236 237 }	{ 64 64 }	183
Siemens, Georg W. von, assignor to Siemens & Halske, Berlin, Germany. Conductor sys- tem for electric railways	489,573	Jan. 10	919	{ 240 240 }	{ 62 62 }	207
Siemens, Georg W. von, assignor to Siemens & Halske, Berlin, Germany. Closed conduit for electric railways	493,948	Mar. 21	1902	485	62	1759
Siemens, Georg W. von, assignor to Siemens & Halske, Berlin, Germany. Converter sys- tem for electric railways	502,538	Aug. 1	488	117	64	656
Siemens, Georg W. von, assignor to Siemens & Halske, Berlin, Germany. Electric rail- way system	502,539	Aug. 1	491	117	64	657
Siemens, Georg W. von, assignor to Siemens & Halske, Berlin, Germany. Electric closed- conduit system for railways	509,403	Nov. 28	2380	577	65	1247
Siemens & Halske. (See Benjamin, George H., assignor.)						
Siemens & Halske. (See Du Bois-Reymond, Alard, assignor.)						
Siemens & Halske. (See Frischen, Johann H., assignor.)						
Siemens & Halske. (See Frölich, Oscar, assignor.)						
Siemens & Halske. (See Gorges, Johannes H. F., assignor.)						
Siemens & Halske. (See Hefner-Altenack, Friedrich von, assignor.)						
Siemens & Halske. (See Henneberg, Hermann O., assignor.)						
Siemens & Halske. (See Höfer, Carl F. W., assignor.)						
Siemens & Halske. (See Hoffmann, Carl, assignor.)						
Siemens & Halske. (See Hoffmann and Richter, assignors.)						
Siemens & Halske. (See Kolpoel, Adolf, assignor.)						
Siemens & Halske. (See Meissner, Waldemar, assignor.)						
Siemens & Halske. (See Nordmann, Paul, assignor.)						
Siemens & Halske. (See Pfeil, Robert, assignor.)						
Siemens & Halske. (See Philipsborn, Alexander, assignor.)						
Siemens & Halske. (See Philipsborn and Schiemann, assignors.)						
Siemens & Halske. (See Richter and Hoffmann, assignors.)						
Siemens & Halske. (See Schwennicke, Carl, assignor.)						
Siemens & Halske. (See Siemens, Alexander, assignor.)						
Siemens & Halske. (See Siemens, Georg W. von, assignor.)						
Siemens & Halske. (See Siemens, Wilhelm von, assignor.)						
Siemens & Halske. (See Thalacker, Carl, assignor.)						
Siemens & Halske. (See Wörner, Adolf, assignor.)						
Siemens, Wilhelm von, assignor to Siemens & Halske, Berlin, Germany. Distribution of alternating electric currents	502,682	Aug. 1	744	179	64	703
Sienknecht, Christian C. A., Kingston, Tenn. Gate-brace	491,906	Feb. 14	1360	338	62	1036
Siepmann, Wilhelm, Leopoldshall, assignor to Stassfurter Chemische Fabrik, vormals Vorster & Grüneberg Actien-Gesellschaft, Stassfurt, Germany. Process of and appar- atus for making cyanides	509,957	Dec. 5	183	43	65	1444
Sierman, Julius H., Albert Lea, Minn. Straw-stacker	509,454	Nov. 28	2482	{ 599 600 }	{ 65 65 }	1268
Sievers, Claus, Denison, Iowa. Hame-tug fastener	501,966	July 25	2287	573	64	460
Sievers, Henry J., et al. (See Athey, Isaac H., assignor.)						
Siewers, Joseph B., Decatur, Ill. Churn-dasher	489,336	Jan. 3	545	147	62	117
Sigafoos, Russel B., Racine, Wis. Type-writer cabinet	490,127	Jan. 17	1811	473	62	403
Siggon, Louis K., Philadelphia, Pa. Tire for cycles	497,830	May 23	2324	583	63	1084
Silberberg, Nathan, Jassy, Roumania. Stem winding and setting watch	501,108	July 11	925	237	64	183
Silberzahl, John D., West Bend, Wis. Governor	505,279	Sept. 19	1591	414	64	1596
Silcocks, Edward. (See Sandford, Thornley, and Silcocks.)						
Silen, Eric, Kelso, Wash. Combined churn and butter-worker	509,772	Nov. 28	2988	723	65	1364
Sill, Benjamin F., Long Island City, N. Y. Window-garden spray	502,590	Aug. 1	569	136	64	670
Silcocks, Warren S., Jr., Brooklyn, N. Y. Stamp-box	495,067	Apr. 11	841	214	63	175
Silleck, Charles D. (See Stephens, Henry, assignor.)						
Sillich, Druscha von, Amalienruhe, near Meiningen, Germany. Pencil or style for writing on slates	511,468	Dec. 26	2815	.....	65	1973
Silliman, Herbert E., Rochester, N. Y. Last	492,114	Feb. 21	1675	417	62	1113
Silsbee, Samuel, New Utrecht, assignor to himself, and A. P. Van Tuyl, Jr., Brooklyn, N. Y. Treating diseases electrically	506,449	Oct. 10	1140	283	65	230
Silsby, Eugene W., Chicago, Ill. Pinking-machine	499,445	June 13	1188	283	63	1612
Siltberg, Enoch, York, England. Pneumatic tire for wheels	497,831	May 23	2325	583	63	1085
Silver, Hugh, Lindsay, Canada. Wood wall-covering	495,465	Apr. 11	1522	380	63	301
Silver, Joseph R. (See Mariani, John, assignor.)						
Silver, Sam D., Seattle, Wash. Fire-escape	501,373	July 11	1355	338	64	260
Silver, William, Tamworth, New South Wales. Animal-shears	494,034	Mar. 21	2052	524	62	1788
Silverman, Louis. (See Maxim and Silverman.)						
Silverman, Louis, Crayford, England. Corrugated tube for boilers, &c	494,033	Mar. 21	2050	{ 523 524 }	{ 62 62 }	1787
Silvey, William L., Lima, Ohio. Journal-bearing for dynamo-electric machines	489,505	Jan. 10	826	216	62	188
Silvey, William L., Lima, Ohio. Secondary battery	500,622	July 4	136	37	64	27
Silvey, William L., Lima, Ohio. Secondary battery	504,370	Sept. 5	92	23	64	1288
Silvey, William O., and L. Shiflet, Middleport, Ohio. Sponge or bread raising oven	497,609	May 16	1978	495	63	1005
Sime, Thomas C., Hubbard, Iowa. Drilling-machine	498,313	May 30	3114	{ 776 777 }	{ 63 63 }	1238
Simmerly, Albert N., Cleveland, Ohio. Automatic dumping-bucket	506,081	Oct. 3	438	115	65	85
Simmon, L. A. (See Record, Adam T., assignor.)						
Simmonds, John C., and A. Peniston, Jersey City, N. J. Shell for distributing oil on water	495,569	Apr. 18	1682	424	63	349
Simmons, Daniel W., Cave Spring, Ga. Snap and buckle	491,449	Feb. 7	644	160	62	870
Simmons, Daniel W., Cave Spring, Ga. Buckle	510,052	Dec. 5	360	80	65	1477
Simmons, David P., Georgetown, Tex. Cuspidor	497,419	May 16	1672	422	63	952

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Simmons Hardware Company. (See Markle, Charles N., assignor.)						
Simmons, Henry L., Wickes, Mont. Amalgamator	496,670	May 2	447	120	63	700
Simmons, James, Long Branch, N. J. Trunk-fastening	501,259	July 11	1156	293	64	225
Simmons, James A., Enondale, Miss. Combined planter and distributor	499,856	June 20	1864	453	63	1743
Simmons, John H., Warren, Pa. Sewing-cabinet and work-table	509,773	Nov. 28	2989	723	65	1364
Simmons, John P., and W. J. Holmes, San Francisco, Cal. Adjustable rock-crusher	490,215	Jan. 17	1956	512	62	430
Simmons, Joseph C., Martinsville, Ohio. Fence	492,115	Feb. 21	1677	418	62	1113
Simmons, Oliver E., et al. (See Seibert, Nicholas, assignor.)						
Simmons, Ralph C. (See Benjamin and Simmons.)						
Simmons, Stephen W., Clinton, Mass. Unsealing attachment for cans	503,500	Aug. 15	2087	521	64	975
Sims, Henry W., Bay City, Mich. Bottling apparatus	496,141	Apr. 25	2568	646	63	524
Simon, August, Gnadau, Germany. Pile-planting	500,780	July 4	395	104	64	73
Simon, Gottlieb H. (See Olp, Robert, assignor.)						
Simon, Henry, Manchester, England. Shaking-sieve	495,190	Apr. 11	1082	268 269	63	219
Simon, Horace F., London, England. Advertising or other illuminating effect	499,150	June 6	679	163	63	1509
Simon, Jacob J., McDonaldsville, Ohio. Potato cutter and planter	492,243	Feb. 21	1883	471	62	1157
Simon, Robert, Union Hill, N. J. Warping or beaming machine	504,791	Sept. 12	795	201 202	64	1432
Simon, Solomon, and J. Pletka, Chicago, Ill. Bridge-gate	502,779	Aug. 8	914	223	64	749
Simonds, George F., Fitchburg, Mass. Ball-bearing	501,374	July 11	1357	338	64	260
Simonds, George F., Fitchburg, Mass. Ball-bearing	501,375	July 11	1358	339	64	260
Simonds, George F., Fitchburg, Mass. Metallurgical furnace	507,460	Oct. 24	2828	692	65	570
Simoneau, Joseph M., assignor to E. P. Morse and H. C. Davis, Ware, Mass. Reed for textile machinery	495,435	Apr. 11	1467	369	63	289
Simoneau, Joseph M., assignor to E. P. Morse and H. C. Davis, Ware, Mass. Leasing device	495,436	Apr. 11	1469	370	63	289
Simonot, Claude J., Paris, France, assignor to Fleischmann & Bloedel, Fürth, Germany, and Paris, France. Toy figure	507,174	Oct. 24	2348	578	65	479
Simons, Alfred S., Port Chester, N. Y. Wide hemmer for sewing-machines	504,947	Sept. 12	1050	269	64	1482
Simons, Benjamin, Charleston, S. C. Rotating grain-weigher	494,035	Mar. 21	2053	524 525	62	1788
Simons, Frank, assignor of two-thirds to A. D. Aquart and C. Fuchs, St. Louis, Mo. Lock	494,446	Mar. 28	2726	683	62	1927
Simonson, Flavel, Milwaukee, Wis. Rifle	492,057	Feb. 21	1587	395	62	1096
Simonson, James H. (See Daniels, Howard, assignor.)						
Simplex Car Coupler Company. (See Scurr and Cotton, assignors.)						
Simplex Car Coupler Company. (See Scurr and Whipple, assignors.)						
Simpson, Alexander, Scranton, and M. Speicher, Archbald, Pa. Injector	490,590	Jan. 24	2552	657	62	559
Simpson, George. (See Follett and Simpson.)						
Simpson, George W., Santa Barbara, Cal. Dental articulator	501,741	July 18	1933	478	64	382
Simpson, James, McKeesport, Pa. Pipe-welding apparatus	507,289	Oct. 24	2544	626 627	65	513
Simpson, John, Cleveland, Ohio. Car-coupling	489,992	Jan. 17	1578	413	62	354
Simpson, John A., assignor to H. M. and C. H. Sawyer, East Cambridge, Mass. Lamp-support for miners' hats	511,365	Dec. 26	2634	640	65	1940
Simpson, Thomas H., Detroit, Mich. Brake-beam	503,441	Aug. 15	1993	494	64	958
Simpson, W. W., et al. (See Athey, Isaac H., assignor.)						
Simpson, William J. (See Lyle, William P., assignor.)						
Simpson, William J., Dudley, N. J. Tool-box	507,939	Oct. 31	3644	901	65	735
Simpson, William S., London, England. Apparatus for casting metals	493,047	Mar. 7	430	108	62	1443
Sinrell, William W., New York, N. Y. Pipe-coupling	497,990	May 23	2566	647	63	1130
Sims, Frederick L. H., Toronto, Canada. Rotary brick-press	507,638	Oct. 31	3163	775 776	65	645
Sims, Henry J., Ottawa, Canada. Hat or clothes brush	489,694	Jan. 10	1089	282	62	242
Sims, Jesse B., Washington, D. C. Whiffletree-hook	489,271	Jan. 3	449	124	62	99
Sims, Lewis C., Newark, Ohio. Roof-gutter	490,815	Jan. 31	2943	755	62	651
Sims, Orin B. (See Tinkham and Sims.)						
Simser, James, Rock Island, Ill. Corn-harvester	495,526	Apr. 18	1613	406 407	63	336
Simultaneous Chromography Printing Machine and Manufacturing Company. (See Toye, William H. R., assignor.)						
Sinclair, F. M. (See Matthews, Elem D., assignor.)						
Sinclair, Jeremiah C., assignor of one-half to H. Hood, Toledo, Ohio. Type-writing machine	510,653	Dec. 12	1384	339 440	65	1684
Sinclair, Lovell H., Switz City, Ind. Motor	504,056	Aug. 29	2983	745 746	64	1176
Sindelar, Joseph, Ipswich, S. D. Mowing-machine	494,900	Apr. 4	595	149 150	63	115
Sindelar, Joseph, Ipswich, S. D. Wire-band cutter	509,694	Nov. 28	2-63	692	65	1341
Singer, Joseph, Los Angeles, Cal. Fishing-reel	491,955	Feb. 14	1433	357	62	1050
Singer Manufacturing Company of New Jersey. (See Diehl, Philip, assignor.)						
Singer Manufacturing Company of New Jersey. (See Douglas, John, assignor.)						
Singer Manufacturing Company of New Jersey. (See Foster, Charles H., assignor.)						
Singer Manufacturing Company of New Jersey. (See Friederich, Christian, assignor.)						
Singer Manufacturing Company of New Jersey. (See Gates, Charles A., assignor.)						
Singer Manufacturing Company of New Jersey. (See Greene, James G., assignor.)						
Singer Manufacturing Company of New Jersey. (See Macdougall, Matthew, assignor.)						
Singer Manufacturing Company of New Jersey. (See Müller, Friederich, assignor.)						
Singer Manufacturing Company of New Jersey. (See Reiss, Hans, assignor.)						
Singer, Paris E., London, England. Keyed musical instrument actuated by electricity	492,563	Feb. 28	2399	597	62	1276
Singer, Paris E., London, England. Electrical musical instrument	501,540	July 18	1597	402	64	322
Singer, Paris E., London, England. Electrical musical instrument	501,541	July 18	1598	402	64	322
Singer, Paris E., London, England. Electrical musical instrument	501,542	July 18	1599	403	64	322
Singer, Paris E., London, England. Electric musical instrument	501,543	July 18	1601	403	64	323
Singer, Paris E., London, England. Luminous fountain	507,600	Oct. 31	3095	755 756	65	632
Singer, Robert R., Pittsburg, Pa. Method of and apparatus for the manufacture of hollow articles	501,900	July 18	2182	541 542	64	425
Singer, Robert R., Pittsburg, Pa. Method of and apparatus for manufacturing hollow articles	507,175	Oct. 24	2349	578 579	65	479
Singer, Robert R., Pittsburg, Pa. Blank for vehicle-tongues, &c	507,176	Oct. 24	2351	580	65	480
Singer, Samuel S., assignor of one-half to H. Kline, Helena, Mont. Extension-table	497,080	May 9	1109	285	63	837

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Singin, Louis N., Wall, Pa. Car-coupling.....	497,930	May 23	2492	622	63	1114
Singleton, Frank, Dover, N. J. Fastening device for spindles.....	495,712	Apr. 18	1918	483	63	387
Singleton, George, Dover, N. J. Spindle for twisting and spinning machines.....	495,713	Apr. 18	1919	483	63	387
Singleton, George, Dover, N. J. Thread-guide.....	507,561	Oct. 31	3017	741	65	618
Sinkler, James F., Troy, Tenn. Vehicle-brake.....	490,368	Jan. 24	2217	578	62	495
Sinley, Robert L. (See Hyman and Sinley.)						
Sinn, Louis, Philadelphia, Pa. Cooking-pot.....	489,041	Jan. 3	96	27	62	24
Sinsabaugh, George. (See Pruden, Silas, assignor.)						
Sintz, Clark, Springfield, Ohio. Gas-engine.....	509,255	Nov. 21	2102	506 507	65	1185
Sintzenich, Edwin B., Rochester, N. Y. Thrust-bearing.....	504,253	Aug. 29	3311	827	64	1237
Sinz, Joseph W., Anaconda, Mont. Newspaper-holder.....	511,366	Dec. 26	2635	640	65	1940
Sipe, Thalia E., New York, N. Y. Tailor's measure.....	497,503	May 16	1821	459	63	977
Sir Joseph Whitworth & Company. (See Canet, Jean B. G. A., assignor.)						
Sir W. G. Armstrong, Mitchell & Company. (See Noble and Henderson, assignors.)						
Sirois, Emil, Shelby, Ind. Apparatus for shoeing animals.....	502,054	July 25	2430	612	64	486
Siskron, Edward, Minneapolis, Minn. Metallic railway-tie.....	504,695	Sept. 5	629	160	64	1389
Sisson, Francis M. (See Fludder and Sisson.)						
Sisson, Isaac H., Providence, R. I. Button-attaching machine.....	507,083	Oct. 17	2162	536	65	433
Sitler, Edwin J., assignor of two-fifths to H. C. Mechttersheiner, Chicago, Ill. Car-coupling.....	489,421	Jan. 3	667	181	62	143
Sittig, Lena, Brooklyn, N. Y. Combined cloak and skirt-protector.....	489,103	Jan. 3	191	51	62	45
Sittmann, Gustav. (See Pitt and Sittmann.)						
Sjoberg, Carl J. A., Brooklyn, assignor to Garvin Machine Company, New York, N. Y. Type-writing machine.....	492,844	Mar. 7	109	27	62	1379
Sjolander, Jacob R. (See Anderson and Sjolander.)						
Sjöström, Jonas. (See Boening and Sjöström.)						
Skaggs, Milton B., Brentwood, Cal. Raisin-tray turner.....	504,254	Aug. 29	3312	827	64	1238
Skaggs, Newton J., assignor of one-half to J. C. Lee, Montgomery, Ala. Fluid-fuel burner.....	492,440	Feb. 28	2191	547 548	62	1232
Skelly, Hugh T., and W. J. Neilson, Boston, Mass. Station-indicator.....	500,082	June 20	2205	538	63	1803
Skelton, Frederic C., Montreal, Canada. Electric alarm for tanks.....	496,067	Apr. 25	2465	622	63	504
Skelton, Horace T. (See Barber, Bates, Mabry, and Skelton.)						
Skiddy, William W. (See Sadtler and Grimm, assignors.)						
Skidmore, Frederick R. (See O'Connor, Phillip, assignor.)						
Skiles, Richard J., Pittsburg, Pa. Vehicle-spring.....	490,794	Jan. 31	2914	749	62	644
Skinner Chuck Company. (See Skinner, James N., assignor.)						
Skinner, Edwin M., South Bend, Ind., and O. M. Farrand, New York, N. Y. Combination-lock.....	495,276	Apr. 11	1221	306	63	244
Skinner, Ernest B., Ogden, Utah Ter. Electric brake.....	508,851	Nov. 14	1391	346	65	1035
Skinner, Ernest M., Somerville, assignor of one-half to G. S. Hutchings, Cambridge, Mass. Swell pedal-action for pipe-organs.....	500,040	June 20	2142	519 520	63	1793
Skinner, Frank, et al. (See Spahner, Adam A., Jr., assignor.)						
Skinner, Frank W., New York, N. Y. Actuating mechanism for fluid-meters.....	498,314	May 30	3116	777	63	1239
Skinner, George E., Poughkeepsie, N. Y. Corner dust-shield stamp.....	499,857	June 20	1866	453	63	1743
Skinner, James N., assignor to Skinner Chuck Company, New Britain, Conn. Face-plate jaw.....	508,533	Nov. 14	916	225	65	943
Skinner, John M., Toledo, Ohio. Filter.....	508,440	Nov. 14	753	186	65	912
Skinner, Thomas J., Auburn, assignor of one-half to J. A. Reynolds, Carroll, Iowa. Tire-heater.....	489,042	Jan. 3	97	27	62	24
Slack, James E., Sugar Branch, Ind. Whiffletree-hook.....	511,553	Dec. 26	2937	716	65	1995
Slade, Frank N. (See Muehlig and Slade.)						
Slade, Frank N., Columbus, Ohio. Mining-machine.....	493,659	Mar. 21	1427	363	62	1667
Slaight, George W. (See Wohlschlegel, Carl F., assignor.)						
Slater, Frank, Kaukauna, Wis. Car-brake adjuster.....	509,958	Dec. 5	184	43, 44	65	1444
Slater, George L., South Bend, Ind. Vending-machine.....	491,323	Feb. 7	436	112	62	831
Slater, John. (See Doulton and Slater.)						
Slater, John S., Lytham, England. Cycle-stand.....	511,367	Dec. 26	2635	640 641	65	1940
Slater, Vandalia, Hunt's, N. Y. Pocket-knife.....	499,047	June 6	532	125	63	1484
Slattery, Dennis P. (See Pickles, Charles K., assignor.)						
Slaughter, Lorenzo T., Roanoke, Va. Locomotive sand-box.....	492,058	Feb. 21	1589	395	62	1096
Slawson, John C., Indianapolis, Ind. Street-sweeper.....	505,796	Sept. 26	2495	630	64	1778
Slaymaker, Samuel R., et al. (See Troast, William F., assignor.)						
Sleight, William E., assignor to United States Swing Treadle Company, Milwaukee, Wis. Swinging treadle.....	494,747	Apr. 4	350	89	63	69
Sleight, William E., assignor to United States Swing Treadle Company, Milwaukee, Wis. Suspension device for swinging treadles.....	494,748	Apr. 4	352	89	63	69
Slicer, Edmund. (See D'Andria and Slicer.)						
Sloan, Alfred J., Clyde, N. Y. Safety snap-hook.....	499,942	June 20	1992	484	63	1766
Sloan, Charles T., Buffalo, N. Y. Gas-burner for boiler-furnaces.....	500,724	July 4	312	84	64	58
Sloan, George B. (See Hall and Sloan.)						
Sloan, Robert A., and J. E. L. Barnes, Birkenhead, England. Apparatus for sealing cans, &c.....	502,019	July 25	2370	595 596	64	476
Sloan, Sextus, Painesville, Ohio. Mechanism for converting motion.....	497,478	May 16	1771	446	63	968
Sloan, William P., Knoxville, Tenn. Bookbinding.....	497,137	May 9	1199	306	63	852
Slocumb, Charles E., Everett, Mass. Shoe-nail.....	489,543	Jan. 10	884	231	62	200
Slocum, Eason L., Pawtucket, R. I. Automatic fire-extinguishing sprinkler.....	494,604	Apr. 4	122	29	63	26
Slocum, Frank R. (See Flint, Alvin S., assignor.)						
Slocum, Giles Q., Albert Lea, Minn. Heating-drum.....	506,379	Oct. 10	1016	253	65	206
Slocum, James, Holly, Mich. Type-cabinet.....	509,695	Nov. 28	2864	692	65	1341
Slocum, Orsilus W., assignor of six-sevenths to E. and A. J. McDonald, E. F. Goodwin, J. H. Galligan, S. B. and E. L. Sargent, Taunton, Mass. Making printers' chases.....	508,250	Nov. 7	448	110	65	841
Slongecker, Abram J., Farmersville, Mo. Store-service apparatus.....	490,168	Jan. 17	1869	488	62	414
Sloper, Thomas B., Devizes, England. Means for plugging holes in rubber fabrics.....	490,369	Jan. 24	2219	578 579	62	495
Sloss, Aaron M., Kansas City, Mo. Electric gas-lighting apparatus.....	489,616	Jan. 10	979	255	62	219
Slough, Martin, New York, N. Y. Coin-controlled apparatus.....	492,535	Feb. 28	2355	585	62	1265
Slutz, Herman V., Alta, and T. Slutz, Storm Lake, Iowa. Railway-tie.....	492,895	Mar. 7	194	48	62	1397
Slutz, Theophilus. (See Slutz, Herman V. and T.)						
Smades, Myron W. (See Johnson, Joseph, assignor.)						
Small, John, Dunedin, New Zealand. Horse-detacher.....	507,461	Oct. 24	2829	692	65	570
Smale, John H., St. Thomas, Canada. Wagon-bolster spring.....	506,887	Oct. 17	1854	462	65	376
Small, Dexter M., Providence, R. I. Hot-water appliance.....	507,519	Oct. 24	2940	721	65	590
Small, Edward, Baltimore, Md. Machine for edging sheet-metal blanks.....	509,455	Nov. 28	2486	600	65	1269

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Small, Edward, Baltimore, Md. Machine for making sheet-metal vessels	509,456	Nov. 28	2488	{ 601 602 603 }	{ 65 }	1269
Small, Edward, Baltimore, Md. Machine for forming sheet-metal cylinders	509,959	Dec. 5	186	44	65	1444
Small, George D. B., Chelsea, assignor of one-half to C. M. Wescott, Boston, Mass. Water-heater	495,143	Apr. 11	1005	251	63	204
Small, George N., Lebanon, Ind. Fence	506,559	Oct. 10	1316	329	65	264
Small, Henry J., Sacramento, Cal. Car-brake	510,200	Dec. 5	601	141	65	1523
Small, Henry J., and C. T. Noyes, Sacramento, Cal. Starting appliance for compound engines	503,390	Aug. 15	1922	{ 477 478 }	{ 64 }	946
Small, Thomas, and A. Entwistle, Gloucester City, N. J. Hanger for pictures, &c	511,655	Dec. 26	3109	759	65	2026
Small, William, Jr. (See Livengood, Winfield S., assignor.)						
Small, William, Jr., Kansas City, Mo. Journal-bearing	511,656	Dec. 26	3110	{ 759 760 }	{ 65 }	2026
Smalley, Lindsley H., Coon Rapids, Iowa. Boot for animals	500,968	July 4	689	181	64	125
Smallwood, George S., assignor to L. B. Coupland, Chicago, Ill. Cab	497,352	May 16	1575	{ 396 397 }	{ 63 }	934
Smalstig, Fredrick C., Allegheny, Pa. Cigar-bunching machine	500,083	June 20	2207	539	63	1804
Smalstig, William C., Springfield, Mo. Sad-iron	496,102	Apr. 25	2516	636	63	514
Smardon, George H., Portland, Me. Fire-bucket	504,070	Aug. 29	3002	750	64	1179
Smart, Charles W., Carbondale, Ill. Adjustable support for bicycles	495,914	Apr. 18	2233	562	63	446
Smart, Charles W., Carbondale, Ill. Wheel	507,290	Oct. 24	2546	627	65	514
Smart, David V. B., Troy, N. Y. Trolley and trolley-switch	510,201	Dec. 5	604	{ 141 142 }	{ 65 }	1524
Smawley, William H. (See Bowser, Smawley, and Mullin.)						
Smawley, William H., M. Sassaman, and M. W. Bowser, South English, Iowa. Canopy for horses	498,583	May 30	3549	880	63	1316
Smead, Isaac D., Toledo, Ohio. Stand for bicycles	495,210	Apr. 11	1108	276	63	224
Smead, Isaac D., Toledo, Ohio. Furnace	501,109	July 11	927	238	64	184
Smeal, Archie S., Kylertown, Pa. Rein-ring	506,380	Oct. 10	1017	254	65	206
Smellie, Ernest, New York, N. Y., assignor to Fownes Brothers & Co., London, England. Glove	499,601	June 13	1435	{ 343 344 }	{ 63 }	1656
Smethurst, James, et al. (See Gledhill, Walter, assignor.)						
Smethurst, William, and J. Wade, London, England. Apparatus for mixing gas and air	490,087	Jan. 17	1740	453	62	387
Smith, Verner F. L., Copenhagen, Denmark. Cement	494,763	Apr. 4	371	...	63	74
Smillie, George W., Newark, N. J. Car-coupling	508,441	Nov. 14	755	186	65	912
Smillie, George W., Newark, N. J. Car-coupling	504,442	Nov. 14	756	186	65	913
Smillie, George W., Newark, N. J. Car-coupling	511,220	Dec. 19	2375	579	65	1879
Smith, Abraham R., Burrton, Kans. Latch for wagon end-gates	509,960	Dec. 5	189	44.45	65	1445
Smith, Addison V., Cortland, N. Y. Tricycle	503,009	Aug. 8	1299	318	64	819
Smith, Albert, Washington, D. C. House-door letter-box	492,564	Feb. 28	2400	597	62	1276
Smith, Albert J., and J. V. Landes, Adrian, Mo. Automatic wagon-brake	505,680	Sept. 26	2309	586	64	1743
Smith, Albert S. (See Mills and Smith.)						
Smith, Albert W., San Francisco, Cal. Constructing armature-cores for electric motors or dynamos	492,244	Feb. 21	1884	471	62	1157
Smith, Alice T., Chicago, Ill. Garment-fastening	501,303	July 11	1216	308	64	236
Smith, Alonzo F., Milwaukee, Wis. Puzzle card-case	507,244	Oct. 24	2471	609	65	501
Smith, Alonzo H. (See Earle, Charles H., assignor.)						
Smith, Anthony P., Newark, N. J. Apparatus for tapping mains	505,963	Oct. 3	251	67	65	50
Smith, Arthur H. (See Smith, John T., assignor.)						
Smith, Arthur J., London, England. Manufacture of white lead	501,377	July 11	1361	{ 340 341 }	{ 64 }	261
Smith, Augustus, assignor of four-tenths to J. H. Spannagel, M. Schamber, J. Resner, and F. Frasch, Scotland, S. D. Corn-husking machine	500,434	June 27	2804	{ 690 691 }	{ 63 }	1920
Smith, Benjamin C., Brooklyn, N. Y. Seat	503,728	Aug. 22	2474	615	64	1062
Smith, Benjamin F., Pierre, S. D. Excavator and scraper	497,389	May 16	1625	{ 410 411 }	{ 63 }	943
Smith, Bertha S. (See Smith and Pease, assignors.)						
Smith, Bertha S., et al. (See Cornell, Lewis T., assignor.)						
Smith & Boullemet. (See Kline, Bruce F., assignor.)						
Smith, Burgess, Macon, Ga., assignor to E. & H. T. Anthony & Company, New York, N. Y. Flash-lamp	505,780	Sept. 26	2473	624	64	1774
Smith, Burke N. (See Brewer and Smith.)						
Smith, C. W., et al. (See Kitton, John C., assignor.)						
Smith, Charity, Ithaca, N. Y. Toy figure	505,679	Sept. 26	2308	586	64	1743
Smith, Charles A., San Francisco, Cal. Balloon for observing distant objects	505,414	Sept. 19	1814	468	64	1638
Smith, Charles F., New Britain, Conn. Molasses-gate	490,404	Jan. 24	2269	590	62	505
Smith, Charles G. (See Shilling and Smith.)						
Smith, Charles H., Philadelphia, Pa. Signal-lantern	509,696	Nov. 28	2866	692	65	1341
Smith, Charles H., assignor to O. B. North & Company, New Haven, Conn. Bridle-bit	505,280	Sept. 19	1594	415	64	1596
Smith, Charles H., assignor to O. B. North & Company, New Haven, Conn. Snap-hook	505,281	Sept. 19	1595	415	64	1597
Smith, Charles R., Providence, R. I. Sleeve-button	490,836	Jan. 31	2972	762	62	656
Smith, Charles S., Spokane, Wash. Ticket	509,961	Dec. 5	190	45	65	1445
Smith, Charles S., and E. E. Knowles, Spokane, Wash. Rail-heating device	505,135	Sept. 19	1369	351	64	1555
Smith, Charles T., Cleveland, Ohio. Locomotive fire-kindler	510,447	Dec. 12	1002	239	65	1614
Smith, Charles T., assignor of two-fifths to C. R. Bosworth, Cleveland, Ohio. Oil-burner	489,549	Jan. 10	885	231	62	200
Smith, Christian, Detroit, Mich. Brush	493,414	Mar 14	1005	259	62	1572
Smith, Clarence C. (See Stone and Smith.)						
Smith, Clarence C., et al. (See Stone, Thomas B., assignor.)						
Smith, Coral D. (See Moore, Rue, Smith, Roebuck, Mills, and Kirk.)						
Smith, Daniel H., Holyoke, Mass. Pneumatic tire	491,296	Feb. 7	393	101	62	822
Smith, Daniel H., assignor of one-fourth to A. C. Flegal, Morrisdale, Pa. Spring-motor	491,140	Feb. 7	125	33	62	772
Smith, Darwin, Des Moines, Iowa. Insecticide	490,688	Jan. 31	2748	...	62	612
Smith, David, et al. (See Henry, John, assignor.)						
Smith, David J., assignor of one-half to G. D. Turner, Chicago, Ill. Reciprocating engine	489,766	Jan. 10	1204	316	62	264
Smith, David P. (See Mather and Smith.)						
Smith, Del, Worcester, N. Y. Ice-velocipede	500,623	July 4	138	37	64	27
Smith, Dora A., Glen Ridge, N. J. Composition of matter for cleaning silver	499,401	June 13	1113	...	63	1599
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	506,949	Oct. 17	1951	483	65	395
Smith, E. Irving. (See Foster, Jonas R., assignor.)						
Smith, Earl A. (See Smith, Dwight L., assignor.)						
Smith, Edward, Bradford, England, assignor, by mesne assignments, to G. Draper & Sons, Hopedale, Mass. Automatic warp stop-motion for looms	491,139	Feb. 7	121	33	62	771

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smith, Edward, assignor of one-half to H. Benn, Bradford, England. Warp stop-motion for looms	509,494	Nov. 28	2555	618	65	1282
Smith, Edward A., <i>et al.</i> (See Adams, Charles F., assignor.)						
Smith, Edward A., Hamilton, Ohio. Carburetor	502,781	Aug. 8	918	224	64	749
Smith, Edward A., New York, N. Y., assignor to Boston Tool Company, Boston, Mass. Drag-saw machine	506,277	Oct. 10	838	206	65	171
Smith, Edward G., San José, Cal. Electrical pressure-indicator for steam-gages	490,725	Jan. 31	2801	718	62	623
Smith, Edward J., Almont, Mich. Whiffletree	508,444	Nov. 14	758	187	65	913
Smith, Edward M., Cohoes, N. Y., and J. W. Cassidy, deceased, assignors of part to J. Scott and J. Sullivan. Knitting-machine stop mechanism. (Reissue)	11,366	Sept. 19	1844	474	64	1643
Smith, Edward S., Waterbury, Conn. Comb.	497,353	May 16	1577	397	63	934
Smith, Edward S., Waterbury, Conn. Fastening for garment-supporters	500,353	June 27	2685	658	63	1899
Smith, Edward S., Waterbury, Conn. Garment-supporter	490,437	June 27	2808	692	63	1921
Smith, Edward W., and J. B. Walton, Dayton, Ohio. Slate-pencil sharpener	500,257	June 27	2524	617	63	1871
Smith, Edwin D., Chattanooga, Tenn. Wristband	500,435	June 27	2806	691	63	1921
Smith, Edwin G., and B. B. Brewer, San Francisco, Cal. Smelting-furnace	496,235	Apr. 25	2715	680	63	551
Smith & Egge Manufacturing Company. (See Egge, Frederick, assignor.)						
Smith & Egge Manufacturing Company. (See Norwell, John J., assignor.)						
Smith, Elihu E., Baltimore, Md. Box for railway-joints	491,787	Feb. 14	1178	295	62	999
Smith, Elmer S. (See Spaulding, Elijah F., assignor.)						
Smith, Emery B., assignor of three-fourths to L. C. Billon, W. E. Vach, and J. W. Pickel, St. Louis, Mo. Wrench	497,138	May 9	1200	306	63	852
Smith, Emmet L., assignor to Reliance Corset Company, Jackson, Mich. Corset	492,172	Feb. 21	1772	442	62	1134
Smith, Ernest B., Springfield, Mass. Toy game apparatus	506,800	Oct. 17	1704	427	65	349
Smith, Ernst G., Columbia, Pa. Reversing-gear	489,104	Jan. 3	192	51	62	45
Smith, Eugene, Philadelphia, Pa. Saw-set	490,371	Jan. 24	2225	579	62	496
Smith, Eugene, Philadelphia, Pa. Sewing-machine	504,792	Sept. 12	796	202	64	1432
Smith, Eugene, Chicago, Ill. Building-stone	507,562	Oct. 31	3018	741	65	618
Smith, Eugene C., New York, N. Y. Structural blank for hinge-butto	507,336	Oct. 24	2631	647	65	532
Smith, Everett A. (See Smith, Henry N., N. A., and E. A.)						
Smith Exhaust Pipe Company. (See Smith, John Y., assignor.)						
Smith, Ezra B., Cincinnati, Ohio, assignor of one-half to Victor Manufacturing Company, Covington, Ky., and Cincinnati, Ohio. Vehicle-spring	500,515	June 27	2927	719	63	1943
Smith, F. F., <i>et al.</i> (See Lyle, Jefferson Y., assignor.)						
Smith, Ferdinand E., assignor to Smith Sons Gin and Machine Company, Birmingham, Ala. Seed-cotton cleaner and conveyer	494,902	Apr. 4	597	150	63	116
Smith, Frank A., assignor of one-third to J. Krauss, Flora, Ind. Heating-drum	501,901	July 18	2184	542	64	425
Smith, Frank J., Muskegon, Mich. Hinge	493,190	Mar. 7	648	165	62	1486
Smith, Frank W., St. Louis, Mo. Combined fender and car-brake	502,780	Aug. 8	916	223	64	749
Smith, Frank W., Sunbury, Pa. Coin holder and counter	504,504	Sept. 5	324	83	64	1330
Smith, Frank W., assignor to R. O. Conant, Portland, Me. Can-filling machine	506,137	Oct. 3	532	137	65	103
Smith, Fred C. (See Graham and Smith.)						
Smith, Fred P., Worcester, Mass. Heating and ventilating apparatus and system	509,332	Nov. 21	2237	541	65	1210
Smith, Fred P., Worcester, assignor to Smith Heating and Ventilating Company, Boston, Mass. Concentrating blower	509,142	Nov. 21	1907	466	65	1148
Smith, Fred P., Worcester, assignor to Smith Heating and Ventilating Company, Boston, Mass. Rotating fan or blower	509,143	Nov. 21	1909	467	65	1148
Smith, Fred R. (See Moody and Smith.)						
Smith, Frederick A., Wollaston, Mass. Reflector-lantern	508,776	Nov. 14	1275	317	65	1014
Smith, Frederick H., deceased; W. D. Baldwin, Washington, D. C., administrator, assignor to I. S. Smith, Bromley, England. Shoe-lace fastener	502,694	Aug. 8	762	185	64	731
Smith, Frederick J., Sheldon, Ill. Brace for dredges	498,824	June 6	128	32	63	1414
Smith, Friend W., Jr., assignor to Curtis & Curtis, Bridgeport, Conn. Device for holding nipples during threading	500,748	July 4	344	91	64	64
Smith, Friend W., Jr., assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	508,581	Nov. 14	995	244	65	959
Smith, Friend W., Jr., assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	508,582	Nov. 14	996	244	65	959
Smith, G. Waldon. (See Moore, George, assignor.) (Reissue.)						
Smith, Gary B., Wolcott, N. Y. Bed-bottom	508,056	Nov. 7	116	32	65	780
Smith, George, assignor of three-fourths to J. McClure, W. K. Elliott, and L. H. Roots, Little Rock, Ark. Steam-engine	501,581	July 18	1662	415	64	335
Smith, George, Little Rock, assignor of nine-tenths to D. A., O. B., A. H., B. A. Neal, J. L. Booth, A. G. Griffin, T. S. Anderson, J. H. Emison, J. M. Wright, W. P. Davis, El Paso, and J. A. Phelps, White county, Ark. Steam-engine	491,141	Feb. 7	126	33	62	773
Smith, George H., deceased, London, England; A. J. Benedict, administrator. Making varnish	496,451	May 2	99		63	637
Smith, George H., assignor to M. O. and T. M. Smith, Lancaster, Ohio. Watch-balance	510,202	Dec. 5	605	142	65	1524
Smith, George M., assignor of one-half to S. Young, Boonville, Mo. Bridle	507,852	Oct. 31	3512	864	65	710
Smith, George W. (See Ott, Charles F. X., assignor.)						
Smith, George W., Milwaukee, Wis. Diving apparatus	503,753	Aug. 22	2519	627	64	1071
Smith, George W., Union City, Ind. Vehicle-pole	505,964	Oct. 3	254	68	65	50
Smith, George W., Mineral Point, Wis. Bung for barrels, &c.	506,278	Oct. 10	840	207	65	171
Smith, George W., assignor to C. F. Pond, Rochester, N. Y. Delivery-crane for mail-bags	497,391	May 16	1630	412	63	944
Smith, George W., and J. S. Hendon, Van Fleet, Miss. Combined scraper and cultivator	510,940	Dec. 19	1919	469	65	1794
Smith, George Y., assignor of one-half to F. G. Atkinson, Minneapolis, Minn. Vertical boiler	498,450	May 30	3335	830	63	1279
Smith, George Y., assignor of one-half to F. G. Atkinson, Minneapolis, Minn. Grain steamer and drier	498,731	May 30	3833	945	63	1365
Smith, H. H., <i>et al.</i> (See Wilkinson, William A., assignor.)						
Smith, Harmon L. and W. E., Watkins, N. Y. Corn-harvester	497,390	May 16	1627	411	63	944
Smith, Harper F., assignor of one-half to W. F. McCully, Philadelphia, Pa. Self-generating gas-burner	500,969	July 4	689	181	64	125
Smith, Harper F., assignor of five-eighths to W. F. McCully and G. McGowan, Philadelphia, Pa. Vapor-burner	506,560	Oct. 10	1317	329	65	264
Smith, Harry. (See Pullman and Smith.)						
Smith, Harvey E., Benton, Ohio. Nut-lock	505,856	Oct. 3	81	21	65	18
Smith, Henry. (See Smith, Theodore and H.)						
Smith, Henry, Chicago, Ill. Map-holder	507,178	Oct. 24	2360	583	65	481
Smith, Henry A., Lynn, Mass. Gate	494,390	Mar. 28	2651	665	62	1913

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smith, Henry A., Los Angeles, Cal. Ventilated fruit and refrigerator car	498,449	May 30	3332	829	63	1278
Smith, Henry C., Roanoke, Va. Game apparatus	495,527	Apr. 18	1618	407	63	337
Smith, Henry C., Oneonta, assignor of one-third to R. C. Blackall, Albany, N. Y. Machine for grinding links and link-blocks for valve-motions of locomotives	507,639	Oct. 31	3170	776	65	646
Smith, Henry C., Oneonta, assignor of four-fifths to H. G. and E. Young, R. C. Blackall, Albany, and J. W. Sprong, Slingerlands, N. Y. Spark-arrester for locomotives	495,380	Apr. 11	1379	344	63	273
Smith, Henry J., Fitzroy, Victoria. Shaving-brush	507,462	Oct. 24	2830	692	65	571
Smith, Henry N., N. A., and E. A., Bangor, Me. Grapple	510,053	Dec. 5	361	80	65	1477
Smith, Henry V., Hartford, Conn. Tool-holder	501,110	July 11	930	232	64	184
Smith, Henry V., assignor of one-half to J. W. Storrs, Hartford, Conn. Ratchet-brace	505,611	Sept. 26	2187	553	64	1722
Smith Heating and Ventilating Company. (See Smith, Fred P., assignor.)						
Smith, Herbert G., Claysville, Pa. Well-bailer	492,117	Feb. 21	1681	419	62	1114
Smith, Herbert G., Claysville, Pa. Earth-drill	508,187	Nov. 7	336	83	65	820
Smith-Hill Foundry and Machine Company. (See Hill, Thomas, assignor.)						
Smith, Horace T., Port Jefferson, N. Y. Speed-indicator	490,889	Jan. 31	3056	785	62	674
Smith, Howard F., assignor of one-half to H. J. Cannon, Elkhart, Ind. Process of and machine for making cell-cases	507,761	Oct. 31	3346	{ 819 820 }	{ 65 }	679
Smith, Hugh L. (See Boeck, Charles H., assignor.)						
Smith, Hugh S. (See Boeck, Charles H., assignor.)						
Smith, Ira T., Mount Carmel, Conn. Machine for swaging needle-blanks	492,589	Feb. 28	2437	{ 606 607 }	{ 62 }	1284
Smith, Isabella S. (See Smith, Frederick H.)						
Smith, Isaiah, Nashville, Tenn. Portable scaffold	506,561	Oct. 10	1318	{ 329 330 }	{ 65 }	264
Smith, Israel C., Grand Rapids, Mich. Folding bed	496,915	May 9	866	228	63	794
Smith, J. B., et al. (See Trexler, David L., assignor.)						
Smith, J. N., et al. (See Lombard, Levi W., assignor.)						
Smith, Jacob C., assignor of one-half to J. H. Golfin and E. J. Hardeman, Luling, Tex. Combined car and air-brake coupling	491,227	Feb. 7	270	67, 68	62	799
Smith, Jacob G. (See Barnes and Smith.)						
Smith, James A., et al. (See Kermeen, George S., assignor.)						
Smith, James A., Cleavesville, Mo. Pipe-wrench	493,737	Mar. 21	1560	398	62	1695
Smith, James B., Brooklyn, assignor to E. Todd & Co., New York, N. Y. Magazine lead-pencil	489,043	Jan. 3	98	27	62	25
Smith, James G., Covington, Ky., assignor of one-half to J. Watson, Cincinnati, Ohio. Lock-hinge	497,730	May 16	2163	541	63	1040
Smith, James H. (See Walker, Francis M., assignor.)						
Smith, James M. (See Randolph, George W., assignor.)						
Smith, Jay, and C. H. Gage, Llano, Tex. Pipe-wrench	496,753	May 2	577	154	63	723
Smith, Jay H., Rochester, N. Y. Fly-paper holder	491,860	Feb. 14	1288	319	62	1021
Smith, Jay H., and M. D. Knowlton, Rochester, N. Y.; said Knowlton assignor to said Smith. Machine for the manufacture of fly-paper	491,861	Feb. 14	1290	{ 319 320 }	{ 62 }	1022
Smith, John A. (See Goetz and Smith.)						
Smith, John B., Chicago, Ill. Auxiliary steam-pipe for radiators	505,136	Sept. 19	1370	351	64	1555
Smith, John C., Edinburgh, Scotland. Micrometer-gage	495,379	Apr. 11	1376	343	63	272
Smith, John D., Bonham, assignor of one-half to R. R. Gaines and J. S. Williams, Paris, Tex. Type-writing machine	502,147	July 25	2574	646	64	514
Smith, John E., New York, N. Y. Electric-circuit connection for signaling or telephone boxes	501,631	July 18	1747	435	64	350
Smith, John G., Montreal, Canada. Stop-cock	509,628	Nov. 28	2763	666	65	1322
Smith, John H., Fairchild, Wis. Snap-hook	496,012	Apr. 25	2374	600	63	487
Smith, John H., Hazleton, Pa. Flower-pot support	496,173	Apr. 25	2618	659	63	533
Smith, John H. C. and N. B., Altamont, Ill. Car-coupling	510,097	Dec. 5	430	96	65	1491
Smith, John L. (See Burgess, Melancthon, assignor.)						
Smith, John L., Ogden, Utah Ter. Car-coupling	490,169	Jan. 17	1872	488	62	414
Smith, John M., Charleston, S. C. Axle-box	491,380	Feb. 7	533	136	62	850
Smith, John P., Portland, Me. Cash-indicator	493,306	Mar. 14	852	217	62	1541
Smith, John S. (See Montgomery, Floyd E., assignor.)						
Smith, John S., Leavenworth, Kans. Label-holder	490,687	Jan. 31	2746	707	62	612
Smith, John S., London, England. Pneumatic tire	505,255	Sept. 19	1548	404	64	1588
Smith, John S., C. J. and G. E. Tate, London, England; said C. J. and G. E. Tate assignors to said Smith. Fastening device for pneumatic tires	504,284	Aug. 29	3357	839	64	1247
Smith, John T., Heron Lake, Minn. Flax or hemp brake	494,174	Mar. 28	2294	581	62	1846
Smith, John T., Heron Lake, Minn. Finishing-machine for flax or hemp fiber	494,175	Mar. 28	2296	581	62	1847
Smith, John T., Heron Lake, Minn. Portable flax and hemp brake	494,176	Mar. 28	2298	582	62	1848
Smith, John T., Heron Lake, Minn. Cleaner and reducer for crude flax-straw	505,069	Sept. 12	1260	323	64	1521
Smith, John T., Heron Lake, Minn. Flax cleaning and reducing machine	511,221	Dec. 19	2376	580	65	1879
Smith, John T., Bridgeport, Conn., assignor of one-half to A. H. Smith, New York, N. Y. Wheel-tire	501,967	July 25	2289	569	64	460
Smith, John V., Hayes, Ill. Pin-lock	489,272	Jan. 3	450	124	62	99
Smith, John V., Hayes, Ill. Cuff-holder	507,940	Oct. 31	3645	902	65	735
Smith, John V., Reserve, assignor of one-half to J. C. Porter, Jr., Allegheny, Pa. Core-barrel	489,188	Jan. 3	316	87	62	72
Smith, John W., Enders, Ark. Plow	500,244	June 27	2505	612	63	1868
Smith, John W. R., et al. (See Irving, Samuel, assignor.)						
Smith, John Y., assignor to Smith Exhaust Pipe Company, Doylestown, Pa. Method of and apparatus for consumption of fuel	503,501	Aug. 15	2089	522	64	976
Smith, Jonathan N., Gilmer, Tex. Cotton-cleaner	497,219	May 9	1317	336	63	874
Smith, Joseph F., New Bedford, Mass. Card-case	504,948	Sept. 12	1052	270	64	1482
Smith, Joseph J., and G. W. Findlater, Jamaica, N. Y. Armature	501,376	July 11	1360	340	64	261
Smith, Joseph R., Waterbury, Conn., assignor, by mesne assignments, to Consolidated Fastener Company, Portland, Me. Glove-fastening	504,309	Aug. 29	3398	851	64	1254
Smith, Josiah T., W. S., and W. F., East Liverpool, Ohio. Ironing-table	502,591	Aug. 1	570	137	64	671
Smith, Lawrence T., Barrington, R. I. Electric cigar-lighter	496,103	Apr. 25	2517	637	63	514
Smith, Leroy H., Ithaca, N. Y., assignor to Ithaca Gun Company. Type-writing machine	496,370	Apr. 25	2951	737	63	596
Smith, Leslie P., Otego, N. Y. Sawing-machine	506,948	Oct. 17	1949	483	65	394
Smith, Levi W., assignor of two-thirds to J. Feldmeyer and C. A. Lyon, Milwaukee, Wis. Draft-oven	492,995	Mar. 7	352	89	62	1428
Smith, Lew C. (See Byrkit, Christian S., assignor.)						
Smith, Lewis R., Portland, Mich. Cartridge-filler	492,171	Feb. 21	1769	442	62	1134
Smith, Lorenzo M., and A. P. Morrill, Shipton, Canada. Hoisting apparatus	511,255	Dec. 19	2431	{ 592 593 }	{ 65 }	1889
Smith, Loring M., Romeo, Mich. Running-gear for vehicles	492,845	Mar. 7	111	27, 28	62	1379
Smith, Louis, Cleveland, Ohio. Cloth-cutting machine	510,717	Dec. 12	1487	368	65	1793

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smith, Lyman C. (See Clarke, Charles C., assignor.)						
Smith, Lyman C. (See Stillman, George F., assignor.)						
Smith, Martin L., Elwell, Iowa. Music-leaf turner	491,907	Feb. 14	1361	339	62	1036
Smith, Martin V., Pittsburg, Pa. Oven for the manufacture of coke	510,448	Dec. 12	1003	{ 239 240 }	{ 65 }	1614
Smith, Martin V., assignor to B. H. Lightfoot, Pittsburg, Pa. Apparatus for and process of reducing zinc ores	500,436	June 27	2807	691	63	1921
Smith, Mary O., et al. (See Smith, George H., assignor.)						
Smith, Michael H., Halifax, England. Conduit railway-trolley	498,906	June 6	283	66	63	1442
Smith, Michael H., Halifax, England. System for supplying electricity to railways	500,256	June 27	2521	{ 616 617 }	{ 63 }	1871
Smith, Millage M., assignor to one-half to J. Roberson, Stockdale, Tex. Ironing-table	494,654	Apr. 4	199	50	63	41
Smith, Minard M., Brooklyn, N. Y. Piston	490,724	Jan. 31	2800	718	62	623
Smith, Miner O., Waverly, N. Y. Check-punch	500,676	July 4	234	62	64	44
Smith, Morris F., Philadelphia, Pa., assignor of one-half to William Cramp & Sons Ship and Engine Building Company, of Pennsylvania. Machine for finishing bores of large gun-tubes or cannon	493,191	Mar. 7	649	{ 165 166 }	{ 62 }	1486
Smith, Morris F., Philadelphia, Pa., assignor of one-half to William Cramp & Sons Ship and Engine Building Company, of Pennsylvania. Contractible test-plug	499,682	June 13	1558	376	63	1676
Smith, Morris F., Philadelphia, Pa., assignor of one-half to William Cramp & Sons Ship and Engine Building Company, of Pennsylvania. Adjusting device for rifling guns or cannon	499,683	June 13	1559	376	63	1677
Smith, Morris F., Philadelphia, Pa., assignor of one-half to William Cramp & Sons Ship and Engine Building Company, of Pennsylvania. Metal cutting and working machine	506,342	Oct. 10	944	{ 236 237 }	{ 65 }	191
Smith, Nathan, Great Harwood, and J. Haydock, Blackburn, England. Vehicle-wheel	510,203	Dec. 5	606	142	65	1524
Smith, Nathan B. (See Smith, John H. C. and N. B.)						
Smith, Ned E. (See Odell and Smith.)						
Smith, Noah, Ashland, Ill. Gate-operating mechanism	500,161	June 27	2375	576	63	1845
Smith, Normand A. (See Smith, Henry N., N. A., and E. A.)						
Smith, Oberlin, Bridgeton, N. J. Combination-lock	494,605	Apr. 4	124	30	63	26
Smith, Oberlin, Bridgeton, N. J., assignor, by mesne assignments, of one-half to Northrop Loom Company, Hopedale, Mass. Warp stop-motion for looms	498,191	May 23	2890	721	63	1184
Smith, Oberlin, Bridgeton, N. J., assignor, by mesne assignments, of one-half to Northrop Loom Company, Hopedale, Mass. Warp stop-motion for looms	498,192	May 23	2898	722	63	1185
Smith, Oberlin, Bridgeton, N. J., assignor, by mesne assignments, of one-half to Northrop Loom Company, Hopedale, Mass. Warp stop-motion for looms	498,193	May 23	2902	{ 723 723 }	{ 63 }	1186
Smith, Oberlin, Bridgeton, N. J., assignor, by mesne assignments, of one-half to Northrop Loom Company, Hopedale, Mass. Warp stop-motion for looms	498,194	May 23	2907	723	63	1186
Smith, Oliver A., Clinton county, assignor of one-half to W. F. Gant, Grayson, Mo. Cultivator	494,749	Apr. 4	353	89, 90	63	70
Smith, Oliver H., Flemington, N. J. Water cooler and filter	494,901	Apr. 4	596	150	63	115
Smith, Ophelia, Shepherdsville, Kv. Scrubber	494,037	Mar. 21	2056	525	62	1788
Smith, Parker P. (See Forbes, Wilson H., assignor.)						
Smith, Parker P., Jeannette, Pa. Railway-rail joint and fastening	499,049	June 6	534	126	63	1484
Smith, Phelps F., et al. (See Brooks, Silas M., assignor.)						
Smith, Prescott A. (See Stone and Smith.)						
Smith, Prescott A., et al. (See Stone, Thomas B., assignor.)						
Smith, Ransom A., assignor of one-half to W. D. Lewis, Washington Mills, N. Y. Car-coupling	507,762	Oct. 31	3349	821	65	680
Smith, Reuben K., Greeley, Colo. Neck-yoke coupling	490,046	Jan. 17	1676	436	62	374
Smith, Richard, Sherbrooke, Canada. Mixing apparatus	492,475	Feb. 28	2248	562	62	1244
Smith, Richard, Sherbrooke, Canada. Mixing apparatus	495,603	Apr. 18	1737	438	63	358
Smith, Richard, Sherbrooke, Canada. Doctor for calender-rolls	497,610	May 16	1979	{ 495 496 }	{ 63 }	1006
Smith, Richard, Sherbrooke, Canada. Steam-regulator for paper-machines	508,993	Nov. 21	1656	408	65	1100
Smith & Richardson. (See Wilkinson, William A., assignor.)						
Smith, Robert, et al. (See Chesebro, James F., assignor.)						
Smith, Robert M., and C. B. Rose, Louisiana, Mo. Stove	511,222	Dec. 19	2378	580	65	1880
Smith, Roswell T. (See White and Smith.)						
Smith, Roswell T., Nashua, N. H., assignor to C. H. Parsons, Brooklyn, N. Y. Cloth-fold-ing machine	492,116	Feb. 21	1678	{ 418 419 }	{ 62 }	1114
Smith, Rudolph C., Yonkers, N. Y., assignor, by mesne assignments, to National Company, of Illinois. Elevator	490,370	Jan. 24	2223	579	62	496
Smith, Rudolph C., Yonkers, assignor to Otis Brothers & Company, New York, N. Y. Heater for compressed-air engines	491,859	Feb. 14	1287	319	62	1021
Smith, Samuel H., Reynoldton, Pa. Vending-machine	494,653	Apr. 4	196	49, 50	63	40
Smith, Samuel I., et al. (See Cornell, Lewis T., assignor.)						
Smith, Samuel I., and H. W. Pease, assignors to B. S. Smith, Chicago, Ill. Cigar-bunch-ing machine	507,177	Oct. 24	2352	{ 580 581 582 }	{ 65 }	480
Smith, Samuel R., Colusa, Cal. Step-ladder	490,991	Jan. 31	3235	826	62	707
Smith, Samuel R., Cincinnati, Ohio. Sawmill-carriage	496,142	Apr. 25	2570	647	63	524
Smith, Scott A., Providence, R. I. Support for shelves	498,945	June 6	344	82	63	1452
Smith, Seth T., assignor of one-half to H. P. Proctor, Viroqua, Wis. Hitching-strap holder	489,438	Jan. 3	703	188	62	151
Smith, Sheffield. (See Hancock, George, assignor.)						
Smith, Sidney. (See Glen, Purvis, and Smith.)						
Smith, Solomon P., Waterford, N. Y. Air-current governor	505,238	Sept. 19	1520	398	64	1583
Smith Sons Gin and Machine Company. (See Smith, Ferdinand E., assignor.)						
Smith, Stephen D., Orlando, Fla. Steam canning cooker	510,718	Dec. 12	1488	368	65	1704
Smith, Stephen N., Providence, R. I. Manufacture of lacing-studs	498,315	May 30	3120	778	63	1239
Smith, Theodore and H., Jersey City, N. J. Drier	492,340	Feb. 21	2028	{ 504 505 }	{ 62 }	1187
Smith, Theodore V., New York, N. Y. Box for storing and preserving cigars and tobacco	496,234	Apr. 25	2713	679	63	551
Smith, Thomas, Breckenridge, Miss. Tongs	490,510	Jan. 24	2440	629	62	538
Smith, Thomas, assignor to B. De Lissa and J. A. Wallace, Melbourne, Victoria. Apparatus for mixing air and gas	491,060	Jan. 31	3349	854	62	731
Smith, Thomas, and J. J. Minchin, Paterson, N. J., assignors to Hess, Goldsmith & Co., New York, N. Y. Swivel-loom	499,399	June 13	1101	{ 265 266 }	{ 63 }	1597
Smith, Thomas, and J. J. Minchin, Paterson, N. J., assignors to Hess, Goldsmith & Co., New York, N. Y. Swivel-loom	499,400	June 13	1108	{ 266 267 }	{ 63 }	1598
Smith, Thomas M., et al. (See Smith, George H., assignor.)						
Smith, Thomas S., assignor of one-half to W. W. Breslin, Waterford, N. Y. Mechanism for operating machines	505,254	Sept. 19	1547	403	64	1588
Smith, Walter, Sharon Hill, Pa. Spring-cotter	500,162	June 27	2376	576	63	1845

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smith, Walter F., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Razor-strop case	508,443	Nov. 14	758	186	65	913
Smith, Walter J., Leamington, Canada. Color-printing device	496,914	May 9	865	228	63	794
Smith, Walter T. (See Ryan, Frank M., assignor.)						
Smith, Walton D., Prophetstown, Ill. Flower-trellis	510,523	Dec. 12	1124	272	65	1637
Smith, Walton D., Prophetstown, Ill. Flower-trellis	510,524	Dec. 12	1125	272	65	1637
Smith, Warren S., St. Johnsbury, Vt. Attachment for dividers	504,116	Aug. 29	3083	771	64	1195
Smith, Wellington C. (See Vail, Jackson, and Smith.)						
Smith, Willard A., Providence, R. I. Coin-actuated machine	491,196	Feb. 7	223	56, 57	62	790
Smith, William, Mystic, Iowa. Grubbing-machine	509,774	Nov. 28	2991	724	65	1364
Smith, William, assignor to Dale & Davis, Trenton, N. J. Water-closet	492,947	Mar. 7	276	70	62	1413
Smith, William, Philadelphia, Pa., assignor to Willets Manufacturing Company, Trenton, N. J. Water-closet	510,997	Dec. 19	2022	499	65	1811
Smith, William C., Goshen, Ind. Bicycle	506,741	Oct. 17	1608	405	65	331
Smith, William C., Goshen, Ind. Pedal-crank for bicycles	510,620	Dec. 12	1326	324	65	1672
Smith, William E. (See Smith, Harmon L. and W. E.)						
Smith, William E., assignor of one-half to R. Jewell, Linneus, Mo. Stovepipe	498,316	May 30	3120	778	63	1239
Smith, William G. (See Bailey, Elmer E., assignor.)						
Smith, William G. (See Hood and Smith.)						
Smith, William H., Albion, Ind. Wagon running-gear	507,563	Oct. 31	3019	742	65	618
Smith, William H., Chicago, Ill. Account-book	507,601	Oct. 31	3098	756	65	633
Smith, William I., Memphis, Tenn. Electrical connection	505,561	Sept. 26	2102	533	64	1705
Smith, William J., Wilkinsburg, assignor of one-half to T. W. Welsh, Wilmerding, Pa. Train signaling apparatus	494,234	Mar. 28	2394	604 } 605 }	62	1866
Smith, William S. (See Smith, Josiah T., W. S., and W. F.)						
Smith, William S., Berkeley, Cal. Closed-conduit electric railway	511,254	Dec. 19	2427	592	65	1888
Smith, William T., Baltimore, Md. Cable-railway apparatus	499,048	June 6	533	125 } 126 }	63	1484
Smith, William T., assignor to Wm. Knabe & Co. Manufacturing Company, Baltimore, Md. Piano-stool	505,256	Sept. 19	1549	404	64	1588
Smith, William W., Traverse City, Mich. Car-coupling	494,391	Mar. 28	2652	665	62	1913
Smith, William W., Traverse City, Mich. Car-coupling	494,512	Mar. 28	2835	710	62	1947
Smith, Willie J., Ellis, Mo. Hay-stacker	492,059	Feb. 21	1589	395	62	1096
Smith, Wilson F. (See Smith, Josiah T., W. S., and W. F.)						
Smith, Yorick W., Washington, D. C. Lining for flues or chimneys	494,036	Mar. 21	2055	525	62	1788
Smithman, John B., Oil City, Pa. Cable railway	496,236	Apr. 25	2716	680 } 681 }	63	551
Smitten, Thomas W. F., Brooklyn, N. Y. Sleeve or collar button	502,834	Aug. 8	1009	246	64	767
Smucker, David D., West Liberty, Ohio. Coffin-protector	507,763	Oct. 31	3351	821	65	680
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Paper-feeder	492,374	Feb. 21	2080	520 } 521 }	62	1197
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Automatic weighing-machine	493,795	Mar. 21	1650	420 } 421 } 422 }	62	1712
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Automatic weighing-machine	493,796	Mar. 21	1658	422 } 423 }	62	1713
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Automatic weighing-machine	493,797	Mar. 21	1663	424 } 425 }	62	1714
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Feeding device for weighing-machines	493,798	Mar. 21	1667	425 } 21 }	62	1715
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Package-making machinery	505,857	Oct. 3	82	22 } 23 }	65	18
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Card-feeder for package-filling machines	505,858	Oct. 3	88	24 } 35 }	65	19
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Package making and filling machine	505,888	Oct. 3	135	36 } 37 }	65	27
Smyth, Charles A., Monroeville, Ill. Secondary battery	507,463	Oct. 24	2831	693	65	571
Smyth, David M., Northwood, N. H. Cultivator for fruit-trees	505,965	Oct. 3	255	68	65	50
Smyth, David M., Northwood, N. H., assignor to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	491,228	Feb. 7	273	68, 69	62	800
Smyth Manufacturing Company. (See Smyth, David M., assignor.)						
Smyth, Samuel, Pittston, Pa. Folding table	490,320	Jan. 24	2140	558	62	479
Snapp, James F., Garza, Tex. Photographer's changing and developing box	506,343	Oct. 10	946	236	65	192
Snapp, James F., Garza, Tex. Curtain-fixture	506,344	Oct. 10	948	236	65	192
Snapp, James W., Jasper, Tenn. Bush or weed puller	496,452	May 2	100	28	63	637
Snapp, Julia E., Danville, Ill. Thread-cutter for sewing-machines	499,352	June 13	1020	245	63	1583
Snavelly, John S., et al. (See Nipher, Henry W., assignor.)						
Snead, Littleton U., Ellisburg, Pa. Revolving adjustable map-stand	510,941	Dec. 19	1920	469	65	1794
Sneberg, James, Keokuk, Iowa. Horse-collar fastener	508,251	Nov. 7	449	110	65	841
Sneckner, Frank A. L., assignor to National Cash Register Company, Dayton, Ohio. Cash-register	492,974	Mar. 7	320	81	62	1423
Sneckner, George A., San Antonio, Tex., and C. E. Roth, assignors of one-third to F. D. Brown, New York, N. Y. Fan and motor therefor	497,139	May 9	1202	307	63	853
Snedeker, Charles T., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Electric-arc lamp	504,760	Sept. 12	743	185	64	1424
Snee, John A., et al. (See Snee, William, assignor.)						
Snee, William, assignor of thirteen-sixteenths to A. Owens and J. A. Snee, Pittsburg, Pa. Electric heater	507,941	Oct. 31	3647	902	65	735
Sneed, Archie J., Jr., Canton, Miss. Adjustable fitting for freight-cars	509,697	Nov. 28	2867	692	65	1342
Sneer, George S., Marengo, Iowa. Wagon end-gate	489,721	Jan. 10	1131	292	62	249
Snell, Arthur T., West Satiscay, and W. R. H. Weldon, Ventura, assignors to Snell & Weldon, Santa Barbara, Cal. Harness	500,516	June 27	2930	719	63	1944
Snell, Henry D., London, England. Ship-locomotive	498,036	May 23	2657	664	63	1142
Snell, Jacob A., Barrington, R. I. Brick-cutting machine	496,982	May 9	955	250 } 251 }	63	809
Snell, Jacob A., Barrington, R. I. Brick-cutting machine	496,983	May 9	959	251 } 252 }	63	810
Snell, James E. (See Glasmann, John H., assignor.)						
Snell, Norman S., Brighton, assignor to Butler Manufacturing Company, Boston, Mass. Frame-saw	509,256	Nov. 21	2105	507	65	1185

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Snell & Weldon. (See Snell and Weldon, assignors.)						
Snider, Andrew B., and W. H. Roberts, Bartholow's, Md. Rail shoe and brace	511,170	Dec. 19	2292	560	65	1864
Snider, Charles A., Columbus, Ga. Gearing for bicycles	511,169	Dec. 19	2291	560	65	1864
Snider, Henry C., Joshua, Tex. Washing-machine	494,447	Mar. 28	2729	684	62	1927
Snider, James B., Chicago, Ill. Bushing	504,460	Sept. 5	237	63	64	1314
Sniffen, Samuel T., <i>et al.</i> (See Shaw, Truman A., assignor.)						
Sniffin, Charles A. (See Waller and Sniffin.)						
Snively, Jonathan R., <i>et al.</i> (See Gates, Matthias, assignor.)						
Snoddy, Hayden C. and S. D., Greenville, Ky. Type-setting machine	489,834	Jan. 10	1296	{ 339 340 341 }	62	285
Snoddy, Samuel D. (See Snoddy, Hayden C. and S. D.)						
Snodgrass, George M., assignor of one-fourth to V. Hall, Waco, Tex. Combined stalk-cutter, root-puller, and cultivator	511,657	Dec. 26	3111	760	65	2026
Snodgrass, George M., assignor of one-fourth to V. Hall, Waco, Tex. Combined stalk-cutter and cultivator	511,658	Dec. 26	3114	{ 760 761 }	65	2027
Snoeck, Albert, Ensival, Belgium. Depth-gage	490,860	Jan. 31	3003	771	62	663
Snow, Albert E. (See Burke, George H., assignor.)						
Snow, Alt O. (See Mason and Snow.)						
Snow, Andrew, Jr. (See Camberon, Jay, assignor.)						
Snow, Andrew, Jr., assignor to Mount Washington Glass Company, New Bedford, Mass. Flower-holder	496,013	Apr. 25	2374	601	63	487
Snow, Charles B. (See Watrous and Snow.)						
Snow, Frederick, Lynn, Mass., assignor to National Carving Company, Kittery, Me. Carving-machine	495,233	Apr. 11	1146	287	63	231
Snow, George B., Buffalo, N. Y. Dental vulcanizer	499,602	June 13	1435	344	63	1656
Snow, George B., Buffalo, N. Y. Gas-regulating apparatus for vulcanizers	506,742	Oct. 17	1610	405	65	331
Snow, George B., Buffalo, N. Y. Time mechanism for operating gas-cocks	507,564	Oct. 31	3020	742	65	619
Snow, George B., Buffalo, N. Y. Gas-regulator for vulcanizers	511,256	Dec. 19	2433	593	65	1889
Snow, Gilbert B., assignor to Elgin Wind Power and Pump Company, Elgin, Ill. Wind-mill	498,584	May 30	3550	881	63	1316
Snow, Gilbert B., assignor to Elgin Wind Power and Pump Company, Elgin, Ill. Wind-mill	508,852	Nov. 14	1393	{ 346 347 }	65	1035
Snow, Thomas, Batavia, Ill. Tower for windmills	493,650	Mar. 21	1428	364	62	1667
Snow, Thomas W. (See Long, Malcolm W., assignor.)						
Snow, William W., Ramapo, N. Y. Switch-stand	507,245	Oct. 24	2472	609	65	501
Snow, Willie N., Snowville, N. H. Sleigh	495,245	Apr. 18	2125	534	63	425
Snowman, Herman, New Paltz, assignor of one-half to O. B. Whitney, Marlborough, N. Y. Fifth-wheel	507,602	Oct. 31	3099	757	65	633
Snyder, Albert L., Topeka, Kans. Hot-water and steam heating apparatus	502,055	July 25	2431	612	64	486
Snyder, Andrew, Canton, Minn. Portable tilting gate	505,375	Sept. 19	1746	453	64	1624
Snyder, Andrew S., Homestead, Pa. Gage-line holder	492,636	Feb. 28	2518	623	62	1299
Snyder, Andrew W., <i>et al.</i> (See Jones and Greene, assignors.)						
Snyder, Charles H., Percival, Iowa. Car-coupling	510,719	Dec. 12	1489	368	65	1704
Snyder, Charles L., Philadelphia, Pa. Porter or beer tap	502,835	Aug. 8	1010	246	64	767
Snyder, Christopher, assignor of one-third to W. F. Ebbs, Buffalo, N. Y. Operating device for fare-registers	506,188	Oct. 3	638	163	65	123
Snyder, Cyrus. (See Bufkin and Snyder.)						
Snyder, Daniel T., <i>et al.</i> (See Jones and Greene, assignors.)						
Snyder, Emory P., Chambersburg, Pa. Poultry-brooder	503,172	Aug. 15	1570	{ 386 387 }	64	883
Snyder, Frank T., assignor of one-half to N. W. Hershman, St. Louis, Mo. Brake attachment for bicycles	508,490	Nov. 14	840	208	65	929
Snyder, George W., Herkimer, N. Y. Automatic feed-stop for knitting-machines	501,582	July 18	1664	416	64	336
Snyder, Hiram, Minneapolis, Minn. Feed-box	496,068	Apr. 25	2465	623	63	504
Snyder, Homer P., and M. J. Fisher, Little Falls, N. Y. Stop-motion for knitting-machines	495,068	Apr. 11	842	214	63	176
Snyder, J. R. (See Lind, Hugh, assignor.)						
Snyder, John A., Pittsburg, Pa. Cork cutting and facing machine	492,846	Mar. 7	113	28, 29	62	1380
Snyder, John S., <i>et al.</i> (See Franklin, Nelson G., assignor.)						
Snyder, John T., Luzerne, Pa. Drilling-machine	489,044	Jan. 3	100	28	62	25
Snyder, John T., Luzerne, Pa. Drilling-machine	492,118	Feb. 21	1682	419	62	1114
Snyder, Michael F. (See Lee and Snyder.)						
Snyder, Owen T., Columbus, Ohio. Lubricator	504,178	Aug. 29	3185	796	64	1214
Snyder, Robert L., Chattanooga, Tenn. Water-cooling refrigerator	490,511	Jan. 24	2441	{ 629 630 631 }	62	538
Snyder, Thomas J., Wallowa, Oreg. Hay-loader	493,307	Mar. 14	853	{ 217 218 }	62	1541
Snyder, Waldo V., Canton, Ohio. Tricycle	492,060	Feb. 21	1590	395	62	1096
Snyder, Waldo V., Canton, Ohio. Toy	492,061	Feb. 21	1592	396	62	1097
Snyder, Waldo V., Canton, Ohio. Tricycle	492,062	Feb. 21	1593	396	62	1097
Snyder, Waldo V., Canton, Ohio. Tricycle	492,063	Feb. 21	1595	396	62	1097
Snyder, Waldo V., Canton, Ohio. Tricycle	503,991	Aug. 29	2891	723	64	1159
Snyder, Waldo V., Canton, Ohio. Tricycle	503,992	Aug. 29	2892	723	64	1159
Snyder, Ward H. (See Carter and Snyder.)						
Snyder, William. (See Maxfield and Snyder.)						
Snyder, William D., Chicago, assignor to Forest City Furniture Company, Rockford, Ill. Base for furniture	503,993	Aug. 29	2893	{ 723 724 }	64	1159
Snyder, William D., Chicago, assignor to Forest City Furniture Company, Rockford, Ill. Base for furniture	503,994	Aug. 29	2895	724	64	1159
Sobolewski, Amanda J., Denver, Colo. Toy	492,476	Feb. 28	2249	562	62	1244
Sobolewski, Paul F. H., St. Louis, Mo. Dry gas-meter with rotating drum	511,368	Dec. 26	238	642	65	1941

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Soby, Charles. (See Gray, William, assignor.)						
Société Alsacienne des Constructions Mécaniques. (See Yochet, Alfred d', assignor.)						
Société Anonyme des Mines et Fonderies de Zinc de la Vieille Montagne. (See Detombay, Benoit B., assignor.)						
Société Anonyme des Parfums Naturels de Cannes. (See Watel, Etienne, assignor.)						
Société Anonyme du Compresseur F. Jourdan. (See Deiss, Jules A., assignor.)						
Société Anonyme Industrielle des Establishments Arbel. (See Arbel, Pierre, assignor.)						
Société de Laire & Co. (See Laire, Georges de, assignor.)						
Société du Nettoyeur O. André Appliqué au Filtre Chamberland Système Pasteur. (See André, Oscar, assignor.)						
Société Générale des Téléphones, (Réseaux Téléphoniques et Constructions Électriques.) (See Berthon, Louis A., assignor.)						
Société Knight de Kerpezdron et Gibault. (See Knight, James T. C., assignor.)						
Société L. Durand Huguenin & Co. (See Brack, Jacob, assignor.)						
Société Nouvelle de Constructions Systeme Tollet. (See Lastelle, Henry P. de., assignor.)						
Society C. Delescluse & Company. (See Delescluse, Carlos J., assignor.)						
Society Geneste, Herscher et Co. (See Herscher, Charles G., assignor.)						
Society of Chemical Industry in Basle. (See Gnehm and Schmid, assignors.)						
Society of Chemical Industry in Basle. (See Schmid, Jakob, assignor.)						
Society of Chemical Industry in Basle. (See Schmid and Mohler, assignors.)						
Society of Chemical Industry in Basle. (See Schmid and Paganini, assignors.)						
Society Outhenin Chalandre Fils et Cie. (See Chalandre, Antoine J. O., assignor.)						
Society Paul Tourasse & Company of the Republic of France. (See Tourasse, Paul, assignor.)						
Sockman, Bryant R., Mount Vernon, Ohio. Self-locking pulley.....	497,731	May 16	2164	541	63	1040
Soderberg, Anders A., Boston, Mass. Cake-cutter	490,993	Jan. 31	3237	827	62	707
Soehner, Oscar. (See Dister, Joseph, assignor.)						
Sofge, John. (See Doane and Sofge.)						
Sofseiss, Conrad C., Woodbury, N. J. Hot-air furnace	500,821	July 4	457	{ 120 121 }	64	84
Sohège, Paul, Paris, France. Machine for molding paper-stuff boxes	511,659	Dec. 26	3115	761	65	2027
Söhner, Andreas, Berlin, Germany. Lantern	492,896	Mar. 7	195	48	62	1397
Sokloff, Alexis. (See Rauser, Wieber, and Sokoloff.)						
Solar Refining Company. (See Frasc, Herman, assignor.)						
Soldwedel, Nicholas, Union, N. J. Refrigerator	490,216	Jan. 17	1957	513	62	430
Soleau, Edward R., assignor of one-half to J. M. Roe, Newark, N. J. Heating apparatus	511,280	Dec. 19	2479	604	65	1898
Soler y Vila, José. (See Benoit and Soler y Vila.)						
Soley, William H., et al. (See Carlinet, John G., assignor.)						
Solliday, Wilson B., et al. (See Cornell, Ehjah B., assignor.)						
Sollers, Trustin A., et al. (See Jones, Wesley C., assignor.)						
Solomon, Saunders S. (See Griffith, Wilfred S., assignor.)						
Solomon, Saunders B., Rochester, N. Y. Neckscarf.....	490,512	Jan. 24	2442	630	62	538
Solt, Harrison, assignor of one-half to W. H. Webber, Kingston, Pa. Carpet-fastener	495,844	Apr. 18	2124	534	63	425
Solt, Jacob B. and J. E., Frederick, Md. Slat-and-wire-fencing machine	499,353	June 13	1021	{ 246 247 }	63	1583
Solt, James E. (See Brown and Solt.)						
Solt, James E. (See Solt, Jacob B. and J. E.)						
Solter, John, Baltimore, Md. Automatic steam-regulator.....	505,179	Sept. 19	1435	369	64	1566
Solvay, Ernest, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Apparatus for treating pulverulent materials with gases	503,556	Aug. 15	2184	546	64	993
Solvay, Ernest, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Apparatus for the distillation of hydrochloric acid	503,557	Aug. 15	2186	546	64	994
Solvay, Ernest, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Treating pulverulent material with gases	503,558	Aug. 15	2188	547	64	994
Solvay Process Company. (See Solvay, Ernest, assignor.)						
Somborn, Helen. (See Goldkind and Stirn, assignors.)						
Somborn, Julius, et al. (See Goldkind, Isaac, assignor.) (Reissue.)						
Somers, Daniel M. (See Atkinson and Somers.)						
Somers, Thomas F. (See Ross, John K., assignor.)						
Somers, William, Atlantic City, N. J. Roundabout.....	489,238	Jan. 3	395	{ 109 110 }	62	89
Sommer, Charles, assignor to R. Sommer, Sloan's Valley, Ky. Stave-bending machine.....	501,697	July 18	1854	461	64	368
Sommer, Charles, assignor to W. Sommer, Sloan's Valley, Ky. Machine for dressing bucked staves	504,461	Sept. 5	238	63	64	1315
Sommer, John. (See Sommer, Peter, J., and P. W.)						
Sommer, Peter, J., and P. W., Tremont, Ill. Machine for making wire fencing.....	490,775	Jan. 31	2878	{ 739 740 }	62	637
Sommer, Peter, J., and P. W., Tremont, Ill. Wire fence	503,219	Aug. 15	1646	404	64	896
Sommer, Peter K., assignor to D. Kegler, Mannheim, Germany. Vitrification-furnace	509,257	Nov. 21	2106	507	65	1186
Sommer, Peter W. (See Sommer, Peter, J., and P. W.)						
Sommer, Regina. (See Sommer, Charles, assignor.)						
Sommer, William. (See Sommer, Charles, assignor.)						
Somerset & Johnsonburg Manufacturing Company. (See Johnson, William, assignor.)						
Somerset & Johnsonburg Manufacturing Company. (See Rice, David H., assignor.)						
Somersworth Machine Co. (See Gordon, Edward F., assignor.)						
Sommer, August C. (See Fraser, John, assignor.)						
Sonnema, Charles J., Centerville, Mich. Lantern-holder	508,491	Nov. 14	841	208	65	929
Sooter, Milton C., Palace, Mo. Cutter-bar for mowing-machines.....	491,142	Feb. 7	126	34	62	773
Sooy, Ephraim C. (See Heaston and Sooy.)						
Sooy, Ephraim C., Kansas City, Mo., assignor to Kansas City Hay Press Company, of Missouri. Baling-press power	494,798	Apr. 4	438	108	63	85
Sooy, Henry B. (See Grush and Sooy.)						
Soper, Hubbell O., Aurora, and W. M. Brown, Dixon, Ill. Clothes-pounder	489,506	Jan. 10	827	216	62	189
Soper, William H., Jackson, Mich. Lamp-chimney holder	489,695	Jan. 10	1090	282	62	242
Sørensen, Ole N. (See Boysen and Sørensen.)						
Soret, Aimable H., Elbeuf, J. Hurta and V. Hautin, Paris, France. Circular loom	491,324	Feb. 7	438	{ 113 114 }	62	831
Sorg, Henry, Rochester, N. Y. Stencil apparatus.....	495,604	Apr. 18	1738	438	63	358
Sorlien, Ole H. (See Rice, Charles L., assignor.)						
Sortor, Thomas G., Baker City, Oreg. Filter	497,354	May 16	1578	397	63	934
Souchet, Mathien E. A., assignor of one-half to M. Ollier, Paris, France. Artificial flower and making same	490,170	Jan. 17	1874	488	62	415
Souder, William C., Washington, D. C. Skein-holder.....	506,138	Oct. 3	535	138	65	104

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Soules, Silas G., and H. E. Stowe, Hudson, Mass. Eye-shade	490,513	Jan. 24	2443	630	62	538
Souleyret, Jerome C., Alpine, Ky. Car-coupling	509,144	Nov. 21	1911	467	65	1148
Sounat, François, Cahors, France. Toy watch	505,966	Oct. 3	255	68	65	50
South Bend Iron Works. (See Anderson, Charles, assignor.)						
South Bend Iron Works. (See Oliver, James, assignor.)						
Southern, Charles H. T. J. (See Talpey, John H., assignor.)						
Southerland, Milton B., Linden, Tenn. Vehicle-hub	496,704	May 2	495	132	63	709
Southern Horse and Mule Shoe Manufacturing Company. (See Billings, John D., assignor.)						
Southern Toy and Novelty Company. (See Moore, Everett D., assignor.)						
Southwark Foundry and Machine Company. (See Good, William E., assignor.)						
Southwark Foundry and Machine Company. (See Good and Petsche, assignors.)						
Southwark Foundry and Machine Company. (See James, Thomas, assignor.)						
Southwick, Albert N., Boston, Mass. Apparatus for holding checks	492,441	Feb. 28	2192	548	62	1232
Southwick, Edward M., and F. J. Mohr, Worcester, Mass. Top	510,998	Dec. 19	2023	499	65	1811
Southworth, Andrew. (See Reed, Samuel C., assignor.)						
Southworth, Edward A., and W. H. Blodgett, Whitehall, Wis. Vehicle-top	506,562	Oct. 10	1319	330	65	265
Southworth, Martin O., Lynn, assignor to General Electric Company, Boston, Mass. Connector for electro-magnet coils	508,643	Nov. 14	1085	268	65	978
Southworth, Preston B., Marysville, Cal. Buckle	510,824	Dec. 12	1672	415	65	1737
Sovereign, George E., Pottersville, N. J. Game apparatus	498,451	May 30	3338	830	63	1279
Sovereign, Joshua, Woodland, Cal. Shoulder-cutter for vehicle-axles	507,389	Oct. 24	2719	667	65	549
Soverhill, Charles W., assignor of one-half to C. H. Perkins and S. S. Pierson, Newark, N. Y. Fruit-evaporator	506,651	Oct. 10	1447	363	65	290
Sowden, William A., Covington, Ky. Combination folding bed	496,327	Apr. 25	2867	715	63	580
Sowell, Joseph L., Althouse, Oreg. Car-coupling	500,624	July 4	140	37	64	27
Sowerbutts, Thomas, Accrington, England. Screw-making machine	509,775	Nov. 28	2994	724	65	1365
Sowers, Emory B., Westville, Ohio. Flying-machine	504,631	Sept. 5	510	132	64	1366
Spach, Frédéric A. (See Spach, Jean C. and F. A.)						
Spach, Jean C. and F. A., Rothau, Germany, assignors, by mesne assignments, to J. R. Leeson, Newton, Mass. Machine for winding thread on plates	500,163	June 27	2377	576	63	1845
Spahmer, Adam A., Jr., assignor, by mesne assignments, of one-half to F. Skinner and A. Giesecke, Philadelphia, Pa. Metallic roofing-tile	503,173	Aug. 15	1571	387	64	883
Spahmer, Charles, assignor of one-half to J. F. Thomas, Philadelphia, Pa. Frying-pan, &c.	498,195	May 23	2911	724	63	1187
Spalding & Brothers, A. G., et al. (See Perkins, Albert, assignor.)						
Spalding, Frank, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Micrometer-gage	495,915	Apr. 18	2234	563	63	446
Spalding, Warren A., New Haven, Conn. Box for tooth-powder	493,528	Mar. 14	1201	307	62	1606
Spangenberg, Robert F., New Orleans, La. Cotton-seed delinter	495,069	Apr. 11	845	215	63	176
Spangler, Albert E., Syracuse, N. Y. Vehicle-tire	504,819	Sept. 12	846	217	64	1442
Spangler, Albert E., Syracuse, N. Y. Vehicle-tire	505,929	Oct. 3	197	50	65	39
Spangler, C. A., et al. (See Kepler, Beroth M., assignor.)						
Spangler, Fred S., Orion, Ill. Washing-machine	490,372	Jan. 24	2227	580	62	497
Spangler, James M., Canton, Ohio. Combined hay rake and tedder	492,341	Feb. 21	2030	505	62	1187
Spannagel, Julia H., et al. (See Smith, Augustus, assignor.)						
Sparks, Albert F., assignor to James Leffel & Company, Springfield, Ohio. Water-wheel	500,355	June 27	2688	659	63	1900
Sparks, Charles H. (See Hull, William S., assignor.)						
Sparks, Charles H., St. Louis, Mo. Electric jail	502,325	Aug. 1	122	28	64	588
Sparks, Mary J. (See Wells and Sparks.)						
Sparks, Walter, Brooklyn, N. Y. Machine for coating or enameling paper	510,098	Dec. 5	430	96	65	1491
Sparks, William E. (See Page and Sparks.)						
Sparks, William E., assignor to Sargent & Company, New Haven, Conn. Lock	502,937	Aug. 8	1185	292	64	799
Sparks, William H., Camden, N. J. Jump-seat for carriages	500,354	June 27	2686	659	63	1899
Sparr, Benjamin F., and M. F., Brooklyn, N. Y. Rail-fastening	503,442	Aug. 15	1994	495	64	959
Sparr, Millard F. (See Sparr, Benjamin F. and M. F.)						
Spatz, John B., Strassstown, Pa. Sausage-stuffer	498,317	May 30	3121	778	63	1239
Spaulding, Elijah F., assignor of one-half to E. S. Smith, Bound Brook, N. J. Cash register and indicator	500,164	June 27	2378	577	63	1845
Spaul, Barnard A., London, England. Apparatus for the manufacture of glass bottles	503,220	Aug. 15	1647	404	64	897
Speaker, Charles E., Louisville, Ky. Tobacco and packing box	502,836	Aug. 8	1011	246	64	767
Spear, Anson R., Devil's Lake, N. D. Envelope	491,928	Feb. 14	1395	348	62	1043
Spear, Arthur, assignor of one-half to E. F. Angell, Chicago, Ill. Self-closing gas-burner	490,321	Jan. 24	2141	558	62	479
Spear, Edmund D. (See Page, Herbert S., assignor.)						
Spear, Edmund D. (See Page and Spear, assignors.)						
Spear, Frederick A., Lowell, Mass. Store-service apparatus	505,905	Oct. 3	166	43	65	33
Spear, Livy. (See Page and Spear.)						
Speare, Andrew J., Thayer, Mo. Budding-knife	510,204	Dec. 5	607	143	65	1525
Spearing, Robert J., Sherbrooke, Canada. Safety attachment for car-trucks	493,661	Mar. 21	1429	364	62	1668
Spearing, Robert J., Sherbrooke, Canada. Safety-shoe and brake attachment for car-trucks	493,662	Mar. 21	1432	365	62	1668
Spectatoria Company. (See Mackaye, Steele, assignor.)						
Speed, Francis M., San Francisco, Cal. Pipe-machine	503,102	Aug. 8	1442	355	64	846
Speer, Edward D., New York, N. Y. Gearing	510,368	Dec. 5	865	208	65	1574
Speer, Jacob S., Springfield, Mo. Car-axle box	491,819	Feb. 14	1222	306	62	1009
Speer, John Z. (See Fitzhugh, Speer, and Babbitt.)						
Speer, William W., Pittsburg, Pa. Plow attachment	495,916	Apr. 18	2236	563	63	446
Speer, William W., Pittsburg, Pa. Making wheels	505,612	Sept. 26	2188	553		1722
Speicher, Mathias. (See Simpson and Speicher.)						
Speigel, Adol., Grube Messel, near Darmstadt, Germany. Sulphur compound	495,124	Apr. 11	973		63	199
Speight, George, Bradford, and S. Chapman, Blackley, England. Sewing-machine	494,039	Mar. 21	2060	526	62	1789
Speight, George, Bradford, S. Chapman, Blackley, and R. Todd, Manchester, England. Sewing-machine	494,038	Mar. 21	2057	525	62	1789
Speirs, John, Jersey City, N. J. Door-check	511,099	Dec. 19	2176	536	65	1842
Speirs, John C. (See Torkelson, Reinhard T., assignor.)						
Spencer, Albert F., Sidney, Wash. Folding gate	509,559	Nov. 28	2658	644	65	1301
Spencer, Charles F., assignor of one-half to J. C. M. Bosdyk, Rochester, N. Y. Game puzzle	489,394	Jan. 3	627	169	62	135

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Spencer, Charles R., assignor to H. F. New and T. W. Patten, Baltimore, Md. Harness	499,684	June 13	1560	377	63	1677
Spencer, Christopher M., Windsor, Conn. Dental handpiece	511,029	Dec. 19	2060	510	65	1819
Spencer, Edwin F., Hastings, Pa. Show case or rack	506,743	Oct. 17	1613	406	65	332
Spencer, Edwin F., Hastings, Pa. Show case or rack	506,744	Oct. 17	1613	406	65	332
Spencer, Edwin F., Hastings, Pa. Show case or rack	508,445	Nov. 14	759	187	65	913
Spencer, George, assignor to C. W. Colby, Old Mission, Idaho. Antifriction journal-box	494,392	Mar. 28	2654	665	62	1913
Spencer, Henry A., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Hoisting mechanism	496,799	May 2	653	173	63	735
Spencer, James H., Beaver Crossing, Nebr. Lister-cultivator	493,878	Mar. 21	1777	453	62	1736
Spencer, John S., New York, N. Y. Frame for spectacles	502,782	Aug. 8	920	224	64	750
Spencer, Michael J., Lawrence, Mass. Drier and carbonizer	490,171	Jan. 17	1876	489	62	415
Spencer, Nathaniel W., Centralia, Ill. Spark-arrester	503,174	Aug. 15	1573	387	64	883
Spencer, Theodore, Cambridge, Mass. Station apparatus for telephonic and telegraphic circuits	501,472	July 11	1491	376	64	287
Spencer, Theodore, Cambridge, assignor to American Bell Telephone Company, Boston, Mass. Electric annunciator	502,472	Aug. 1	373	89	64	635
Spencer, Theodore, Cambridge, assignor to American Bell Telephone Company, Boston, Mass. Telephone-circuit	505,730	Sept. 26	2391	604	64	1758
Spencer, Theodore, Cambridge, assignor to American Bell Telephone Company, Boston, Mass. Test and signal circuit and appliance	507,565	Oct. 31	3021	742	65	619
Spencer, Thomas, Philadelphia, Pa. Electric-arc-lighting system	504,632	Sept. 5	511	133	64	1367
Spengler, Reinhart, New York, N. Y. Machine for making paper tubes	507,764	Oct. 31	3351	822	65	680
Sperl, Antonin, Los Angeles, Cal. Forging-hammer	500,970	July 4	690	181	64	126
Sperl, Antonin, Los Angeles, and J. Geemen, Cucamonga, Cal.; said Geemen assignor to said Sperl. Portable fruit-evaporator	489,168	Jan. 3	280	78	62	64
Sperry, Barton E., Batavia, Ill. Vacuum-pan	509,962	Dec. 5	192	45	65	1446
Sperry, Elmer A., Cleveland, Ohio. Electrical controller	509,776	Nov. 28	2997	725	65	1366
Sperry Electric Railway Company. (See Sperry, Elmer A., assignor.)				726		
Sperry, Elmer A., Chicago, Ill., assignor, by mesne assignments, to Thomson-Houston Electric Company, of Connecticut. Electric mining-machine	497,832	May 23	2326	583	63	1085
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Railway Company, Cleveland, Ohio. Revolving armature for electric machines	501,194	July 11	1057	267	64	207
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Railway Company, Cleveland, Ohio. Electric locomotive	501,195	July 11	1059	268	64	207
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Railway Company, Cleveland, Ohio. Electric-railway trolley	501,968	July 25	2291	573	64	460
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Railway Company, Cleveland, Ohio. Electric locomotive	502,020	July 25	2373	596	64	476
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Railway Company, Cleveland, Ohio. Trolley-wire switch	503,443	Aug. 15	1995	495	64	959
Sperry, Elmer A., assignor to F. R. Greene, Chicago, Ill. Electro-conducting bearing for trolley or other wheels	505,994	Oct. 3	300	77	65	58
Spery, Charles F., Hermann, assignor to W. J. Giessler, A. Kilpatrick, and F. J. Hunleth, St. Louis, Mo. Slicer and grater	503,272	Aug. 15	1725	425	64	910
Spicer, Ernest F., Springfield, Mass. Shoe-fastening	494,825	Apr. 4	482	122	63	93
Spicer, John D. (See Betts, Albert C., assignor.)						
Spiecker, Gustav, Bonn, Germany, assignor of one-half to G. Huettemann, Wiktitz, near Karbitz, Austria-Hungary. Manufacture of blocks of fuel	507,246	Oct. 24	2473		65	501
Spiegel, Otto, assignor of one-third to J. M. Sherman, Tarkio, Mo. Snow-plow	509,333	Nov. 21	2239	541	65	1210
Spiers, John C. (See Torkelson, Reinhard T., assignor.)				542		
Spilker, John J., Cincinnati, Ohio. Miter-box	490,514	Jan. 24	2444	630	62	539
Spillman, Lorenz. (See Scranton and Spillman.)				631		
Spillman, Lorenz, Columbus, Ohio. Trolley-wire hanger	499,943	June 20	1993	484	63	1766
Spindler, Charles, Brooklyn, assignor to Wittmann Brothers, New York, N. Y. Treadle-motion for rotary shafts	501,902	July 18	2185	543	64	425
Spink, Eugene A., Chicago, Ill. Aging liquors	489,337	Jan. 3	545	147	62	117
Spinner, William, Warren, Pa. Fireplace	507,390	Oct. 24	2720	068	65	549
Spinnery, B. F., et al. (See Lombard, Levi W., assignor.)						
Spittell, Christian A., New Brunswick, N. J. Folding paper box	489,993	Jan. 17	1579	413	62	355
Spivey, Fred, and C. Halmshaw, Heckmondwike, England. Apparatus for distributing oil or other liquids upon fibers	499,603	June 13	1436	344	63	1656
Splann, John, Athens, Pa. Ladder	501,378	July 11	1367	341	64	261
Spofford, Jason, Jr., Amesbury, Mass. Carriage	492,477	Feb. 28	2250	562	62	1244
Spohr & Krämer. (See Vonhaus and Becker, assignors.)						
Spong, James O., London, England. Ice-cream freezer	505,731	Sept. 26	2395	605	64	1758
Spooner, Benjamin F., Orange, Tex. Saw-templet	503,010	Aug. 8	1302	318	64	819
Spooner, James M. H., Detroit, Mich. Incubator	508,492	Nov. 14	842	208	65	930
Spooner, Philip D. (See Nicholls, John C., assignor.)				319		
Spooner, Spencer, assignor to A. G. Jennings, Brooklyn, N. Y. Making warp fabrics for gloves or the like	500,165	June 27	2381	578	63	1846
Spooner, William E., New Bedford, Mass. Making nut-locks	507,291	Oct. 24	2548	627	65	514
Sporborg, William L., et al. (See Dial, Wilbur F., assignor.)						
Spotts, Daniel L. (See Lippy, David, assignor.)						
Sprague, Austin V. M., Rochester, N. Y. Belt-shifter	494,177	Mar. 28	2300	582	62	1848
Sprague, Austin V. M., Rochester, N. Y., assignor to Sprague-Schuyler Manufacturing Company, of New Jersey. Laundry-drier	500,625	July 4	141	37, 38	64	28
Sprague, Austin V. M., Rochester, N. Y., assignor to Sprague-Schuyler Manufacturing Company, of New Jersey. Sterilizing apparatus	505,967	Oct. 3	257	68, 69	65	51
Sprague, Austin V. M., Rochester, N. Y., assignor to Sprague-Schuyler Manufacturing Company, of New Jersey. Sterilizing apparatus	509,560	Nov. 28	2659	644	65	1302
Sprague, Charles H., et al. (See Bennett, Willis, assignor.)						
Sprague Electric Railway and Motor Company. (See O'Shaughnessy, Patrick F., assignor.)						
Sprague Electric Railway and Motor Company. (See Sprague and O'Shaughnessy, assignors.)						
Sprague, Frank J., and P. F. O'Shaughnessy, assignors to Sprague Electric Railway and Motor Company, New York, N. Y. Electric-railway trolley	504,255	Aug. 29	3314	828	64	1238
Sprague, Frank S., Everett, Mass. Mirror attaching device for bureaus, &c.	511,660	Dec. 26	3117	762	65	2028
Sprague, John S., Tottenville, N. Y. Merry-go-round	508,994	Nov. 21	1658	408	65	1100

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Sprague Manufacturing Company. (See Sprague, Welcome, assignor.)						
Sprague-Schuyler Manufacturing Company. (See Sprague, Austin V. M., assignor.)						
Sprague, Welcome, assignor to Sprague Manufacturing Company, Farnham, N. Y. Machine for cutting green corn from the cob	494,799	Apr. 4	440	{ 108 109 }	63	85
Sprang, Frederick H., London, England. Pneumatic tire	504,793	Sept. 12	799	203	64	1433
Spratley, Albert G., et al. (See Davison, Ferdinand, assignor.)						
Sprecher, David, Richview, Ill. Car-coupling	503,175	Aug. 15	1574	388	64	884
Sriegel, Hermann, Königsberg, Germany. Bottle-stopper	503,333	Aug. 15	1839	456	64	930
Spring, Gottlieb L., Pawnee City, Nebr. Cultivator	489,507	Jan. 10	828	217	62	189
Spring, Marcia W. A., et al., trustees. (See Goodale, Stephen L., assignor.)						
Springer, C. J., et al. (See Springer, Clifton F., assignor.)						
Springer, Clifton F., Chicago, Ill., assignor to C. J. Springer and E. E. Ankeney, Des Moines, Iowa. Car-coupling	508,853	Nov. 14	1395	347	65	1036
Springer, Daniel M., Little Rock, Ark. Mold-jacket	506,950	Oct. 17	1952	483	65	395
Springer, James F. (See Hoffstaedt and Springer.)						
Springer, Stephen H., Des Moines, Iowa. Car-coupling	501,592	July 18	1679	419	64	338
Springer, William N., Fortville, Ind. Thrashing-machine	502,473	Aug. 1	377	89, 90	64	635
Springstun, John W. C., Winfield, Kans. Mail bag or pouch	490,172	Jan. 17	1878	489	62	415
Sproat, Clinton. (See Allen, George C., assignor.)						
Sprong, J. White, et al. (See Smith, Henry C., assignor.)						
Sprong, Severn D. (See Knap and Sprong.)						
Sprout, Waldron & Co. (See Ring, Henry H., assignor.)						
Sprunt, John D., London, England. Cask for petroleum	500,245	June 27	2506	612	63	1868
Spry, Benjamin F., Des Moines, Iowa. Pavement	489,105	Jan. 3	194	52	62	45
Spuhr, Max, Dresden, Germany. Boot-tree	499,761	June 20	1704	408	63	1715
Spung, Lemuel B. (See Longstreth and Spung.)						
Spurgin, John H., Carthage, Mo. Band-cutter and feeder for thrashing-machines	502,592	Aug. 1	571	{ 137 138 }	64	671
Spurgin, Robert, Chicago, Ill. Letter-press copying-cloth	506,610	Oct. 10	1384	347	65	277
Spurr, George W., New Britain, Conn. Cash register and indicator	508,353	Nov. 7	607	149	65	871
Squires, George S., Boston, Mass. Method of and device for forming dress-shields	510,099	Dec. 5	432	96, 97	65	1491
Squires, Harry D. (See Muntz, Oliver H., assignor.)						
Squires, Oland W., New York, N. Y. Bicycle	504,633	Sept. 5	513	133	64	1367
St. Cloud Vulcanized Fibreware Company. (See West and Whipple, assignors.)						
St. Croix Manufacturing Company. (See Hall, Eva J., assignor.)						
St. Cyr, Theodore Z. H., assignor to Westfield Plate Company, Thompsonville, Conn. Composition of matter for coating with silver	503,358	Aug. 15	1879		64	938
St. George, Harry. (See Lubking, Adolph H., assignor.)						
St. George, Percival W., Montreal, Canada. Dirt or garbage receptacle	502,595	Aug. 1	580	139	64	673
St. Germain, Marshall, St. Albans, Vt. Stall-floor	490,931	Jan. 31	3136	804	62	689
St. John, Garland B., Kalamazoo, Mich. Vehicle running gear	490,806	June 20	1774	430	63	1728
St. John, Garland B., Kalamazoo, Mich. Fifth-wheel	503,177	Aug. 15	1578	388	64	884
St. Louis Car-Axle Lubricator Company. (See Daniels, William H., assignor.)						
St. Louis Register Company. (See Ehrlich, Leo, assignor.)						
St. Louis Register Company. (See Fassett and Rein, assignors.)						
St. Louis Stamping Company. (See Jenkins, John, assignor.)						
St. Louis Stamping Company. (See Niedringhaus and Wettengel, assignors.)						
St. Louis Stamping Company. (See Zeitinger, Christian J., assignor.)						
St. Louis, Thomas J., Cadott, Wis. Method of and machine for finishing saws	501,742	July 18	1934	478	61	382
St. Mary, Joseph. (See St. Mary, Peter and J.)						
St. Mary, Peter and J., San Francisco, Cal. Damper-regulating apparatus	491,384	Feb. 7	538	137	62	851
Staab, William, Munich, Germany. Mattress	504,443	Sept. 5	212	55	64	1310
Staats, Gustav F., et al. (See Pieper, Herman H., assignor.)						
Staats, William H., assignor of one-half to J. F. Griffin, Chicago, Ill. Coin-tray	504,684	Sept. 5	608	{ 155 156 }	64	1385
Staber, George, and H. Abbey, Brooklyn, N. Y. Machine for embossing wood	500,300	June 27	2592	634	63	1882
Stabler, Edward R., Brighton, Md. Lawn-mower	497,420	May 16	1674	423	63	952
Stabler, James P. (See Donaldson, Robert B., assignor.)						
Stacey, Henry, assignor of one-half to M. H. Cain, Indianapolis, Ind. Oil-burner	494,992	Apr. 4	722	184	63	138
Stacey, Henry, assignor of one-half to M. H. Cain, Indianapolis, Ind. Oil-burner	509,831	Nov. 28	3090	746	65	1384
Stackpole, Charles F., Lynn, assignor of one-fourth to J. M. Schofield, Boston, Mass. Leather stretching and softening machine	501,593	July 18	1680	{ 419 420 }	64	339
Staff, Peter N., Terre Haute, Ind. Holder for opera-glasses	507,566	Oct. 31	3028	743	65	620
Stafford, Benjamin D., Des Moines, assignor of one-half to G. B. Albert, Marshalltown, Iowa. Composition for plaster and coating walls	507,942	Oct. 31	3648		65	735
Stafford, Ezra H., and F. Field, Grand Rapids, Mich. Letter-file	503,915	Aug. 22	2746	688	64	1115
Stafford, George W., Providence, R. I. Jacquard mechanism for looms	497,833	May 23	2328	584	63	1085
Stafford, George W., Providence, R. I. Lingo for looms	499,478	June 13	1233	294	63	1621
Stafford, J. W., et al. (See Grant, Arthur W., assignor.)						
Stafford, Marshall B., New York, N. Y. Car-ventilator	511,369	Dec. 26	2640	642	65	1941
Stagg, Charles T., Jr. (See Pechin, Mason J., assignor.)						
Stagg, Charles T., Jr., Philadelphia, Pa. Rail-joint	506,082	Oct. 3	439	115	65	85
Staggers, A. I., et al. (See Rodecker, Charles W., assignor.)						
Stahl, Gustav. (See Kintner, Charles J., assignor.)						
Stahl, Gustav. (See Reed, Charles J., assignor.)						
Stahl, Samuel A., and B. Klipper, Knoxville, Tenn. Watch-chain charm or other article of jewelry	491,362	Feb. 7	536	136	62	850
Stahr, William J., Bloomsburg, Pa. Car-brake	491,381	Feb. 7	534	136	62	850
Staiger, John F., and C. Schnur, Mount Vernon, Ind. Suspender-button	491,197	Feb. 7	225	57	62	790
Stair, William S. (See Enders, Henry M., assignor.)						
Staley, George, assignor of one-half to C. H. Mason, Versailles, Mo. Paper-bag holder	502,783	Aug. 8	921	924	64	750
Stalker, Peter, Union, N. Y. Thill-coupling	507,765	Oct. 31	3357	822	65	681
Stalkner, Edwin E. (See Cook, Charles H., assignor.)						
Stall, William W., Boston, Mass. Rim for wheels	509,258	Nov. 21	2107	507	65	1186
Stall, William W., Boston, Mass. Rim for wheels	509,259	Nov. 21	2109	508	65	1186
Stall, William W., Boston, Mass. Felly for vehicle-wheels	509,260	Nov. 21	2110	508	65	1186
Stall, William W., Boston, Mass. Felly for wheels	509,261	Nov. 21	2112	508	65	1186
Stallings, John N., High Point, N. C. Sash-balance	511,030	Dec. 19	2061	518	65	1819
Stallings, Joseph H., New Orleans, La. Bottle-filling device	498,863	June 6	196	48	63	1428
Stallman, Charles C., San Francisco, Cal. Combined rotary calendar and stamp-holder	498,088	May 23	2733	683	63	1156
Stamp, John G., assignor of two-thirds to C. J. J. Seaman and H. T. Davis, Buffalo, N. Y. Velocipede	496,800	May 2	653	174	63	735
Stamp, John M., Cartersville, Mo. Rail-joint	494,235	Mar. 28	2396	605	62	1866

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Standard, Charles H. (See Jackson, George K., assignor.)						
Stanbon, Charles P., Saugus, Mass. Sole-channeling machine	500,438	June 27	2809	692	63	1921
Stanbrough, Rufus G., New York, N. Y. Dental machine for grinding artificial tooth-crowns	490,930	Jan. 31	3133	803	62	688
Stanbrough, Rufus G., New York, N. Y. Dental disk and carrier	503,258	Aug. 15	1705	419	64	907
Stanbrough, Rufus G., New York, N. Y. Dental-disk holder	505,490	Sept. 26	1932	498	64	1674
Stanchfield, John B. (See Wood, William H., assignor.)						
Stancliff, O. D., et al. (See Eldridge, Edward E., assignor.)						
Standard Cartridge Company. (See Hisey, Charles S., assignor.)						
Standard Cartridge Company. (See Hunter, George D., assignor.)						
Standard Caster and Wheel Company. (See Hoffmann, Ernest G., assignor.)						
Standard Caster and Wheel Company. (See Lachman, Morris, assignor.)						
Standard Electric Company. (See Loveridge, Frederick H., assignor.)						
Standard Electric Heat, Light and Power Company. (See O'Neill, Henry G., assignor.)						
Standard Elevator Company. (See Francis, George T., assignor.)						
Standard Elevator Company et al. (See Forslund, Hugo W., assignor.)						
Standard Guard Rail Fastener Company. (See Cummins, George L., assignor.)						
Standard Heater Company. (See Beazley, Joseph O., assignor.)						
Standard Lubricant Company. (See Atkinson, Lewis E., assignor.)						
Standard Manufacturing Company. (See Henn, Edwin C., assignor.)						
Standard Manufacturing Company of Maine. (See O'Neill, Henry G., assignor.)						
Standard Oil Company. (See Koehler, Hermann, assignor.)						
Standard Pearl Button Company. (See Carlyle, George, assignor.)						
Standard Screw Elevator Manufacturing Company. (See Coyle, Andrew M., assignor.)						
Standard Screw Elevator Manufacturing Company. (See Fowler, Charles W., assignor.)						
Standard Sewing Machine Company. (See Mack, William A., assignor.)						
Standard Store Service Company. (See Gipe, Emanuel C., assignor.)						
Standard Syndicate. (See Hoffman, Austin D., assignor.)						
Standard Underground Cable Company. (See Barrett, John A., assignor.)						
Standard Underground Cable Company. (See Conner, William A., assignor.)						
Standard Underground Cable Company. (See Fisher, Henry W., assignor.)						
Standard Underground Cable Company. (See Fowler, Samuel B., assignor.)						
Standart, William H. (See Wynn, Calvin, assignor.)						
Stander, Peter, Belleville, Ill. Sewer-trap	505,302	Sept. 19	1635	422	64	1604
Standiford, Jacob F., Muscooge, Indian Ter. Magnetic tool	492,245	Feb. 21	1886	471	62	1157
Standish, Barney H., Evansville, Wis. Electric belt	501,849	July 18	2093	517	64	410
Standish, Philander H., St. Mary's, Ohio. Furnace for heating chain-link blanks, &c., for welding						
Standish, Philander H., St. Mary's, Ohio. Furnace for heating chain-links	502,593	Aug. 1	574	138	64	671
Stanford, Arthur L., Evanston, Ill. Railway-rail bender	502,594	Aug. 1	577	139	64	672
Stanley, Augustus J., Colorado Springs, Colo. Car-coupling	497,288	May 9	1459	367	63	897
Stanley, Ethelbert A. (See Anger, John E., assignor.)	509,457	Nov. 28	2497	603	65	1271
Stanley, Edward, Bridgeport, Pa. Method of and apparatus for folding paper bags	503,810	Aug. 22	2595	648	64	1086
				649		
				499	65	1812
				500		
Stanley, Frank C., Fulton, N. Y. Ejector mechanism for breakdown guns	510,998	Dec. 19	2024	499	65	1812
Stanley, Frank F., et al., trustees. (See Goddu, Louis, assignor.)						
Stanley, Frank F., et al., trustees. (See Tobey, Franklin O., assignor.)						
Stanley, Frank M., Guthrie, Oklahoma Ter. Car-coupling	490,515	Jan. 24	2447	631	62	539
Stanley, Frank W., assignor to himself and S. H. Tacy, Brooklyn, N. Y. Type-writing machine	506,345	Oct. 10	949	237	65	192
Stanley, James W., Oakland, Cal. Injector	500,677	July 4	236	62	64	45
Stanley Laboratory Company. (See Chesney, Cummings C., assignor.)						
Stanley Laboratory Company. (See Kelly, John F., assignor.)						
Stanley Laboratory Company. (See Kelly and Chesney, assignors.)						
Stanley Laboratory Company. (See Stanley and Kelly, assignors.)						
Stanley Laboratory Company. (See Stanley, Kelly, and Chesney, assignors.)						
Stanley Laboratory Company. (See Stanley and Kelly, assignors.)						
Stanley Laboratory Company. (See Stanley and Tobey, assignors.)						
Stanley, Lucius T., Brooklyn, N. Y., assignor to Cutter Electrical and Manufacturing Company, Philadelphia, Pa. Electric switch	501,450	July 11	1464	367	64	282
Stanley Manufacturing Company. (See Hatfield, Charles B., assignor.)						
Stanley Manufacturing Company. (See Hildreth, William O., assignor.)						
Stanley, Reginald, Nuneaton, England. Tunneling-machine. (Reissue)	11,333	May 9	1469	370	63	899
Stanley, Reginald, Nuneaton, England. Tunneling or mining machine	504,179	Aug. 29	3186	796	64	1215
Stanley, Reginald, Nuneaton, England. Tunneling or mining machine	504,180	Aug. 29	3193	797	64	1216
Stanley, Reginald, Nuneaton, England. Tunneling-machine	504,181	Aug. 29	3197	797	64	1217
Stanley, Robert L., Somerville, assignor of one-half to F. E. Whitney, Melrose, Mass. Chuck for lathes	504,285	Aug. 29	3358	839	64	1247
Stanley Rule and Level Company. (See Trant, Justus A., assignor.)						
Stanley, Thomas C. (See Stanley, William L. and T. C.)						
Stanley, Verling. (See Brown, Philip C., assignor.)						
Stanley, William, Jr., Pittsfield, Mass. Alternating-current meter	494,513	Mar. 28	2837	710	62	1947
Stanley, William, Jr., Great Barrington, Mass., assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Electric converter	496,212	Apr. 25	2680	672	63	544
Stanley, William, Jr., Great Barrington, Mass., assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. System of electrical conversion and distribution	503,622	Aug. 22	2312	577	64	1031
Stanley, William, Jr., Great Barrington, Mass., assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Alternate-current electric motor	508,188	Nov. 7	338	83	65	820
Stanley, William, Jr., Great Barrington, Mass., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Regulating self-exciting alternate-current electric generators	508,493	Nov. 14	849	209	65	930
Stanley, William, Jr., and J. F. Kelly, Pittsfield, Mass. System of electrical distribution	507,391	Oct. 24	2723	668	65	549
Stanley, William, Jr., and J. F. Kelly, assignors to Stanley Laboratory Company, Pittsfield, Mass. Electric generator and motor	500,301	June 27	2594	635	63	1883
Stanley, William, Jr., and J. F. Kelly, assignors to Stanley Laboratory Company, Pittsfield, Mass. Alternating-current motor	505,859	Oct. 3	91	25	65	19
Stanley, William, Jr., J. F. Kelly, and C. C. Chesney, assignors to Stanley Laboratory Company, Pittsfield, Mass. Working condensers	505,860	Oct. 3	93	25	65	19
Stanley, William H., et al. (See Huestia, Thomas B., assignor.)						
Stanley, William L. and T. C., Cambridge, Ohio. Adhesive composition	506,745	Oct. 17	1615	406	65	332

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Stanley, William S., Washington, D. C. Cabinet	503,444	Aug. 15	1997	495	64	959
Stanley Works. (See Corscaden, Thomas, assignor.)						
Stanley Works. (See Corscaden and Holland, assignors.)						
Stanley Works. (See Hart, William H., assignor.)						
Stanly, William, Jr., and W. B. Tobey, assignors to Stanley Laboratory Company, Pittsfield, Mass. Electrical condenser	498,907	June 6	285	66	63	1443
Stanly, William, Jr., and J. F. Kelly, assignors to Stanley Laboratory Company, Pittsfield, Mass. Alternating-current generator	499,446	June 13	1189	283	63	1613
Stannard, John E., assignor of one-half to F. J. Millea, Springfield, Mass. Throttle-valve	509,334	Nov. 21	2240	542	65	1210
Stansbury, Fremont. (See McAneny and Stansbury.)						
Stanton, Elmer R. (See Bryce and Stanton.)						
Stanton, Ephraim W., Sharon Hill, Pa., assignor to W. McFarland, Trenton, N. J. Method of and apparatus for producing naphtha-soap	499,762	June 20	1704	408	63	1715
Stanton, Gilbert A., Long Lake, N. Y., assignor of one-fourth to G. E. Terry, Waterbury, Conn. Gaff-hook	503,176	Aug. 15	1577	388	64	884
Stanton, Henry, Flushing, Ohio. Heater or boiler	509,495	Nov. 28	2557	618	65	1282
Stanton, Nelson F., Bruin, Pa. Slat-and-wire-fence machine	504,371	Sept. 5	94	24	64	1288
Stanwood, Jeremiah D., Warren, R. I. Spring-presser for carding-machines	491,143	Feb. 7	128	34	62	773
Staples, Edward F. (See Sullivan and Staples.)						
Staples, John H., Charlestown, Mass. Turbine water-wheel	511,716	Dec. 26	3207	{ 786 787 }	{ 65 65 }	{ 2044 709 }
Staples, Leander, Monroe, Me. Halter	496,705	May 2	496	132	63	709
Stapleton, John C., Washington, D. C. Artificial-tooth plate	494,393	Mar. 28	2654	665	62	1913
Star Automatic Feed Bag Company. (See Klahn, Emil, assignor.)						
Star Brass Manufacturing Company. (See Winther, Charles A. G., assignor.)						
Star Brothers <i>et al.</i> (See Chesebro, James F., assignor.)						
Star Milk Cooler Company. (See Heulings, Samuel M., assignor.)						
Star Rosin Company. (See Ketchum, David W., assignor.)						
Staren, Joseph, assignor of one-half to A. P. Whitford, Chicago, Ill. Spoon or analogous article	511,100	Dec. 19	2177	536	65	1842
Stark, Andrew, Chicago, Ill. Grain-binder	492,590	Feb. 28	2439	607	62	1284
Stark, Andrew, Chicago, Ill. Cord-knotter for grain-binders	492,591	Feb. 28	2443	608	62	1285
Stark, Andrew, Chicago, Ill. Harvester-reel mechanism	495,846	Apr. 18	2126	534	63	426
Stark, Andrew, Chicago, Ill., assignor of one-half to Warder, Bushnell & Glessner Company, Chicago, Ill., and Springfield, Ohio. Butt-adjuster for grain-binders	502,210	July 25	2680	{ 676 677 }	{ 64 64 }	{ 535 535 }
Stark, Andrew, Chicago, Ill., assignor of one-half to Warder, Bushnell & Glessner Company, Chicago, Ill., and Springfield, Ohio. Grain-binder	502,540	Aug. 1	493	{ 117 118 119 }	{ 64 64 64 }	{ 657 657 657 }
Stark, Charles A., Duluth, Minn. Closed-conduit electric railway	489,835	Jan. 10	1303	340	62	286
Stark, Charley H., <i>et al.</i> (See Stark, George L., assignor.)						
Stark, Frank G., assignor, by mesne assignments, to Carbo-Alumina Metal Company, St. Louis, Mo. Alloy of metals and making same	490,174	Jan. 17	1880	.....	62	416
Stark, George L., McKinney, Tex., assignor of two-thirds to C. H. and T. J. Stark. Bed-spring-coiling machine	489,550	Jan. 10	885	232	62	200
Stark, James, Jr., <i>et al.</i> (See Olmsted, Levi, assignor.)						
Stark, James M., assignor of one-half to J. McLaren and H. L. Humphrey, Detroit, Mich. Car-coupling	489,395	Jan. 3	628	169	62	135
Stark, John, Waltham, assignor to R. E. Robbins, Boston, Mass., and T. M. Avery, Chicago, Ill., trustees. Stem winding and setting watch	503,502	Aug. 15	2092	522	64	976
Stark, Theodore A., Ottawa, Ill. Motor	490,173	Jan. 17	1878	489	62	416
Stark, Thomas J., <i>et al.</i> (See Stark, George L., assignor.)						
Starkey, James T. (See Starkey, William H. and J. T.)						
Starkey, William H. and J. T., Moncton, Canada. Car-coupling	491,450	Feb. 7	645	161	62	871
Starkeweather, Oakley B., Decatur, Ill. Adjustable shade-holder	505,681	Sept. 26	2311	587	64	1744
Starkeweather, Gleason F. (See Meyer and Starkeweather.)						
Starkeweather, Gleason F., assignor to Paige Iron Works, Chicago, Ill. Spring-bolt and box	505,491	Sept. 26	1934	498	64	1674
Starkeweather, Martin S., Boston, Mass. Fender for electric or other cars	489,207	Jan. 3	344	97	62	79
Starley, John M. and W. Coventry, England. Construction of cycles	500,971	July 4	692	182	64	126
Starley, William. (See Starley, John M. and W.)						
Starr Anchor Company. (See Starr, Eben T., assignor.)						
Starr, Eben T., New York, assignor to Starr Anchor Company, Hempstead, N. Y. Anchor	493,901	Mar. 21	1814	{ 461 462 }	{ 62 62 }	{ 1743 1743 }
Starr, Eli T., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental chair	490,516	Jan. 24	2450	{ 631 632 }	{ 62 62 }	{ 540 540 }
Starr, John E. (See Branson, Thornburgh, and Starr.)						
Starr, William H., Liberty, Nebr. Motor	503,623	Aug. 22	2314	577	64	1031
Starr, William S. (See Holt, Charles F., assignor.)						
Starrett, Laroy S. (See Gay, Francis J., assignor.)						
Start, Sampson S., Jr., and M. A. S. Johnson, Luverne, Minn. Garment-pattern	510,942	Dec. 19	1922	{ 469 470 }	{ 65 65 }	{ 1794 1794 }
Starz, Albert. (See Starz, Cornelius, assignor.)						
Starz, Cornelius, assignor of one-half to A. Starz, Pittsburg, Pa. Nut-lock	491,908	Feb. 14	1363	339	62	1036
Stasch, Emil R., assignor to Corning Manufacturing Company, Corning, N. Y. Hot-air furnace	489,994	Jan. 17	1580	413	62	355
Stassfurter Chemische Fabrik, vormals Vorster & Grüneberg Actien-Gesellschaft. (See Siepermann, Wilhelm, assignor.)						
Stathem, Isaac H., New Orleans, La. Pen or pencil holder	503,011	Aug. 8	1304	319	64	820
Staton, Charles P., assignor of one-half to E. W. Harper, Hackett City, Ark. Kitchen-cabinet and sifter therefor	497,461	May 16	1741	439	63	264
Stauffer, Benjamin G., Bachmanville, Pa. Watch-charm	497,611	May 16	1981	496	63	1006
Stauffer, David R. (See Stauffer, Henry E., assignor.)						
Stauffer, Henry E., Wilmington, Del., assignor to D. R. Stauffer, Walkersville, Md. Toy microscope	493,529	Mar. 14	1202	307	62	1607
Stauffer, J. R. (See Fischer, John, assignor.)						
Stauffer, John, Alpha, Ohio. Wire-fence ratchet	499,260	June 13	846	203	63	1551
Stauffer, John F. (See Reiffer and Stauffer.)						
Stauffer, Samuel D., Lancaster, Pa. Insulator for heating pipes, tubes, or flues	509,963	Dec. 5	193	45	65	1446
Stauth, Sebastian, and C. Wiebach, Newark, N. J., assignors to Ruby Light Company, of New Jersey. Pyrotechnic projectile	508,152	Nov. 7	286	71	65	811
Stayner, Edward G., Halifax, Canada. Skate	503,624	Aug. 22	2315	577	64	1031
Stead, George E., Leeds, England. Conveyor-belt	501,218	July 11	1091	277	64	214
Stead, Robert J., assignor of one-half to J. H. Wilson, Lanark, Canada. Bee-escape	507,506	Oct. 24	2910	716	65	584

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Stead, William. (See Pearson, Stead, and Monk.)						
Steam Gauge and Lantern Company <i>et al.</i> (See Betts, Lewis F., assignor.)						
Steam Gauge and Lantern Company <i>et al.</i> (See Dietz, Frederick, assignor.)						
Steam Gauge and Lantern Company <i>et al.</i> (See Erb, Charles F., assignor.)						
Steam Gauge and Lantern Company <i>et al.</i> (See Wright, Frederick K., assignor.)						
Steam Heated Horn Company. (See Peare, George R., assignor.)						
Stearnes, Alfred J., Chicago, Ill. Machine for straining soups, &c.	506,746	Oct. 17	1615	406	65	332
Stearns, Albyn D., assignor to Frederick Stearns & Company, Detroit, Mich. Apparatus for holding and dipping pills	493,604	Mar. 14	1341	342	62	1636
Stearns, Albyn D., assignor to Frederick Stearns & Company, Detroit, Mich. Apparatus for holding and dipping pills	504,505	Sept. 5	325	83	64	1330
Stearns, Charles K., Newton, assignor to General Electric Company, Boston, Mass. Railway-gate	498,452	May 30	3339	831	63	1279
Stearns & Co., E. C. (See Ennis, Frank, assignor.)						
Stearns & Co., E. C. (See Seely, Obadiah, assignor.)						
Stearns & Co., E. C. (See Stearns, Edward C., assignor.)						
Stearns, Edward C., assignor to E. C. Stearns & Co., Syracuse, N. Y. Molding-flask	496,014	Apr. 25	2375	601	63	488
Stearns, Edward C., assignor to E. C. Stearns & Co., Syracuse, N. Y. Sash-cord guide	496,069	Apr. 25	2466	623	63	504
Stearns, Fred B., Rushville, assignor to Stearns Manufacturing Company, Connerville, Ind. Windmill-wheel	510,054	Dec. 5	362	81	65	1478
Stearns, Henry O. (See Hastings, Robert L., assignor.)						
Stearns, Herbert P., Byron, Ill. Railway-rail joint	497,834	May 23	2330	584	63	1085
Stearns, James B. (See Nightingale and Stearns.)						
Stearns Manufacturing Company. (See Stearns, Fred B., assignor.)						
Stearns, Norman W., Middleborough, Mass. Pillow-sham holder	499,858	June 20	1866	453	63	1743
Stearns, Norman W., Middleborough, Mass. Curtain-fixture	506,346	Oct. 10	951	237	65	192
Stearns, Theron C., New York, N. Y. Manufacturing toilet soap	508,777	Nov. 14	1276		65	1014
Stearns, William E., Berlin, assignor to Berlin Iron Bridge Company, East Berlin, Conn. Building	495,070	Apr. 11	848	216 217	63	177
Stebbins, Achilles R., Watsonstown, Pa. Extension-table	500,440	June 27	2812	693	63	1922
Stebbins, Ensign B., Lakeview, Mich. Combined step-ladder and bench	500,439	June 27	2811	693	63	1922
Stebbins, James H., Jr., assignor to J. H. and C. H. Campbell, New York, N. Y. Treating butter	505,137	Sept. 19	1371	352	64	1555
Stebbins, Milton W., assignor of one-half to E. P. Lynch, Waterbury, Conn. Finger-moistener	503,905	Aug. 29	2896	725	64	1160
Steber, Louis A. (See Flint, Henry, assignor.)						
Stech, Johann T. C., Lübeck, assignor to J. Sander, Hamburg, Germany. Manufacture of brooms, brushes, &c.	501,219	July 11	1092	277	64	215
Stechhan, Otto, Indianapolis, Ind. Trunk	508,057	Nov. 7	117	33	65	780
Steck, Charles C., assignor to C. W. Woddrop and B. H. Welch, Hughesville, Pa. Making mine-pulleys	507,723	Oct. 31	3290	805	65	669
Steck, George, New York, N. Y. Piano	491,607	Feb. 14	904	227	62	944
Stedman, Charles A. (See Hopkins, Edwin F., assignor.)						
Stedman, Thomas R. (See Ingle, Stedman, and Lawson.)						
Stedman, William C. (See Stedman, William F. and W. C.)						
Stedman, William F. and W. C., Boston, Mass.; said W. C. assignor to said William F. Stedman. Switch-actuator	503,334	Aug. 15	1839	456	64	930
Stedman, William H. (See Merrow and Stedman.)						
Steeb, George V., Brooklyn, N. Y. Pneumatic signal	508,252	Nov. 7	450	110	65	841
Steedley, Robert T., Hillsborough, assignor of one-fourth to G. A. McIlhenny, Forest, Miss. Thrasher and separator	491,689	Feb. 14	1025	258 259	62	970
Steedman, Robert, Berkeley, Cal. Setting-gage for door-frames	493,566	Mar. 14	1271	325	62	1621
Steedmann, Henry E., Denver, Colo. Fire-escape	495,437	Apr. 11	1470	370	63	249
Steel Edge Stamping and Retinning Company. (See Hollander, Alva L., assignor.)						
Steel Motor Company. (See Harris, Samuel, assignor.)						
Steel Patents Company. (See Reese, Jacob, assignor.)						
Steel, Robert, assignor to W. J. Moore, Philadelphia, Pa. Wheeled vehicle	504,685	Sept. 5	610	156	64	1385
Steel, W. Irving. (See Refuss, George, J. G., and M. O., assignors.)						
Steel, Walter, Reading, Pa. Machine for rounding, straightening, and planishing metal bars	491,668	Feb. 14	990	250	62	962
Steel, Walter J., assignor of one-half to H. C. Braham, London, England. Sash-fastener	489,274	Jan. 3	452	125	62	99
Steel, William J. (See Ahner, Cyrus S., assignor.)						
Steelbrooke, Joseph W., Holyoke, Mass. Cloth-scouring machine	500,626	July 4	143	38	64	28
Steele, Albert H., Worcester, Mass. Loom-shuttle	499,944	June 20	1994	484	63	1766
Steele, Herbert B. (See Knight and Steele.)						
Steele, James W., Elizabethtown, N. Y. Car-coupling	491,862	Feb. 14	1296	320	62	1023
Steele, James W., Chicago, Ill. Railway-signal	498,864	June 6	197	48, 49	63	1428
Steele, James W., assignor to G. D. Cook, Chicago, Ill. Wrench	489,273	Jan. 3	451	124	62	99
Steele, John, Denver, Colo. Spraying device for fire-hose nozzles	492,119	Feb. 21	1683	420	62	1115
Steele, Joseph H. (See Coffield, Jesse M., assignor.)						
Steen, George B., Ionia, Kans. Wire-stretcher	499,945	June 20	1995	484	63	1766
Steen, James H., Canton, assignor of one-half to J. W. Cole, Columbus, Ohio. Surface-cutting tool	492,310	Feb. 21	1983	493	62	1178
Steenstrup, Ludvig, Aalborg, Denmark, assignor to E. H. Hohe, St. Paul, Minn. Milking-machine	510,449	Dec. 12	1005	240	65	1614
Steers, Wilhelm C., San Francisco, Cal. Extension-table	498,318	May 30	3122	778	63	1240
Steers, William, Boston, Mass. Bicycle-saddle	492,375	Feb. 21	2084	521	62	1197
Steece, George F., assignor to W. H. Newton, Cleveland, Ohio. Store-stool	505,138	Sept. 19	1373	352	64	1555
Steets, Louis, New York, and U. Bohren, Brooklyn, N. Y. Blind-slat tenon	501,810	July 18	2042	502	64	400
Steffen, Carl, Vienna, Austria-Hungary. Centrifugal machine	489,643	Jan. 10	1013	263	62	226
Steffen, Carl, Vienna, Austria-Hungary, assignor, by mesne assignments, to W. W. Frazier, Philadelphia, Pa. Obtaining sugar	489,879	Jan. 10	1357	354	62	297
Steffley, William E., assignor of one-half to G. H. Hardiman, San Diego, Cal. Car-coupling	503,754	Aug. 22	2522	627	64	1071
Stegner, Louis M., Lebanon, Ind. Garden-cultivator	508,995	Nov. 21	1659	408	65	1101
Steimer, Theodore C., assignor of one-half to Dalzell, Gilmore & Leighton Company, Findlay, Ohio. Snap for holding glassware	508,854	Nov. 14	1397	348	65	1036
Stein, Arthur, Schönpriesen, near Aussig, Austria-Hungary. Car-coupling	503,503	Aug. 15	2093	523 524	64	976
Stein, Carl, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Gas or oil motor engine	511,661	Dec. 26	3118	762	65	2026
Stein, Emanuel. (See Berens, Stanislaus, assignor.)						
Stein, Herman E., <i>et al.</i> (See Sumner, William A., assignor.)						
Stein, Joseph N., Fort Wayne, Ind. Car-replacer	493,308	Mar. 14	855	218	62	1541

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Stein, Leo, and N. Rappleyea, Rochester, N. Y. Burial-casket lid.....	507,292	Oct. 24	2549	628	65	514
Stein, Valentine, New York, N. Y. Work-guide for saws.....	500,972	July 4	694	182	64	126
Steinbach, Reinhold, assignor to Grusonwerk, Magdeburg, Germany. Grinding and crushing mill.....	507,943	Oct. 31	3648	{ 902 903 }	{ 65 65 }	{ 736 736 }
Steinbart, Alfred. (See Uehling and Steinbart.)						
Steinbarth, Carl, assignor of one-half to H. Pfaff, Abilene, Tex. Steam-condenser.....	494,655	Apr. 4	200	50, 51	63	41
Steinen, Otto, Omaha, Nebr., assignor of one-half to H. Kind, Stapleton, N. Y. Shears.....	493,415	Mar. 14	1005	259	62	1572
Steiner, Charles E., assignor of one-half to W. B. Hildebrand, York, Pa. Railway-tie.....	507,179	Oct. 24	2361	583	65	481
Steiner, Josef, Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-switch.....	505,070	Sept. 12	1262	323	64	1522
Steiner, Josef, Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Telegraph-key.....	509,964	Dec. 5	194	46	65	1446
Steiner, Sidney W., Norristown, Pa. Non-conducting composition of matter for covering steam pipes, boilers, or other surfaces.....	505,426	Sept. 19	1840		64	1643
Steiner, William R., Frederick, Md. Corn-harvester.....	505,492	Sept. 26	1935	{ 498 499 500 238 239 }	{ 64 64 64 64 64 }	{ 1674 1674 1674 1674 1674 }
Steinmann, Theodor, Marburg, Austria-Hungary. Air-ship.....	501,111	July 11	931		64	184
Steinmetz, John W., Millbank, S. D. Draft-equalizer.....	508,778	Nov. 14	1277	317	65	1014
Stelling, Frederik W., and H. F. Reetz, Hartford, Conn. Ash-chute.....	506,583	Nov. 14	997	244	65	960
Stelwagon, William H., Philadelphia, Pa. Tar or petroleum still.....	503,996	Aug. 29	2897	725	64	1160
Stely, Levi N., Vienna, Va. Vehicle-axle support.....	496,285	Apr. 25	2791	698	63	566
Stelzner, Alfred, Wiesbaden, Germany. Stringed musical instrument.....	492,948	Mar. 7	277	70	62	1413
Stempel, Omar A. (See Newman, Werden, and Stempel.)						
Stempel, Omar A., St. Louis, Mo. Fire-extinguisher.....	511,469	Dec. 26	2815	621	65	1973
Stempel, Omar A., assignor of two-thirds to J. F. Wangler and Missouri Lamp and Manufacturing Co., St. Louis, Mo. Fire-extinguisher.....	489,767	Jan. 10	1206	317	62	265
Stenberg, John A., La Vergne, Ill. Razor.....	489,995	Jan. 17	1582	414	62	355
Stenger, Francis, Philadelphia, Pa. Car-coupling.....	491,929	Feb. 14	1395	348	62	1043
Stephan, Franz, Werchniatschka, Russia. Machine for cutting beet-roots.....	489,338	Jan. 3	546	{ 147 148 }	{ 62 62 }	{ 117 117 }
Stephens, Benjamin H., Woodland, Cal. Device for raising loaded trucks.....	489,339	Jan. 3	548	149	62	118
Stephens, Ebenezer B., Denver, Colo. Animal-trap.....	506,951	Oct. 17	1954	484	65	395
Stephens, George H., London, England. Boot-tree.....	510,654	Dec. 12	1388	340	65	1684
Stephens, George W., Denison, Iowa. Beehive.....	491,669	Feb. 14	992	250	62	962
Stephens, Henry, assignor, by mesne assignments, to C. D. Silleck, Brooklyn, N. Y. Mail-bag.....	499,232	Jan. 17	1978	519	62	435
Stephens, James H., Mexia, Tex. Provision-safe.....	509,262	Nov. 21	2114	508	65	1187
Stephens, Jesse A., assignor of two-thirds to G. N. Higman and M. E. Vandercook, Muncie, Ind. Carpet stretcher and tacker.....	492,771	Feb. 28	2728	679	62	1341
Stephens, Olney, Astoria, Ill. Valve-gear.....	489,836	Jan. 10	1306	341	62	287
Stephens, Samuel D., West Shoals, Ind. Cable arch support.....	501,969	July 25	2292	573	64	461
Stephens, Samuel G. (See Hildreth, Stephens, and Whitaker.)						
Stephenson, Adolf, and J. Backstrom, Stromsburg, Nebr. Electric belt.....	503,811	Aug. 22	2598	649	64	1066
Stephenson, Charles H., Lynn, Mass. Foot-bath attachment for bath-tubs.....	501,304	July 11	1217	308	64	236
Stephenson, Elwood F., Cartersburg, Ind. Brick or tile kiln.....	492,064	Feb. 21	1596	{ 396 397 }	{ 62 62 }	{ 1097 1097 }
Stephenson, John, New York, N. Y. Tram-car.....	491,608	Feb. 14	904	227	62	944
Steppacher, Oscar M., Philadelphia, Pa. Necktie-holder.....	497,140	May 9	1204	307	63	853
Sterick, Sylvester T. F., Gaithersburg, Md., assignor of two-thirds to W. M. King, Washington, D. C. Journal-box.....	496,174	Apr. 25	2619	660	63	533
Sterling Car Heating and Lighting Company. (See Hiscox, Gardner D., assignor.)						
Sterling Car Heating and Lighting Company. (See Kennelly, John J., assignor.)						
Sterling, Charles A., East Orange, N. J., and J. E. Wilson, New York, N. Y.; said Wilson assignor to said Sterling. Machine for separating coiled bars or rods.....	505,071	Sept. 12	1263	{ 324 325 90 }	{ 64 64 64 }	{ 1522 1522 636 }
Sterling, Guy, North Yakima, Wash. Conduit.....	502,474	Aug. 1	378		64	636
Sterling, Harry W., et al. (See White, Charles E., assignor.)						
Sterling, John C., et al. (See White, Charles E., assignor.)						
Sterling, John P., Lemars, Iowa. Bolting-reel.....	497,220	May 9	1319	336	63	875
Stern, Benjamin, New York, N. Y. Nasal douche.....	507,567	Oct. 31	3029	743	65	620
Stern, Benjamin, New York, N. Y. Atomizer.....	507,603	Oct. 31	3100	757	65	633
Stern, Joseph, San Francisco, Cal. Collar.....	507,405	Oct. 17	2108	522	65	423
Sternberg, John C. M. (See Hesse and Sternberg.)						
Sternberger, Herman S., Piqua, Ohio. Ventilated mattress.....	510,490	Dec. 12	1072	257	65	1628
Sterne, Louis, et al. (See Wilbrant, Henri, assignor.)						
Sterne, Louis, and T. R. Murray, Glasgow, Scotland. Regulator for refrigerating or freezing machines.....	509,263	Nov. 21	2115	509	65	1187
Sternier, Charles, et al. (See Grim, Charles B., assignor.)						
Sterns, Jacob, New York, N. Y. Car-coupling.....	490,128	Jan. 17	1813	474	62	403
Sterrit, William B., Pittsburg, Pa. Molding-machine.....	491,273	Feb. 7	334	85	62	812
Sterzing, Fred. (See Lane and Kelly, assignors.)						
Sterzing, Fred, et al. (See Lane, Fernando G., assignor.)						
Stetson, A. B., et al. (See Hayward, Jacob L., assignor.)						
Stetson, Charles M., Rosario, Argentine Republic. Nut and bolt lock.....	490,176	Jan. 17	1883	490	62	416
Steuart, William R., Chicago, Ill. Shoe-still.....	493,663	Mar. 21	1435	365	62	1668
Stenervald, Philip, and A. Cording, Sauemin, Ill. Latch.....	490,517	Jan. 24	2452	632	62	540
Steur, John J., Albany, N. Y., assignor to J. J. Stier, Jr., Jersey City, N. J. Car-step.....	510,369	Dec. 5	867	209	65	1575
Stevens, Alfred F., Orange, N. J. Eraser-guard for type-writing machines.....	499,894	June 20	1927	468	63	1755
Stevens, Alfred L., assignor of part interest to J. M. Phelps and C. W. Uthbrok, Dayton, Ohio. Bottle-labeling machine.....	511,281	Dec. 19	2481	{ 604 605 }	{ 65 65 }	{ 1898 1898 }
Stevens, Arthur L., Philadelphia, Pa., assignor to Diamond Paper Bag Company, Wilmington, Del. Paper-bag machine.....	502,784	Aug. 8	923	235	64	750
Stevens, Augustus P., Brooklyn, N. Y. Railway-switch.....	497,355	May 16	1579	{ 397 398 }	{ 63 63 }	{ 935 935 }
Stevens, Austin, Brooklyn, N. Y. Pulverizer.....	502,021	July 25	2375	597	64	477
Stevens, C. Amory. (See Collins, Caleb G., assignor.)						
Stevens, Calvin A. (See Collins, Caleb G., assignor.)						
Stevens, Charles E., Hill City, S. D. Safety-pin.....	504,634	Sept. 5	514	133	64	1367
Stevens, Charles W. (See Crittenden, Louis S., assignor.)						
Stevens, Collins R. (See Klock and Stevens.)						
Stevens, Edward G. (See Warren, John D., assignor.)						
Stevens, Frank, assignor of one-half to S. Welsh, Philadelphia, Pa. Electric switch.....	506,563	Oct. 10	1319	330	65	265

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Stevens, Frank L. (See Brien, Theodore R., assignor.)						
Stevens, Frank M., White River Junction, Vt. Electric locomotive	500,276	June 27	2550	623	63	1876
Stevens, Fred A., Sacramento, Cal. Locomotive-headlight cover	504,949	Sept. 12	1052	270	64	1482
Stevens, Fred A., Sacramento, Cal. Car-coupling	508,779	Nov. 14	1278	318	65	1014
Stevens, George W., New Orleans, La. Automatic railway-switch	502,475	Aug. 1	378	90	64	636
Stevens, Henry A., Norristown, Pa. Folding table	491,760	Feb. 14	1131	285	62	991
Stevens, Henry A., Norristown, assignor to J. W. Douglas, Philadelphia, Pa. Life-saving apparatus	494,090	Mar. 21	2144	548	62	1805
Stevens, Henry H., Marengo, Ill. Clip for holding wheel-tires	504,117	Aug. 29	3083	772	64	1196
Stevens, James F., and W. V. Breene, Port Chester, N. Y. Running-gear	505,139	Sept. 19	1374	352	64	1556
Stevens, John C., assignor to A. Brainerd and C. L. Tuttle, Hartford, Conn. Burial apparatus	498,319	May 30	3122	779	63	1240
Stevens, John C., assignor, by mesne assignments, to C. L. Tuttle and A. E. Mather, Hartford, Conn. Blind-slat fastener	511,000	Dec. 19	2026	500	65	1812
Stevens, John H., Cambridge, Mass. Device for mixing hot and cold water for bathing, &c.	508,584	Nov. 14	999	245	65	960
Stevens, John H., Cambridge, Mass. Discharge-valve-operating device for washbasins, bath-tubs, &c.	508,585	Nov. 14	1000	245 246	65	960
Stevens, John H., Newark, N. J., and F. C. Axtell, Brooklyn, assignors to Celluloid Manufacturing Company, New York, N. Y. Manufacture of compounds of pyroxyline	510,617	Dec. 12	1320		65	1671
Stevens, John J., Galt, Canada. Attachment for drilling-machines	503,012	Aug. 8	1304	319	64	820
Stevens, Levi and Levi, Jr., Trenton, N. J. Gas apparatus	495,917	Apr. 18	2236	563	63	446
Stevens, Louis V., Buffalo, N. Y., and J. R. Mott, Cleveland, Ohio. Railway-switch	501,112	July 11	932	239	64	184
Stevens, Robert W., et al. (See Cundiff, Middleton, assignor.)						
Stevens, Samuel J., assignor of one-half to D. S. Trimmer, Springfield, Ohio. Nut-lock	493,127	Mar. 7	553	138	62	1468
Stevens, Sidney M., De Kalb, Ill. Cooking-stove	494,350	Mar. 28	2576	649	62	1900
Stevens, Truman E. (See Wulff, John W., assignor.)						
Stevens, Truman E., Blair, assignor of one-half to W. J. C. P. Cramer, Omaha, Nebr. Balanced electric drop-light hanger	492,847	Mar. 7	114	29	62	1380
Stevens, Washington C., Muskegon, Mich. Instrument for determining the inclination of ditches	508,253	Nov. 7	453	110 111	65	842
Stevens, Wilbur F., Detroit, Mich. Screw-cleaning device	491,144	Feb. 7	128	34	62	773
Stevens, William E., Newark, N. J. Spectacle or eyeglass frame	495,918	Apr. 18	2238	564	63	447
Stevens, William H. (See Chase, John F., assignor.)						
Stevenson, Archy A., Lewistown, Pa. Manufacture of wheels	494,903	Apr. 4	599	151	63	116
Stevenson, Charles. (See Reid and Stevenson.)						
Stevenson, Charles. (See Reid and Stevenson.) (Reissue.)						
Stevenson & Co. (See Stevenson, William G., assignor.)						
Stevenson, Donald M., assignor to Hamilton Folding Bed Company, Hamilton, Ohio. Folding bedstead	511,282	Dec. 19	2483	605 606	65	1898
Stevenson, Edward W., New York, N. Y., assignor to S. L. and E. B. Fox, Philadelphia, Pa. Electrical testing outfit for cables, &c.	496,801	May 2	656	175	61	736
Stevenson, Hugh, New York, N. Y. Folding bed	508,058	Nov. 7	118	33	65	781
Stevenson, James H., Alliance, Mo. Steering mechanism for traction-engines	504,894	Sept. 12	961	248	64	1465
Stevenson, John, Jr., New Castle, Pa. Wire-nail machine	492,565	Feb. 28	2402	597 598 599	62	1276
Stevenson, John L., assignor of one-half to J. E. York, Chicago, Ill. Brick	490,726	Jan. 31	2802	718 719	62	623
Stevenson, John W. (See Thomas, Henry O., assignor.)						
Stevenson, John W., et al. (See Thomas, Henry O., assignor.)						
Stevenson, William G., assignor to Stevenson & Co., Wellsville, Ohio. Pan-emptying machine	499,366	June 13	1041	252	63	1587
Stevenson, William G., assignor to Stevenson & Co., Wellsville, Ohio. Grinding-pan	499,367	June 13	1041	253	63	1587
Stever, Solomon F., Fairfield, Iowa. Railway-rail joint	492,848	Mar. 7	115	29	62	1380
Steward, John A., East Clarendon, Vt. Soldering-machine	493,309	Mar. 14	857	218	62	1541
Steward, John F. (See Deering and Steward.)						
Steward, John F., Chicago, Ill. Sheaf-carrier for self-binding harvesters	490,591	Jan. 24	2553	657	62	560
Steward, John F., Chicago, Ill. Corn-harvester	498,320	May 30	3123	779 780	63	1240
Steward, John F., Chicago, Ill. Making twine from paper	500,627	July 4	144	38	64	28
Steward, John F., Chicago, Ill. Twine	501,970	July 25	2293		64	461
Steward, John F., Chicago, Ill. Method of and machinery for making twine	501,971	July 25	2294	574	64	461
Steward, John F., Chicago, Ill. Feed-regulator for twine-machines	502,326	Aug. 1	125	28	64	588
Steward, John F., Chicago, Ill. Automatic grain-binder	504,372	Sept. 5	97	24	64	1289
Steward, John F., Chicago, Ill. Grain-binder	504,373	Sept. 5	99	25	64	1289
Steward, Nathan H., assignor to Steward & Romaine Manufacturing Company, Limited, Philadelphia, Pa. Expansion-cover for bolts	508,254	Nov. 7	454	111	65	842
Steward & Romaine Manufacturing Company. (See Steward, Nathan H., assignor.)						
Stewart, Allen H., Des Moines, Iowa. House door letter-box	492,443	Feb. 28	2194	549	62	1233
Stewart, Charles A., et al. (See Stewart, John, Jr., assignor.)						
Stewart, Charles F., et al. (See Nembach, Andrew, Jr., assignor.)						
Stewart, George A., et al. (See Stewart, John, Jr., assignor.)						
Stewart, George E., Ashland, and A. G. Brewer, Hopkinton, Mass. Vamp throating and marking machine	499,050	June 6	535	126 127	63	1484
Stewart, George W., Ticonderoga, N. Y. Core-driver	493,192	Mar. 7	651	166	62	1486
Stewart Hartshorn Company. (See Hartshorn, Edmund F., assignor.)						
Stewart Hartshorn Company. (See Hartshorn, Stewart, assignor.)						
Stewart, Henry, Canandaigua, N. Y. Abacus attachment for slates	501,379	July 11	1368	341	64	262
Stewart, Jacob Q. (See Johnson, William T. S., assignor.)						
Stewart, James T., Philadelphia, Pa. Valve device	499,896	June 20	1930	408	63	1755
Stewart, Jennie M., Camden, N. J. Eye for hooks and eyes	492,442	Feb. 28	2193	548	62	1232
Stewart, John, New York, N. Y. Perforating-stamp	500,258	June 27	2525	617 618	63	1871
Stewart, John, New York, N. Y. Check-punch	505,577	Sept. 26	2132	540	64	1711
Stewart, John, Jr., Great Falls, assignor to himself, C. A. and G. A. Stewart, Somersworth, N. H. Tile building-wall	510,720	Dec. 12	1490	369	65	1704
Stewart, John C. (See Braley and Stewart.)						
Stewart, John H., et al. (See Hooper, George W., assignor.)						
Stewart, John H., Danville, Va. Treadle	502,683	Aug. 1	747	179 180	64	703
Stewart, Joseph B., Haverstraw, N. Y. Track-circuit	491,609	Feb. 14	905	227	62	944
Stewart, Joseph B., Haverstraw, assignor of one-third to J. P. Bradfield, Syracuse, N. Y. Electric-railway grade-crossing device	499,805	June 20	1771	429	63	1728
Stewart, Joseph B., Haverstraw, and W. G. Wattson, Tappan, N. Y. Railway-signal	498,865	June 6	202	49	63	1429

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Stewart, Joseph C. (See Ballard and Stewart.)						
Stewart, Linus G., Sawyer, Nebr. Corn-harvester.....	511,554	Dec. 26	2938	{ 716 717 }	65	1996
Stewart & Mattson Manufacturing Company. (See Clamer, George F. S., assignor.)						
Stewart, Richard W., Devonport, England. Panoramic camera.....	509,698	Nov. 28	2868	{ 693 694 }	65	1342
Stewart, Sherman U. (See Peterson and Stewart.)						
Stewart, Thomas W., Detroit, Mich. Mop.....	499,402	June 13	1113	267	63	1599
Stewart, Thomas W., and W. E. Johnson, assignors of one-half to L. H. and A. H. Johnson, Detroit, Mich. Station-indicator.....	499,895	June 20	1928	468	63	1755
Stewart, Walter G., Reading, Pa. Chute mechanism for dumping-wagons.....	510,100	Dec. 5	436	97	65	1492
Stewart, William C. (See Dubois and Stewart.)						
Stewart, William D., et al. (See Christ, Jacob, assignor.)						
Stewart, William G., Ireland, Ind. Beehive.....	489,696	Jan. 10	1091	252	62	242
Stewart, William M., Scurry, Tex. Nut lock.....	505,140	Sept. 19	1375	352	64	1556
Stewerwald, Philip, et al. (See Butler, William H., assignor.)						
Stibbs, William P., Belleville, N. J. Step-ladder.....	491,820	Feb. 14	1223	306	62	1009
Stibbs, William P., Belleville, N. J. Paper-holder.....	510,721	Dec. 12	1492	369	65	1704
Stibel, A. C., et al. (See Langer, Gotthold, assignor.)						
Stibel, H. G., Jr., et al. (See Langer, Gotthold, assignor.)						
Stibel, Henry G., Jr. (See Langer, Gotthold, assignor.)						
Stickney, Allison M., Medford, assignor to Wellman Sole Cutting Machine Company, Boston, Mass., and Portland, Me. Machine for cutting soles, &c.....	506,801	Oct. 17	1705	{ 428 429 }	65	349
Stickney, Charles W., Butte, Mont. Roasting sulphur-bearing ores.....	493,193	Mar. 7	652		62	1486
Stickney, Henry R., Portland, Me. Can-filling machine.....	510,618	Dec. 12	1322	322	65	1672
Stickney, Henry R., Portland, and H. C. Baxter, Brunswick, Me. Machine for silking corn.....	500,496	Nov. 28	2558	619	65	1282
Stiehl, Otto M., Belleville, Ill. Paper-bag holder.....	495,605	Apr. 18	1739	438	63	353
Stier, Jacob J., Jr. (See Steur, John J., assignor.)						
Stieringer, Luther, et al. (See White, Wendell P., assignor.)						
Stifel, Herman C., St. Louis, Mo., F. J. Torrance, and O. F. Grant, Allegheny, Pa. Bath-tub.....	493,194	Mar. 7	654	166	62	1486
Stiggleman, James H., Wabash, Ind. Fastening for furniture.....	491,383	Feb. 7	537	137	62	851
Stiggleman, James H., Wabash, Ind. Tension-hinge.....	496,802	May 2	660	175	63	736
Stiles, Albert C., New Haven, Conn. Journal-bearing.....	495,919	Apr. 18	2239	564	63	447
Stiles, Frederic, assignor of three-fifths to R. K. Allerton and C. H. Hall, Binghamton, N. Y. Cigar-wrapping machine.....	496,453	May 2	101	28	63	637
Stiles, George A., Brookline, Mass., assignor to Lincoln Sewing Machine Company, Exeter, N. H., and Boston, Mass. Shoe-sewing machine.....	494,969	Apr. 4	691	177	63	132
Stiles, George A., Brookline, assignor of one-half to G. H. P. Flagg, Boston, Mass. Tack-driving machine.....	508,780	Nov. 14	1279	{ 318 319 }	65	1015
Still, Oliver H., assignor to J. W. Lander, East Greenwich, R. I. Hose-mender.....	509,458	Nov. 28	2498	603	65	1271
Still, William J., Toronto, Canada. Electrical rotary motor.....	498,585	May 30	3552	881	63	1316
Stille, Oscar Q. (See Stille, Theodore J. and O. Q.)						
Stille, Theodore J. and O. Q., St. Louis, Mo. Candlestick.....	501,473	July 11	1494	376	64	287
Stillebauer, Henry. (See Hoffstaetter and Stillebauer.)						
Stillman, Francis H., Brooklyn, N. Y. Hydraulic punch.....	507,666	Oct. 31	3211	785	65	654
Stillman, Francis H., and C. Wigtel, Brooklyn, N. Y. Mechanism for bending plates.....	504,310	Aug. 29	3399	{ 851 852 }	64	1254
Stillman, George F., Syracuse, N. Y. Vehicle-tire.....	495,277	Apr. 11	1324	306	63	244
Stillman, George F., assignor to L. C. Smith, Syracuse, N. Y. Ribbon-guide for type-writing machines.....	499,051	June 6	538	127	63	1485
Stillwell, Elias, assignor of one-half to B. P. Jarred, Rockville, Mo. Nut-lock.....	498,368	May 30	3210	798	63	1255
Stilwell-Bierce & Smith-Vaile Manufacturing Company. (See Stilwell, Edwin R., assignor.)						
Stilwell, Charles B., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Method of and apparatus for making paper bags.....	508,059	Nov. 7	120	34	65	781
Stilwell, Charles B., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine.....	508,060	Nov. 7	122	35	65	781
Stilwell, Charles B., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine.....	508,061	Nov. 7	124	35	65	782
Stilwell, Charles B., Wayne, assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine.....	511,171	Dec. 19	2293	{ 561 562 563 }	65	1864
Stilwell, Edwin R., assignor to Stilwell-Bierce & Smith-Vaile Manufacturing Company, Dayton, Ohio. Feed-water-purifier attachment.....	510,300	Dec. 5	767	186	65	1555
Stilwell, Edwin R., assignor to Stilwell-Bierce & Smith-Vaile Manufacturing Company, Dayton, Ohio. Purifier.....	510,301	Dec. 5	768	{ 186 187 }	65	1555
Stimpson, Edwin B. (See McDonald, Alexander E., assignor.)						
Stimpson, Edwin B., New York, N. Y. Leggin.....	495,172	Apr. 11	1054	563	63	213
Stimpson, Edwin B., New York, N. Y. Eye-letting-machine.....	502,327	Aug. 1	128	29	64	588
Stimpson, Edwin B., Brooklyn, N. Y. Leggin.....	504,794	Sept. 12	800	203	64	1433
Stimpson, Edwin B., Brooklyn, N. Y. Distending-spring for leggins.....	505,906	Oct. 3	170	43	65	33
Stimpson, Edwin B., Brooklyn, N. Y. Rivet-setting machine.....	509,699	Nov. 28	2871	{ 694 695 696 }	65	1342
Stimpson, James, Baldwinville, Mass. Windmill.....	502,785	Aug. 8	927	{ 225 226 }	64	751
Stimpson, Wallace I., Milford, assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple.....	497,692	May 16	2110	527	63	1029
Stimson, James, Watsonville, Cal. Bookcase.....	504,182	Aug. 29	3198	798	64	1217
Stinchfield, Lewis D., assignor of one-half to G. E. Keith, Brockton, Mass. Welt-guide for sewing-machines.....	510,655	Dec. 12	1389	340	65	1685
Stinde, Herman F., deceased; M. E. Stinde, administratrix, Red Bud, Ill. Telegraphic transmitter.....	511,172	Dec. 19	2296	563	65	1865
Stinde, Mary E., administratrix. (See Stinde, Herman F.)						
Stine, George A., Spokane, Wash. Seed-planter.....	491,863	Feb. 14	1297	320	62	1023
Stine, John F. (See Mowry, Joseph B., assignor.)						
Stiner, Frank, Spencer, Mass. Pneumatic let-off mechanism for looms.....	495,847	Apr. 18	2128	535	63	426
Stiner, Frank, Spencer, Mass. Floating fish-tilt.....	510,205	Dec. 5	608	143	65	1525
Stirling, Allan, New York, N. Y. Machine for bending tubes.....	493,390	Mar. 14	975	251	62	1566
Stirling, Allan, New York, N. Y., assignor to Stirling Boiler Company, Chicago, Ill. Steam-boiler.....	491,451	Feb. 7	646	161	62	871
Stirling Boiler Company. (See Stirling, Allan, assignor.)						
Stirn, Louis. (See Goldkind and Stirn.)						
Stirn, Louis, et al. (See Goldkind, Isaac, assignor.) (Reissue.)						
Stirn, Max. (See Goldkind and Stirn.)						
Stirsky, Joseph F., Nelson, Canada. Burglar-alarm.....	511,370	Dec. 26	2641	642	65	1941

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Stitt, Louise G., Chicago, Ill. Skeleton waist.....	503,916	Aug. 22	2747	683	64	1116
Stobaens, John B., <i>et al.</i> (See Weidig, Henry P., assignor.)						
Stock, Denis, N., St. Louis, Mo. Feed-bag.....	495,278	Apr. 11	1225	306	63	244
Stockard, Charles C., Sr., Columbus, Miss. Garden-hoe plow.....	492,120	Feb. 21	1635	420	62	1115
Stoeke, Jacob, <i>et al.</i> (See Barker, Henry C., assignor.)						
Stoeke, Jacob, <i>et al.</i> (See Fernholtz, Emil, assignor.)						
Stöcker, Alexander, Elberfeld, Germany. Balance.....	499,479	June 13	1235	294	63	1621
Stocker, John. (See Johnson and Stocker.)						
Stocker, John, New Lewisville, Ark. Belt-fastener.....	506,083	Oct. 3	440	115	65	86
Stocker, Robert B. (See Kadletz and Stocker.)						
Stockford, Charles E., Brooklyn, N. Y. Furnace for steam-generators.....	507,692	Oct. 31	3244	{ 794 795 }	{ 65 65 }	{ 660 660 }
Stocking, Edgar L., Buffalo, N. Y. Lumber-loading jack.....	503,335	Aug. 15	1841	456	64	930
Stocking, Harry M., and E. L. Vroom, Castleton Corners, N. Y. Separable square.....	490,994	Jan. 31	3238	827	62	708
Stockstrom, Charles A. (See Stockstrom, Louis, assignor.)						
Stockstrom, Louis, assignor to Geo. D. Barnard & Company, St. Louis, Mo. Ballot-box.....	493,195	Mar. 7	655	{ 166 167 }	{ 62 62 }	{ 1487 1487 }
Stockstrom, Louis, assignor of one-half to C. A. Stockstrom, St. Louis, Mo. Gas-stove burner.....	508,354	Nov. 7	609	149	65	871
Stockton, Albert G., Washington, D. C. Tobacco-pipe.....	496,070	Apr. 25	2467	623	63	504
Stockton Combined Harvester and Agricultural Works. (See Grattan, Christopher, assignor.)						
Stockton, Frank W., Parsons, Kans. Fire-guard and soot-catcher.....	506,279	Oct. 10	841	207	65	171
Stockwell, Emory and H. C., assignors to Yale & Towne Manufacturing Company, Stamford, Conn. Electric bolt-operating mechanism for safes.....	494,495	Mar. 28	2808	{ 703 704 }	{ 62 62 }	{ 1942 1942 }
Stockwell, Herbert C. (See Stockwell, Emory and H. C.)						
Stockwell, John W. (See Bowley, Joseph H., assignor.)						
Stockwell, Willard E., assignor of one-half to W. T. Hess, Grand Rapids, Mich. Trimming-machine.....	490,837	Jan. 31	2973	763	62	657
Stoddard, Hiram D., Binghamton, N. Y. Breast-strap.....	491,864	Feb. 14	1299	330	62	1023
Stoddard Manufacturing Company. (See Brown and Knaub, assignors.)						
Stodder, Edward D., and O. Eastman, San Francisco, Cal. Fruit-picking apparatus.....	510,055	Dec. 5	363	81	65	1478
Stoedel, Frederick, and S. Fahringer, Mahanoy City, Pa. Slate-picker.....	500,302	June 27	2595	635	63	1883
Stokes, Arthur E., Island Heights, N. J. Game apparatus.....	494,496	Mar. 28	2811	705	62	1943
Stokes, Robert L. (See Morris and Stokes.)						
Stokes, William, and R. Hudson, Stockbrook Mills, England. Elastic woven fabric.....	495,762	Apr. 18	1994	{ 504 505 }	{ 63 63 }	{ 401 401 }
Stokesbary, John H. (See Althoff and Stokesbary.)						
Stolle, Frank J., Cincinnati, Ohio. Cloth-notcher.....	491,253	Feb. 7	306	78	62	807
Stollenwerk, Anton, <i>et al.</i> (See Schroeder, Conrad, assignor.)						
Stoltenberg, Hermann A., Hollyrood, Kans. Feeding attachment for thrashing-machines.....	504,950	Sept. 12	1053	270	64	1483
Stoltz, Eugene J., San Francisco, Cal. Gas-cock.....	509,777	Nov. 28	3003	726	65	1368
Stolze, Charles, Rhineland, Wis. Wrench.....	498,321	May 30	3129	780	63	1241
Stombaugh, John, Briceton, Ohio. Land-anchor.....	501,811	July 18	2042	503	64	400
Stombaugh, Parley L., Altamont, Ill. Device for preventing horses from cribbing.....	510,722	Dec. 12	1493	369	65	1704
Stombs Heating Company. (See Stombs, Thomas A., assignor.)						
Stombs, Thomas A., Los Angeles, Cal., assignor to Stombs Heating Company, of California. Petroleum-gas generator and burner for heating purposes.....	498,410	May 30	3264	813	63	1266
Stone, Albert J., <i>et al.</i> (See Phillips, Elwood C., assignor.)						
Stone, Albert W. (See Coburn and Stone.)						
Stone, Alonzo. (See Stone, Charles H. and A.)						
Stone, Charles A. (See Cousins, Alfred C., assignor.)						
Stone, Charles A., Knightsville, R. I. Ladder-hook.....	495,279	Apr. 11	1227	306	63	245
Stone, Charles A., Newton, and E. S. Webster, Boston, Mass. Electrically-operated railway-switch.....	511,173	Dec. 19	2301	564	65	1866
Stone, Charles F., Chicago, Ill. Starching-machine.....	492,311	Feb. 21	1984	494	62	1179
Stone, Charles H. and A., assignors to themselves and J. W. Long, Ringgold, Tex. Rotary engine.....	505,334	Sept. 19	1679	433	64	1612
Stone, Charles M., Nashville, Tenn. Educational apparatus.....	511,470	Dec. 26	2816	681	65	1973
Stone, Charles M., assignor of one-third to P. E. Cleveland, Nashville, Tenn. Universal joint.....	509,404	Nov. 28	2383	577	65	1247
Stone, David K., Bloomingdale, Mich. Horse-detacher.....	498,322	May 30	3130	780	63	1241
Stone, Draper, Pittsford, N. Y. Window-screen.....	493,654	Mar. 21	1436	366	62	1669
Stone, Draper, Rochester, N. Y. Lubricator.....	503,013	Aug. 8	1305	320	64	820
Stone, Edgar B., Narrows, Ind. Car-coupling.....	508,062	Nov. 7	125	35	65	782
Stone, Edward F., Hyde Park, Mass. Electric-railway switch.....	497,061	May 9	1083	278	63	832
Stone, Frank R., Middlebury, Vt. Portable bill board.....	503,812	Aug. 22	2599	649	64	1087
Stone, George M., <i>et al.</i> (See Beesley, Edward, Sr., and E. and E. Beesley, Jr., assignors.)						
Stone, Harry W., Brooklyn, assignor to Brewers' Metallic Bung Company, New York, N. Y. Self-venting bung.....	511,065	Dec. 19	2113	522	65	1829
Stone, Harry W., Brooklyn, assignor to Brewers' Metallic Bung Company, New York, N. Y. Self-venting bung.....	511,101	Dec. 19	2179	536	65	1843
Stone, Harry W., Brooklyn, assignor to Brewers' Metallic Bung Company, New York, N. Y. Vent-bung.....	511,102	Dec. 19	2182	537	65	1843
Stone, Heman W., Jr., Morris, Minn. Dust-collector.....	496,015	Apr. 25	2376	601	63	488
Stone, Henrie D., assignor to Automatic Advertising Panorama Company, Boston, Mass. Advertising-wagon.....	505,682	Sept. 26	2311	587	64	1744
Stone, Henrie D., assignor to G. A. White, Boston, Mass. Machine for making bundling-wire.....	508,256	Nov. 7	459	112	65	842
Stone, Henry C., Kansas City, Mo., assignor to O. A. Stone, South Evanston, Ill. Dynamometer.....	504,286	Aug. 29	3359	840	64	1247
Stone, James S. (See Renstrom, Nils A., assignor.)						
Stone, John P., Philadelphia, Pa. Feed-water heater and condenser.....	499,946	June 20	1996	485	63	1767
Stone, John S., assignor to American Bell Telephone Company, Boston, Mass. Telephone-circuit.....	507,568	Oct. 31	3030	743	65	621
Stone, John S., assignor to American Bell Telephone Company, Boston, Mass. Telephone-transmitter circuit and apparatus.....	507,694	Oct. 31	3247	795	65	361
Stone, John S., assignor to American Bell Telephone Company, Boston, Mass. Telephone-circuit.....	508,255	Nov. 7	455	111	65	842
Stone, John S., assignor to American Bell Telephone Company, Boston, Mass. Telephonic transmission.....	509,965	Dec. 5	195	46	65	1446
Stone, Marvin C. (See Freeman, James P., assignor.)						
Stone, Marvin C. (See Swan, Henry C., assignor.)						
Stone, Olive A. (See Stone, Henry C., assignor.)						
Stone, Pardon B., Waverly, Pa. Combined toe-rail and carpet-holder for vehicles.....	496,016	Apr. 25	2378	602	63	488

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Stone, Samuel A., Fennimore, and J. Philipps, Lancaster, Wis.; said Stone assignor to said Philipps. Bracket or support for foot-railings	490,995	Jan. 31	3240	827	62	708
Stone, Thomas, <i>et al.</i> (See Beesley, Edward, Sr., and E. and E. Beesley, Jr., assignors.)						
Stone, Thomas B., assignor of two-thirds to C. C. and P. A. Smith, Campton, Pa. Cake or biscuit cutter	501,903	July 18	2187	543	64	426
Stone, Thomas B., and C. C. Smith, Camptown, Pa. Buckle and snap-hook combined	490,047	Jan. 17	1677	436	62	374
Stone, Thomas B., C. C. and P. A. Smith, Camptown, Pa. Broom-holder	504,183	Aug. 29	3199	798	64	1217
Stone, William A., <i>et al.</i> (See Lever, Walter S., assignor.)						
Stone, William M., <i>et al.</i> (See Lever, Walter S., assignor.)						
Stone, William S., and G. W. Ream, assignors to Bucher & Gibbs Plow Company, Canton, Ohio. Side-hill plow	507,693	Oct. 31	3246	795	65	661
Stoner, John B., New York, N. Y. Grain-conveyer	492,879	Mar. 7	170	41	62	1392
Stoner, John B., assignor to C. B. Hillhouse, New York, N. Y. Pneumatic grain-elevator	489,340	Jan. 3	549	149	62	118
Stoops, A. J., <i>et al.</i> (See Reed, Eli S., assignor.)						
Stoops, H. E., <i>et al.</i> (See Reed, Eli S., assignor.)						
Storar, Fordyce, Springfield, Ill. Packingless valve	493,567	Mar. 14	1273	325	62	1621
Storch, Vilhelm, assignor to C. D. A. Hansen, Copenhagen, Denmark. Making butter	495,331	Apr. 11	1380	344	63	273
Storey, Albert H., London, England. Apparatus for cleaning knives	496,213	Apr. 25	2681	673	63	545
Storey, Frederic G., Cambridge, E. R. Andrews and J. P. Cushing, Boston, and H. F. Eaton, Quincy, Mass.; said Eaton and Cushing assignors to said Storey and Andrews. Electro-protective system	507,569	Oct. 31	3033	{ 743 744 }	{ 65 65 }	621
Storey, George M., Auburn, Ind. Device for testing hams or other meats	495,382	Apr. 11	1382	344	63	273
Storey, Herbert L. (See Farmer and Storey.)						
Storey, Isaac H. (See Farmer and Storey.)						
Storey, Julius W., Dallas, Tex. Portable scale	502,786	Aug. 8	929	226	64	752
Storie, James D., Oshawa, Canada. Driving-belt	508,153	Nov. 7	287	72	65	811
Storje, Joshua R., Travisville, Tenn. Harrow attachment	493,310	Mar. 14	859	219	62	1542
Storje, Joshua R., Travisville, Tenn. Washing-machine	505,907	Oct. 3	171	44	65	33
Storla, Carl, Belford, S. D. Land-roller and harrow	495,848	Apr. 18	2129	535	63	426
Storla, Carl, Belford, S. D. Roller-skate	499,052	June 6	540	127	63	1485
Storle, Ole O., Milwaukee, Wis., assignor to William Deering & Company, Chicago, Ill. Harvester	491,746	Feb. 14	1108	280	62	986
Storle, Ole O., Milwaukee, Wis., assignor to William Deering & Company, Chicago, Ill. Reaper	498,323	May 30	3131	781	63	1241
Storle, Ole O., Burlington, Wis., assignor to William Deering & Company, Chicago, Ill. Reaper	502,328	Aug. 1	130	29, 30	64	569
Storle, Ole O., Burlington, Wis., assignor to W. Deering, Chicago, Ill. Self-binding harvester	502,329	Aug. 1	132	30	64	569
Storn, Henry, and F. Warnken, New York, N. Y., assignors to Owl Cigar Company, of New York. Cigar-wrapper-cutting machine	493,530	Mar. 14	1203	{ 307 308 501 }	{ 62 62 65 }	1607
Storm, John, Kirksville, Mo. File gage and clamp	511,001	Dec. 19	2026	{ 500 501 }	{ 65 65 }	1812
Storms, Delos W., Western, Nebr. Conveyer-belt for harvesters	492,065	Feb. 21	1597	397	62	1097
Storms, Joseph W. (See Smith, Henry V., assignor.)	503,014	Aug. 8	1307	320	64	820
Story, Edwin H., Eccles, England. Metal-rolling machinery	494,904	Apr. 4	600	151	63	116
Story, Herbert, New York, N. Y., assignor of one-half to O. Bernz, Newark, N. J. Holder for curling-irons	500,106	June 20	2244	546	63	1809
Storz, John T., Buffalo, N. Y. Sheet-metal folder	502,684	Aug. 1	748	180	64	703
Storz, Carl A. G., Frankfort-on-the-Main, Germany. Hose-pipe coupling	489,106	Jan. 3	195	52	62	45
Storz, Carl A. G., Frankfort-on-the-Main, Germany. Hose-pipe coupling	489,107	Jan. 3	196	52	62	46
Stotsenburg, John H. (See Brockman, Robert, assignor.)						
Stott, Samuel H., Preston, county of Lancaster, England. Means for impregnating the water or liquid discharged from syringes	489,396	Jan. 3	630	170	62	136
Stouder, Augustus G. (See Douglass and Stouder.)						
Stough, Rex M., guardian. (See Mack, Carl F.)						
Stout, Harvey, Fairmount, Ky. Harness	508,781	Nov. 14	1280	319	65	1015
Stout, James A., assignor to Harrison Machine Works, Belleville, Ill. Traction-engine	491,385	Feb. 7	540	{ 137 138 }	{ 62 62 }	851
Stout, John P., assignor of one-fourth to R. J. Kennedy, Washington, D. C. Combined check or token and missive	490,048	Jan. 17	1878	436	62	374
Stout, John R., Brooklyn, N. Y. Process of and apparatus for packing confectionery, &c.	500,303	Jan. 27	2596	635	63	1883
Stover, Daniel C., F. W., E. A., and A. Hoefer, assignors to Stover Novelty Works, Freeport, Ill. Drilling-machine	506,865	Oct. 17	1806	{ 453 454 454 }	{ 65 65 65 }	367
Stover, Daniel C., and F. W. Hoefer, assignors to Stover Novelty Works, Freeport, Ill. Hack-sawing machine	510,619	Dec. 12	1324	{ 323 324 }	{ 65 65 }	1672
Stover, Isaac S., <i>et al.</i> (See Bisel, Joseph J., assignor.)						
Stover Manufacturing Company. (See Ziegler, Oscar J., assignor.)						
Stover Novelty Works. (See Stover and Hoefer, assignors.)						
Stow, George W., Binghamton, N. Y. Plow	505,732	Sept. 26	2396	605	64	1759
Stow, William E., Newborn, Ga. Display-stand	493,128	Mar. 7	554	138	62	1468
Stowe, Charles E., McAdenville, N. C. Tag-holder	506,802	Oct. 17	1707	429	65	350
Stowe, George W., New Haven, Conn. Collapsible wagon-top	506,952	Oct. 17	1955	484	65	395
Stowe, Harold C. (See Johnson and Stowe.)						
Stowe, Horace E. (See Soules and Stowe.)						
Stowe, James G., Kansas City, Mo. Device for holding harrow-teeth	491,297	Feb. 7	394	101	62	822
Stowe, William J., Kansas City, assignor to Nixdorf-Krein Manufacturing Company, St. Louis, Mo. Whiffletree-hook	504,686	Sept. 5	611	156	64	1385
Stowell, Frank C., Somerville, Mass. Plotter	509,335	Nov. 21	2243	542	65	1211
Stowell, George B., Somerville, Mass. Surveyor's leveling-rod	495,438	Apr. 11	1471	371	63	290
Straight, George. (See Pettepher, Frank, assignor.)						
Strait, William, Elmira, N. Y. Rake	503,625	Aug. 22	2318	578	64	1032
Straker, Sidney, assignor to Central Cyclone Company, Limited, London, England. Machine for grinding, crushing, or disintegrating grain, &c.	493,531	Mar. 14	1206	{ 308 309 }	{ 62 62 }	1607
Straker, Sidney, assignor to Central Cyclone Company, Limited, London, England. Pulverizing or disintegrating apparatus	503,504	Aug. 15	2096	524	64	977
Strand, Charles A., Chicago, Ill. Dividers	499,053	June 6	544	128	63	1485
Strange, Fred W., assignor of one-half to C. M. Taber, New Bedford, Mass. Picture-back support	500,222	June 27	2476	604	63	1863
Stransky, Charles. (See Stransky, Edouard and C.)						
Stransky, Edouard and C., Paris, France. Coin-controlled apparatus for playing tunes, &c.	507,046	Oct. 17	2109	{ 522 523 }	{ 65 65 }	423
Stransky, Maurice, New York, N. Y. Handle for tea or coffee pots	496,583	May 2	298	80	63	673

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Strassner, Hermann, Erfurt, Germany, assignor to S. Baron, New York, N. Y. Gas heating-stove for smoothing-irons.....	493,532	Mar. 14	1207	309	62	1608
Strater, Herman, Boston, Mass. Drainer for draft apparatus. (Reissue).....	11,371	Oct. 3	682	172	65	129
Strater, Herman, Boston, Mass. Funnel.....	509,966	Dec. 5	197	46	65	1447
Strathy & Co., R. L. F. (See Taylor, Charles H., assignor.)						
Strattner, Frederick, Salisbury, Md., assignor of one-half to W. Thompson, Wilmington, Del. Draft-regulator for locomotive smoke-stacks.....	492,246	Feb. 21	1887	471	62	1154
Stratton, Charles, <i>et al.</i> (See Connor, John R., assignor.)						
Stratton, Charles E., <i>et al.</i> (See Connor, John R., assignor.)						
Stratton, Charles H., Brandt, Pa. Traction-engine.....	492,637	Feb. 28	2520	624	62	1299
Stratton, Henry, <i>et al.</i> (See Connor, John R., assignor.)						
Stratton, Jairo L., and F. Murdock, Kansas City, Kans. Disinfecting apparatus.....	510,825	Dec. 12	1673	416	65	1737
Stratton, John F., Brooklyn, N. Y. Guitar.....	496,706	May 2	497	133	63	710
Stratton, John F., Brooklyn, N. Y. Fret for musical instruments.....	501,743	July 18	1936	479	64	382
Stratton, William H., Providence, R. I. Valve for automatic dry-pipe fire-extinguishers.....	489,341	Jan. 3	552	150	62	118
Stratton, William H., Providence, R. I. Automatic fire-extinguisher.....	489,342	Jan. 3	553	150	62	119
Straub, Ambrose W., Philadelphia, Pa. Metallic railway-tie.....	492,121	Feb. 21	1686	420	62	1115
Straubel, Richard, Jr., New York, N. Y. Eyeglasses.....	489,996	Jan. 17	1584	414	62	355
Strauch Bros. (See Bornhoeft, Edward, assignor.)						
Straus, Alexander, New York, N. Y. Cycle-handle.....	490,459	Jan. 24	2351	608	62	520
Straus, Alexander, New York, N. Y. Cycle-tire.....	491,856	Feb. 7	543	138	62	852
Straus, Alexander L., Baltimore, Md. Bottle.....	491,198	Feb. 7	226	57	62	790
Strause, Mark M., <i>et al.</i> (See Cosby, Anderson B., assignor.)						
Strauss, Adolf, and R. Ripp, Lodz, Russia. Button-machine.....	489,411	May 30	3265	813	63	1266
Strauss, Carl, New York, N. Y. Harmonica.....	505,493	Sept. 26	1938	500	64	1675
Strauss, Joseph B., assignor of one-half to M. C. Weil, Cincinnati, Ohio. Electric hose-coupling.....	500,822	July 4	459	121	64	85
Strauss, Sachs & Co. (See Hyman, Gustave, assignor.)						
Straw, Darien A., Wheaton, Ill. System of brick or tile structure.....	508,446	Nov. 14	761	187	65	913
Strawbridge & Clothier. (See Caperton, Emma R., assignor.)						
Strayer, George D., East Stroudsburg, Pa. Cash-drawer and manual sales-recorder.....	497,141	May 9	1205	307	63	853
Streator, Henry D., Galesburg, Mich. Apparatus for controlling moisture in the air.....	511,555	Dec. 26	2943	717	65	1997
Streeter, Daniel H., Norristown, Pa. Device for thawing out frozen pipes, &c.....	501,744	July 28	1926	479	64	382
Street, Clement F., Milwaukee, Wis., assignor to Johnson Steel Street Rail Company, of Kentucky. Spring-tongue switch.....	490,323	Jan. 24	2143	559	62	480
Street, Frederick. (See Noble and Street.)						
Streeter, Edwin W. (See Lockhart and Streeter.)						
Streeter, Edwin W., London, England. Combined bracelet and whistle.....	496,543	May 2	239	63	63	662
Streeter, Lafayette P., Asbury Park, N. J. Tilting device for drawing-boards.....	504,951	Sept. 12	1056	271	64	1423
Streeter, Nelson R., Groton, N. Y. Knockdown paper-roll holder and cutter.....	492,975	Mar. 7	322	81	62	1423
Streeter, Nelson R., Groton, N. Y. Paper-roll holder and cutter.....	496,754	May 2	577	154	63	723
Streeter, Nelson R., Groton, N. Y. Vegetable or meat cutter.....	496,755	May 2	579	155	63	723
Streeter, Nelson R., Groton, N. Y. Vegetable or meat cutter.....	496,756	May 2	580	155	63	723
Streeter, Nelson R., and C. P. Mosher, Groton, N. Y. Combined nut cracker and picker.....	508,355	Nov. 7	610	150	65	871
Streit, Anton, Cincinnati, Ohio. Pulley-lathe.....	493,738	Mar. 21	1561	398	62	1695
Strepy, Lindsay S., Aspen Junction, assignor of one-half to H. B. Gillespie, Aspen, Colo. Potato-digger.....	494,533	Mar. 28	2874	719	62	1954
Strenfett, Charles, assignor of one-half to C. Holstein, Chicago, Ill. Furnace.....	492,066	Feb. 21	1598	397	62	1097
Stribling, John V., Richland, assignor of one-half to J. D. Verner, Walhalla, S. C. Shutter-worker.....	502,240	July 25	2735	690	64	545
Strickland, Gerald, Villa Bologna, Island of Malta. Lathe slide-rest.....	507,047	Oct. 17	2111	523	65	423
String, Benjamin T., and S. Miller, Philadelphia, Pa.; said String assignor to said Miller. Machine for sewing on buttons.....	507,507	Oct. 24	2911	717	65	584
Stripe, Isaac, Greentown, Ohio. Brick-drier.....	510,491	Dec. 12	1074	258	65	1628
Strippgen, Emil, St. Louis, Mo. Composite board or strip for walls, &c.....	492,849	Mar. 7	117	30	62	1320
Strobel, Charles L., Chicago, Ill. Bridge.....	498,993	June 6	440	103	63	1468
Strobel, Charles L., Chicago, Ill. Bridge.....	498,994	June 6	441	103	63	1468
Stroberger, Otto, Faribault, Minn. Cigar-glossing device.....	500,823	July 4	462	122	64	85
Strobridge Lithographing Company. (See Vine, James S., assignor.)						
Strode, Thomas A., Johnstown, Mo. Tension-needle for harvester-binders.....	492,444	Feb. 28	2195	549	62	1233
Stroher, Louis. (See Koeller, Hermann H., assignor.)						
Stroh, Abraham, Freeland, Pa. Fire-grate.....	504,635	Sept. 5	515	133	64	1367
Stroh, Freeman W., M. J. and J. S. McIntosh, Massillon, Ohio. Picket-mill.....	509,405	Nov. 28	2384	577	65	1248
Strohecker, C. J. D. (See Bumpus, George D., assignor.)						
Strohm, Thomas A., Industry, Pa. Ladder.....	495,920	Apr. 18	2240	564	63	447
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Switch-stand.....	498,196	May 23	2911	724	63	1187
Strom Manufacturing Company. (See Strom, Axel A., assignor.)						
Stromberg, Alfred, Chicago, Ill. Electric switch.....	493,369	Mar. 14	948	243	62	1560
Stromberg, Alfred, Chicago, Ill. Burglar-alarm system.....	499,261	June 13	847	203	63	1551
Stromberg, Alfred, and A. Carlson, Chicago, Ill. Telephone apparatus.....	504,636	Sept. 5	517	134	64	1368
Strong, Abner D., Ashtabula, Ohio. Filter.....	498,586	May 30	3354	882	63	1317
Strong, Bushnell, <i>et al.</i> (See Strong, George H., assignor.)						
Strong, Emily F., <i>et al.</i> (See Strong, George H., assignor.)						
Strong, Frank R. (See Arms, Melford D., assignor.)						
Strong, Frederick M., Wheeling, W. Va. Cooking apparatus.....	504,256	Aug. 29	3317	829	64	1239
Strong, Frederick S., and F. C. Mann, East Bridgewater, Mass. Auxiliary feed mechanism for cotton-seed linters.....	503,997	Aug. 29	2897	725	64	1160
Strong, George H., assignor of one-half to B. and E. F. Strong, Chicago, Ill. Collar-button.....	511,371	Dec. 26	2043	643	65	1942
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Electric-car truck.....	497,356	May 16	1580	398	63	935
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Field-magnet core for dynamos or motors.....	505,530	Sept. 26	2047	522	64	1694
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Forging-die.....	505,540	Sept. 26	2048	522	64	1694
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Forging and bending die.....	505,541	Sept. 26	2049	523	64	1694
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Daytona, Fla. Device for supporting crank-shafts.....	497,357	May 16	1582	399	63	935
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Daytona, Fla. Piston.....	497,358	May 16	1583	399	63	935

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Strong, George S., New York, N. Y., assignor to J. N. Gamble, Daytona, Fla. Boiler	505,542	Sept. 26	2050	523	64	1694
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Daytona, Fla. Boiler	505,543	Sept. 26	2051	523 524	64	1695
Stroud, William J. (See Hearne, John, assignor.)						
Stroud, George W., Chicago, Ill. Window-frame	505,889	Oct. 3	143	37	65	28
Strous, William. (See Ginter and Strous.)						
Strout, Harvey C., Newburyport, Mass. Brine-cooler	505,908	Oct. 3	172	44	65	34
Strowger, Almon B. and W. S., assignors to Strowger Automatic Telephone Exchange, Chicago, Ill. Combined indicating electric switch and current reverser	492,850	Mar. 7	117	30	62	1381
Strowger Automatic Telephone Exchange. (See Strowger, Almon B. and W. S., assignors.)						
Strowger, Walter S. (See Strowger, Almon B. and W. S.)						
Struble, Charles B., Minneapolis, Minn. Electric cigar-lighter	506,347	Oct. 10	952	237	65	193
Strusholm, Anders M., Woodbridge, N. J., assignor of one-half to R. W. Lyle, New York, N. Y. Tile-fastener	492,996	Mar. 7	353	89	62	1429
Strusholm, Anders M., Woodbridge, N. J., assignor to R. W. Lyle, New York, N. Y. Tile-fastener	496,544	May 2	240	63	63	662
Strusholm, Anders M., Woodbridge, N. J., assignor to R. W. Lyle, New York, N. Y. Down-draft muffle-kiln	508,063	Nov. 7	125	36	65	782
Struthers, Gavin. (See Barr, Andrew, assignor.)						
Stryker, William D., New York, N. Y. Extension-table	499,480	June 13	1236	295	63	1621
Stuart, Alexander, Jr., Hamilton, Canada. Tobacco-cutter	489,108	Jan. 3	197	53	62	46
Stuart, Benjamin F., Waco, Tex. Combined copy-holder and tablet	511,032	Dec. 19	2064	511	65	1820
Stuart, Benjamin F., Bosqueville, and F. W. Willson, Waco, Tex. Combined desk and copy-holder	511,031	Dec. 19	2062	511	65	1819
Stuart, Charles B., Boston, Mass. Device for making fires draw, &c	500,628	July 4	145	38	64	29
Stuart, Charles E., Piqua, Ohio. Sickle-grinder	503,998	Aug. 29	2898	726	64	1160
Stuart, Charles H. (See Thayer, Bernard, assignor.)						
Stuart, Herbert A., Bletchley, assignor of one-half to C. R. Binney, London, England. Engine operated by the explosion of mixtures of gas or hydrocarbon vapor and air	502,837	Aug. 8	1012	247	64	766
Stuart, James E., and U. S. James, Helena, Mont. Armature-core for electric motors	497,504	May 16	1822	459	63	978
Stuart, John B. (See Miller, Frederick O., assignor.)						
Stuart, Orsini. (See Higginbottom and Stuart.)						
Stuart, Richard H., Philadelphia, Pa. Sample-case	494,394	Mar. 28	2655	666	62	1914
Stuart, Thomas M., Council Bluffs, Iowa. Car-coupling	505,930	Oct. 3	198	50	65	39
Stuart, Tom R., Washington, D. C., assignor to Eagle Pencil Company, New York, N. Y. Automatic holder for pencil-leads, crayons, or other articles	501,850	July 18	2094	517	64	410
Stubbe, Frederick H., New York, N. Y. Sandpaper wheel or roller	507,508	Oct. 24	2914	717	65	585
Stubbe, Frederick H., assignor of one-half to J. C. Klatzl, New York, N. Y. Sandpaper-wheel	505,683	Sept. 26	2313	587	64	1744
Stubblebine Furnace Company. (See Stubblebine, William, assignor.)						
Stubblebine, William, Bethlehem, assignor to Stubblebine Furnace Company, Philadelphia, Pa. Metallurgical furnace	498,089	May 23	2734	683 684	63	1156
Stubbs, Riley A., assignor of one-half to J. R. Turner, Greenville, Ohio. Separator	499,262	June 13	848	203	63	1552
Stubbs, Sheldon H., Longsight, England. Pneumatic tire	508,996	Nov. 21	1660	409	65	1101
Stuck, Dewell, Rochester, N. Y. Bracket for dental chairs	491,610	Feb. 14	908	227	62	945
Stuck, Dewell, Rochester, N. Y. Dental chair	491,611	Feb. 14	909	228 229	62	945
Stuebner, Gustavus L., Long Island City, N. Y. Car-truck	495,849	Apr. 18	2132	536	63	427
Stuebner, Gustavus L., Long Island City, and P. Nies, Brooklyn, N. Y. Coal-chute	511,557	Dec. 26	2946	718	65	1997
Stuke, Frank J. (See Reiman, Johann C., assignor.)						
Stulp, Fred. J., Muskegon, Mich. Water-gage	501,544	July 18	1602	403	64	323
Stulp, Fred. J., Muskegon, Mich. Attachment for water-gages	506,564	Oct. 10	1321	330	65	285
Stump, Simon, Great Bend, Pa. Car-coupling	511,556	Dec. 26	2944	717	65	1997
Stupakoff, Simon H., assignor of one-half to E. H. Goodman, Pittsburg, Pa. Pattern for railway-frogs	492,638	Feb. 28	2521	624 625	62	1300
Stupakoff, Simon H., assignor of one-half to E. H. Goodman, Pittsburg, Pa. Manufacture of jaws for coupling-rods	501,851	July 18	2096	517 518	64	410
Stupakoff, Simon H., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Electro-magnet	495,125	Apr. 11	975	244	63	200
Stupakoff, Simon H., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Binding-post fuse	497,732	May 16	2165	541	63	1040
Stupakoff, Simon H., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Wire-tightener	497,733	May 16	2166	542	63	1041
Sturdy, Joseph E., Yarmouth, Mass. Cranberry-gatherer	489,239	Jan. 3	397	110	62	89
Sturdy, Nathan, Chicago, Ill. Potato-planter	496,707	May 2	498	133	63	710
Sturgeon, James R., Churubusco, Ind. Checkrein-guide	494,308	Mar. 28	2504	632	62	1887
Sturtevant, Charles A., Plainfield, N. J. Fire-escape	493,391	Mar. 14	976	251	62	1566
Sturtevant, Charles L., administrator. (See Platt and Fidler.)						
Sturtevant, Fred, Charlestown, Mass. Shoplifting-detector	497,062	May 9	1085	278	63	832
Sturtevant, Isabelle A., Centre Harbor, N. H. Sofa-bedstead	495,921	Apr. 18	2241	564	63	447
Sturtevant Mill Company. (See Sturtevant, Thomas L., assignor.)						
Sturtevant, Thomas J. (See Sturtevant, Thomas L. and T. J.)						
Sturtevant, Thomas L., Framingham, assignor to Sturtevant Mill Company, Boston, Mass. Mill	498,037	May 23	2658	664 665	63	1142
Sturtevant, Thomas L. and T. J., Framingham, Mass. Steam-generator	500,166	June 27	2382	578	63	1846
Sturts, Charles F. A., San Francisco, Cal. Electric burglar-alarm	492,478	Feb. 28	2251	563	62	1245
Stutley, James S. P., Adelaide, South Australia. Incandescent burner for hydrocarbon gas	494,040	Mar. 21	2061	526	62	1789
Stutz, Louis F., and J. A. Durnbaugh, Washington, D. C. Insect-screen or dust-arrester	505,494	Sept. 26	1938	500	64	1675
Stutzman, Frank, Williamsport, Pa. Cutter-head for panel-raising machines	511,471	Dec. 26	2820	681	65	1973
Stuver, Stephen T., Puallup, Wash. Window-shade supporter	504,952	Sept. 12	1056	271	64	1483
Stuvvesant, William S., Brookline, Mass. Apparatus for heating and ventilating rooms	495,528	Apr. 18	1620	407	63	337
Sublett, James H., assignor of one-third to R. M. Shelton, Blandville, Ky. Post-hole digger	509,778	Nov. 28	3004	726	65	1308
Suchert, Ernst, et al. (See Hohulin, Timotheus and J., assignors.)						
Suckley, Florence L., Hotchkissville, Conn. Busk-steel	497,142	May 9	1207	308	63	854
Sudden, Robert, Ventura, Cal. Preserving piles	511,372	Dec. 26	2644	643	65	1942
Suddoth, Alexander K., Memphis, Tenn. Apparatus for measuring proportional parts for mixtures	502,596	Aug. 1	581	139	64	673
Suer, Herman, and A. Bode, Cincinnati, Ohio. Loading-platform	510,206	Dec. 5	609	143	65	1525
Suess, Max, Chicago, Ill. Decorating glass by sand-blast	504,543	Sept. 5	385		64	1342
Sugden, James, and W. J. L. Sandy, assignors to C. H. Freedman, F. W. Suter, and H. Wyman, London, England. Electric-arc lamp	490,992	Jan. 31	3236	826	62	707
Sugg, David W., London, England. Bath water-heater	499,403	June 13	1114	267 268	63	1599

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Suhl, Edward H., Peninsular, Oreg. Planter.....	507,048	Oct. 17	2112	{ 523 524 }	65	424
Suhr, Robert B. (See Neal and Suhr.)						
Sullivan, Cornelius, Newark, N. J. Speed-gearing for velocipedes.....	510,101	Dec. 5	438	97	65	1492
Sullivan, Daniel F., and E. F. Staples, Lowell, Mass. Stop mechanism for knitting-machines.....	490,758	Jan. 31	2854	732	62	632
Sullivan, Daniel H., and W. H. Osborn, Rochester, N. Y. Car-brake.....	502,476	Aug. 1	379	91	64	636
Sullivan, Frank J., et al. (See Mayhew, Rubertus G., assignor.)						
Sullivan, Garrett. (See Pennell and Sullivan.)						
Sullivan, James M., assignor of one-half to G. E. Adams, Chicago, Ill. Coin-controlled book-stand.....	505,995	Oct. 3	301	78	65	59
Sullivan, Jere K. (See Dyke, Albion, assignor.)						
Sullivan, John, et al. (See Smith and Cassidy, assignors.) (Reissue.)						
Sullivan, John H., Chicago, Ill. Guard for elevated railways.....	495,850	Apr. 18	2134	536	63	427
Sullivan Machinery Company. (See Ball, Albert, assignor.)						
Sullivan, Michael H., Fall River, Mass. Portable confessional.....	494,179	Mar. 28	2303	583	62	1849
Sullivan, Timothy, Janesville, Wis. Transplanter.....	494,178	Mar. 28	2301	583	62	1848
Sullivan, Timothy J., New Orleans, La. Apparatus for forming staves.....	506,280	Oct. 10	842	{ 207 208 }	65	171
Sullivant, Lyne S., et al. (See Lawrence, William B., assignor.) (Reissue.)						
Summers, Leland L. (See Parker and Summers.)						
Sumner, Charles O., Fairplay, Colo. Placer-mining machine.....	505,684	Sept. 26	2315	{ 587 588 }	64	1745
Sumner, Edward A. (See Brown, Almon C., assignor.)						
Sumner, George, Braintree, Mass. Jack for burnishing-machines.....	497,505	May 16	1823	460	63	978
Sumner, George, South Braintree, Mass. Shoemaker's jack.....	509,497	Nov. 28	2559	619	65	1282
Sumner, John F., Marblehead, Mass. Spectacles.....	509,967	Dec. 5	199	46	65	1447
Sumner, William A., Clay Center, Nebr., assignor of three-fourths to J. C. and G. S. Ward and H. E. Stein. Well-filing coupler.....	491,956	Feb. 14	1436	358	62	1051
Sumovski, Joachim A., Kursk, Russia. Balloon.....	510,492	Dec. 12	1075	258	65	1628
Sumovski, Joachim A., St. Petersburg, Russia. Tubular structure filled with gaseous fluid.....	511,472	Dec. 26	2821	682	65	1973
Sundstrom, Karl J., Brooklyn, assignor to Church & Co., New York, N. Y. Manufacture of soda.....	492,929	Mar. 7	251	63	62	1408
Sun Vapor Street Light Company. (See Best, Clearmont V., assignor.)						
Sunol Bicycle Company. (See Hitchcock, David S., assignor.)						
Sunol Bicycle Company. (See Percy, Sidney H., assignor.)						
Sunol Bicycle Company. (See Percy and Hitchcock, assignors.)						
Superior Drill Company. (See Packham, Frank R., assignor.)						
Supple, Hannah G., New York, N. Y. Abdominal supporter.....	500,356	June 27	2689	660	63	1900
Suppes, Max M., assignor to Johnson Company, Johnstown, Pa. Brace-chair for girder-rails.....	489,508	Jan. 10	830	217	62	189
Suppes, Max M., assignor to Johnson Company, Johnstown, Pa. Rack-rail for railways.....	496,017	Apr. 25	2379	602	63	489
Suppes, Maximilian M., Johnstown, Pa. Girder-joint for railway-rails.....	496,916	May 9	867	228	63	794
Suppes, Maximilian M., Johnstown, Pa. Electric welding machine.....	500,973	July 4	695	{ 182 183 }	64	126
Surerus, Albert, and W. P. Greenhill, Chicago, Ill. Resawing-machine.....	500,167	June 27	2384	{ 578 579 }	63	1846
Surgi, George E., New Orleans, La. Pile or timber protector and preserver.....	500,678	July 4	237	62	64	45
Sürther Maschinenfabrik, vormals H. Hammerschmidt. (See Luhmann, Eduard, assignor.)						
Surtin, John H., assignor of one-third to R. McCulloch, St. Louis, Mo. Car-gong.....	501,030	July 4	778	204	64	142
Surtin, John H., assignor of two-thirds to R. McCulloch and W. Sutton, St. Louis, Mo. Hand-shaft for car-brakes.....	501,031	July 4	780	204	64	142
Susemihl, Francis G., Detroit, Mich. Coal-chute.....	493,949	Mar. 21	1904	485	62	1760
Susemihl, Francis G., assignor of one-half to A. Torrey, A. Barthel, and J. Whittemore, Detroit, Mich. Antifriction journal-bearing.....	503,296	Aug. 15	1770	437	64	918
Susemihl, Theodore. (See Hamman and Susemihl.)						
Susini, Paul de, Paris, France. Ether-vapor motor.....	508,447	Nov. 14	761	188	65	914
Susini, Paul de, Paris, France. Ether-motor.....	509,406	Nov. 28	23-5	578	65	1248
Suter, Cyrus M., Ashton, Ill. Wire-bending machine.....	508,257	Nov. 7	462	112	65	843
Suter, Frank W., et al. (See Sugden and Sandy, assignors.)						
Sutherland, Alexander M., Orange, N. J. Gas apparatus.....	501,698	July 18	1856	461	64	369
Sutherland, Robert, Boston, Mass. Attachment for elevators.....	4-9,240	Jan. 3	398	110	62	89
Sutton, Benjamin F. (See Parker and Sutton.)						
Sutton, Columbus P., Nashville, Ark. Cultivator.....	490,322	Jan. 24	2142	559	62	479
Sutton, Edward L., and C. R. Reed, Stillwater, Minn. Combined cane and camp-stool.....	490,416	Jan. 24	2288	594	62	507
Sutton, George A., Brooklyn, N. Y. Wrapper for bank-bills.....	503,777	Aug. 22	2554	636	64	1078
Sutton, Harry C., Lancaster, Pa., assignor to L. Wernberg, Brooklyn, N. Y. Device for operating door-bells.....	492,753	Feb. 28	2693	669	62	1334
Sutton, John, and J. W. Buckley, Formby, England. Steam-boiler furnace.....	494,041	Mar. 21	2062	527	62	1789
Sutton, Thomas D. (See Gibson and Sutton.)						
Sutton, William, et al. (See Surtin, John H., assignor.)						
Sutton, William, St. Louis, Mo. Combined car-door and conductor's observatory.....	499,604	June 13	1437	315	63	1656
Sutton, William, St. Louis, Mo. Combination swing and sliding car-door.....	507,253	Oct. 31	3512	864	65	710
Sutton, William, assignor of one-fourth to R. McIlvoy, Wilkesburg, Ky. Nut-lock.....	489,595	Jan. 10	953	248	62	213
Sutton, William D., Grand Rapids, Mich. Type-writer table.....	494,764	Apr. 4	372	93	63	74
Svenson, Johan V., Stockholm, Sweden. Burner for cooking-stoves or soldering apparatus.....	500,781	July 4	396	104	64	74
Svensson, Claes A., Buffalo, N. Y. Lineman's wire-grip.....	496,104	Apr. 25	2520	637	63	515
Swager, Nelson, assignor to Norwegian Plow Company, Dubuque, Iowa. Sulky or riding plow. (Reissue.).....	11,361	Aug. 15	2205	551	64	997
Swain, Leander D., Foxville, Ill. Washing-machine.....	505,613	Sept. 26	2189	554	64	1722
Swain, E. T., et al. (See Kepler, Berth M., assignor.)						
Swain, James E., and Y. R. Conner, assignors to themselves and D. F. Penington, Baltimore, Md. Button.....	498,825	June 6	129	32	63	1415
Swales, Frank, New York, N. Y. Driving-bit.....	497,931	May 23	2493	622	63	1114
Swampscott Machine Company. (See Rundlett and Hoyt, assignors.)						
Swan, Alfred, Schenectady, N. Y., assignor to General Electric Company, Boston, Mass. Branch block for incandescent-lighting circuits.....	508,644	Nov. 14	10-6	269	65	978
Swan, Henry C., Oshkosh, Wis. Shifting rail for vehicle-seats.....	503,581	Aug. 22	2670	674	64	1104
Swan, Henry C., Oshkosh, Wis. Fifth-wheel.....	503,917	Aug. 22	2748	689	64	1116
Swan, Henry C., assignor to M. C. Stone, Washington, D. C. Umbrella-runner.....	508,189	Nov. 7	339	84	65	820
Swan, Henry G. (See Shurtz and Swan.)						
Swan, Thomas B., Atlantic, Iowa. Drenching-bit.....	509,968	Dec. 5	290	47	65	1447
Swan, William B., Seymour, Conn. Changeable-speed device for bicycles.....	502,916	Aug. 8	1137	280	64	791

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Swanburg, Joshua, Los Angeles, Cal. Fruit-picker	501,032	July 4	781	{ 204 205 }	64	143.
Swank, Arthur H., Fremont, Ohio. File for letters, bills, accounts, &c.	501,745	July 18	1938	479	64	383.
Swank, John. (See McAneny and Stansbury, assignors.)						
Swank, William W., Seattle, Wash. Car-coupling	491,612	Feb. 14	912	229	62	946
Swanson, Alfred, <i>et al.</i> (See Seger, Garret, assignor.)						
Swanson, Andrew, <i>et al.</i> (See Seger, Garret, assignor.)						
Swanson, Frank, <i>et al.</i> (See Seger, Garret, assignor.)						
Swanson, Frank F., Gallipolis, Ohio. Lock and latch combined	504,482	Sept. 5	276	71	64	1322.
Swanson, Fred, Campbell, Minn. Car-window	496,454	May 2	104	29	63	638.
Swanson, John L., assignor of one-fourth to A. M. Johnson, Superior, Wis. Car-coupling	505,861	Oct. 3	94	25	65	20
Swanson, Olof P., Jobs, Ohio. Auger	503,882	Aug. 22	2691	{ 674 675 }	64	1104.
Swanson, Peter, <i>et al.</i> (See Seger, Garret, assignor.)						
Swarthout, Arthur H. (See Case, Ira, assignor.)						
Swartz, Eli, and D. S. Beemer, Scranton, Pa. Automatic vehicle-brake	501,545	July 18	1603	{ 403 404 }	64	323.
Swartz, George W., Florence, Ala. Electric signal	500,041	June 20	2144	520	63	1793
Swartz, J. D. (See Heberling, Solomon R., assignor.)						
Swartz, John T., Tyrone, Pa. Rein-button	491,199	Feb. 7	227	57	62	790
Swartz, Samuel, Detroit, Mich. Bending-press	500,974	July 4	697	183	64	127
Swayse, Charles A. G., New Bedford, Mass. Holdback for vehicles	499,447	June 13	1190	223	63	1613
Swayze, Caleb, Welland, Canada. Cement for nut-locks	500,975	July 4	698		64	127
Swedish Cream and Butter Separator Company. (See Wahlin, Adolph, assignor.)						
Swedlund, Erick J., Atwater, Minn. Bicycle-gear	505,335	Sept. 19	1681	433	64	1612.
Sweeney, John. (See Rhude, Alonzo B., assignor.)						
Sweeney, Peter, assignor of one-half to C. H. Boyer, New York, N. Y. Mechanical power for elevators, &c.	499,605	June 13	1440	{ 345 346 }	63	1657.
Sweeney, Peter A., Providence, R. I. Adjustable garment-holder	505,578	Sept. 26	2134	540	64	1712.
Sweeny, Robert E., assignor of one-half to J. W. Booze, Jackson Centre, Ohio. Sash-fastener	489,768	Jan. 10	1209	317	62	265.
Sweesy, Thaddeus, Bradford, Pa. Automatically-feeding inkstand	494,448	Mar. 28	2731	684	62	1927.
Sweet, Charles O. (See Regnell, Bigney, and Sweet.)						
Sweet, Elon A., and L. B. Sessions, Panama, N. Y. Car-coupling	507,180	Oct. 24	2363	583	65	482.
Sweet, Frank, Kirksville, Mo. Washing-machine	499,897	June 20	1932	468	63	1755
Sweet, Harry, Burt Lake, Mich. Berry-pail	510,723	Dec. 12	1494	369	65	1705
Sweet, Ira C. N., assignor to C. C. Gregory, Sandwich, Ill. Combined stovepipe and collar holder	490,233	Jan. 17	1979	519	62	435
Sweet, Joseph B., Buffalo, N. Y. Vehicle-brake	489,997	Jan. 17	1584	414	62	356
Sweet, Lou D. (See Sams, Samuel C., assignor.)						
Sweet, Orange M., assignor of one-half to J. B. Webster, Silver Creek, N. Y. Pipe-coupling	494,224	Mar. 28	2474	624	62	1880.
Sweet, Stella, Kansas City, and W. F. Sweet, St. Louis, Mo. Toy	496,018	Apr. 25	2340	602	63	489
Sweet, Thomas, assignor of one-half to J. C. Ellison, Florence, Canada. Car-coupling	503,999	Aug. 29	2900	726	64	1160.
Sweet, Warren, Fort Wayne, Ind. Washing-machine	498,324	May 30	3133	781	63	1242.
Sweet, Warren, Fort Wayne, Ind. Motor	506,382	Oct. 10	1019	254	65	206.
Sweet, William A. (See Crandall, Lucien S., assignor.)						
Sweet, William A., Syracuse, N. Y. Pass-conduit	510,450	Dec. 12	1007	{ 240 241 }	65	1615.
Sweet, William A., Syracuse, N. Y. Pass receiver and shifter for rolling-mills	510,451	Dec. 12	1008	241	65	1615.
Sweet, William F. (See Sweet, Stella and W. F.)						
Sweet, William F., Webb's Mills, N. Y., assignor of fifty-one one-hundredths to W. D. Veder, Mansfield, Pa. Shaft-tug	500,441	June 27	2814	693	63	1922.
Sweeten, Frank D. (See Buck and Sweeten.)						
Sweetland, Frank, Angola, N. Y. Tire for cycle-wheels	489,509	Jan. 10	830	217	62	189
Sweetland, Frank, Angola, N. Y. Hitching-strap	489,837	Jan. 10	1307	341	62	287
Sweetland, Frank, Angola, N. Y. Bicycle	491,200	Feb. 7	228	58	62	791
Sweetland, Frank, Angola, N. Y. Hitching-strap	492,445	Feb. 28	2197	549	62	1233
Sweetland, Frank, Angola, and J. Faulks, Buffalo, N. Y. Sand-band for vehicles	489,838	Jan. 10	1302	341	62	287
Sweetser, Lyman E., Wakefield, Mass. Watchcase	494,725	Apr. 4	313	79	63	62.
Sweger, George B., Chicago, Ill. Garbage-vessel	496,917	May 9	868	229	63	794
Swegles, John, Wayne, Mich. Handle for bags	499,481	June 13	1237	295	63	1621
Swegles, John, assignor of one-half to J. L. Eaton, Wayne, Mich. Antifriction-bearing	506,933	Oct. 17	1956	424	65	396.
Swem Automatic Switch Company. (See Swem, James M., assignor.)						
Swem, James M., assignor to Swem Automatic Switch Company, Denver, Colo. Railway-switch	497,289	May 9	1459	{ 367 368 }	63	897.
Swenson, Benny, Roland, Iowa. Brick-kiln	489,617	Jan. 10	980	255	62	219.
Swensen, Hans P. (See Bagnall, John H., assignor.)						
Swenson, Malcom, Snapee, N. H. Polishing-wheel	497,063	May 9	1086	279	63	833.
Swenson, Magnus, Fort Scott, Kans. Vacuum apparatus	504,374	Sept. 5	101	25, 26	64	1289.
Swett, Albert L., Medina, N. Y. Bracket for door-hanger rails	497,479	May 16	1772	446	63	968
Swett, Nathaniel A., assignor to himself and H. Mayhew, Westbrook, Me. Thill-compiling	498,732	May 30	3836	945	63	1365.
Swift, Daniel W., assignor to Logan, Swift & Brigham Envelope Company, Worcester, Mass. Envelope-cutter	500,304	June 27	2602	636	63	1884
Swift, Frank E., Washington, Iowa. Brick-kiln furnace	501,380	July 11	1369	{ 341 342 }	64	262.
Swift, Oliver F., and W. Warwick, Buffalo, N. Y.; said Warwick assignor to said Swift. Register	501,260	July 11	1157	293	64	225.
Swift, Robert B., Portland, Me. Eyeglass-case	497,734	May 16	2167	542	63	1041
Swift, William A., and W. E. Mitchell, Columbus, Ga. Cam	497,635	May 23	2331	54	63	1086
Swigart, Frank W., assignor of two-thirds to T. A. Dranga and A. Brieger, Arroyo Grande, Cal. Buckle	502,787	Aug. 8	930	226	64	752.
Swigart, Frank W., assignor of two-thirds to T. A. Dranga and A. Brieger, Arroyo Grande, Cal. Protective-buckle	504,895	Sept. 12	963	248	64	1465
Swihart, John H., Dayton, Ohio. Computing-scale	490,518	Jan. 24	2453	632	62	540.
Swin, Thomas P. (See Morrison and Swin.)						
Swindell, James H., Reidsville, Ga. Car-coupling	497,612	May 16	1932	496	63	1006.
Swindell, James H., Reidsville, Ga. Car-coupling	497,613	May 16	1983	496	63	1006.
Swindell, James H., Reidsville, Ga. Car-coupling	499,947	June 20	1997	485	63	1767.
Swindell, John C. (See Swindell, William and J. C.)						
Swindell, William, Allegheny, Pa. Furnace	501,236	July 11	1116	{ 283 284 }	64	218.
Swindell, William, Allegheny, Pa. Furnace	504,118	Aug. 29	3084	772	64	1196.

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Swindell, William and J. C., Allegheny, Pa. Furnace	430,088	Jan. 17	1742	{ 453 454	{ 62	388
Swingle, Charles E., assignor of one-half to G. H. Hughes, Luzerne, Pa. Rail-joint	510,724	Dec. 12	1495	370	65	1705
Swiontkowsky, Frank, Denver, Colo. Fume-arrester	509,336	Nov. 21	2244	542	65	1211
Swoboda, Richard A., Annaberg, Germany. Machine for attaching fringe-balls to the border of textile fabrics	508,645	Nov. 14	1087	269	65	978
Swope, Abram B., Lebanon, Pa. Cigar	489,397	Jan. 3	631	170	62	136
Sykes, Benjamin J., Sykesville, Pa. Wind-wheel	493,533	Mar. 14	1209	{ 309 310	{ 62	1608
Sykes, Walter T., assignor to Philadelphia Textile Machinery Company, Philadelphia, Pa. Condenser or finisher carding-machine	508,064	Nov. 7	127	37	65	783
Sykes, Walter T., assignor to Philadelphia Textile Machinery Company, Philadelphia, Pa. Ring-doffer for carding-machines	508,065	Nov. 7	131	37, 38	65	783
Sykes, William R., Jr., and J. P. O'Donnell, London, England. Safety block system for railway signaling	497,836	May 23	2332	585	63	1086
Sylvén, Walfrid T., and G. W. Coffin, Washington, D. C. Keel for ships	506,139	Oct. 3	535	138	65	104
Syme, Alexander, Glenwood, Wis. Hoop-bending machine	505,614	Sept. 26	2190	554	64	1722
Symmanck, Herman, and E. Mattheijez, Giddings, Tex. Plow	507,854	Oct. 31	3514	864	65	710
Synnstedt, Paul, assignor to Crane Company, Chicago, Ill. Triple-valve mechanism	504,139	Aug. 29	3118	780	64	1201
Synnstedt, Paul, assignor to Crane Company, Chicago, Ill. Triple valve for fluid-pressure brakes	505,685	Sept. 26	2316	588	64	1745
Synnot, Thomas W., Wenonah, N. J. Mold for making glass bottles	507,337	Oct. 24	2632	648	65	532
Sypher, Abraham J., assignor to M. C. Bullock, Chicago, Ill. Rock-drill tripod	511,103	Dec. 19	2183	537	65	1843
Syracuse Arms Company. (See Hollenbeck, Frank A., assignor.)						
Syracuse Specialty Manufacturing Company. (See Latulip, Frederick, assignor.) (Reissue.)						
Syracuse Specialty Manufacturing Company. (See Nase, John, assignor.)						
Syvrrnd, Frederick. (See Johnson and Syvrrnd.)						
Szczeniowski, Ignace v., an ¹ G. v. Piontkowski, Kapusciani, Russia. Centrifugal machine	500,782	July 4	397	105	64	74
Székely, Georg, Lutila, Austria-Hungary. Saw-blade	511,473	Dec. 26	2822	682	65	1974
Szigethy, Stephan, New York, N. Y. Candelabrum	497,036	May 9	1041	266	63	824
T. C. Dill Machine Company. (See Dill, Thomas C., assignor.)						
T. W. Hernemann Company. (See Hernemann, Theodore W., assignor.) (Reissue.)						
Tabbert, Edgar, New York, N. Y. Indicator	506,835	Oct. 17	1762	443	65	360
Taber, Charles M. (See Strange, Fred W., assignor.)						
Taber, John E., Fall River, Mass. Hose-washer	491,821	Feb. 14	1225	307	62	1009
Taber, Winfield H. (See Kenney and Taber.)						
Tabor Carriage Works. (See Tabor, Jesse U., assignor.)						
Tabor, Jesse U., assignor to Tabor Carriage Works, Los Angeles, Cal. Canopy-top for vehicles	505,544	Sept. 26	2053	524	64	1695
Tabor, Stephen, and J. Murphy, Chicago, Ill. Carpet-stretcher	489,769	Jan. 10	1210	317	62	265
Tachau, Ludwig. (See Nicholas and Tachau.)						
Tacy Samuel H. (See Stanley, Frank W., assignor.)						
Taff Frank, Whitestone, N. Y. Propelling mechanism for vessels	510,725	Dec. 12	1496	370	65	1705
Taffer, Robert B., Des Moines, Iowa. Photographic-plate holder	499,763	June 20	1706	409	63	1716
Taft Alanson W., Providence, R. I. Burglar-guard for protection of bank officials	496,492	May 2	155	44	63	647
Taft, Cyrus A., assignor to Whittin Machine Works, Whitinsville, Mass. Separator for spinning-machines	506,140	Oct. 3	537	139	65	104
Taft, James M., South Heart, N. D. Hand-car	495,529	Apr. 18	1621	408	63	337
Taft, Stephen, Millbury, Mass. Cutting-nippers	496,584	May 2	299	81	63	673
Taft, Willi P. (See McGuire and Beemer, assignors.)						
Taggart, Thomas, et al. (See Dobbins and McKenney, assignors.)						
Tagliabue, Charles J., Brooklyn, N. Y. Thermometer	493,197	Mar. 7	657	167	62	1487
Taini, John, Del Rio, Tex. Nut-lock	509,700	Nov. 28	2874	695	65	1343
Tainter, Charles S., Washington, D. C. Coin-controlled graphophone	506,348	Oct. 10	954	{ 237 238	{ 65	193
Tainter, Charles S., Washington, D. C. Reproducer for graphophones	510,656	Dec. 12	1390	341	65	1685
Tainter, Silas B. (See Garretton and Tainter.)						
Taintor, Charles C., Elizabeth, N. J., assignor to Taintor Manufacturing Company, of New York. Saw-set	499,482	June 13	1238	295	63	1621
Taintor Manufacturing Company. (See Taintor, Charles C., assignor.)						
Taintor, Myron F., Easthampton, assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Flexible and collapsible mud-guard for cycles	508,782	Nov. 14	1282	319	65	1015
Talbot, Adjutor, North Adams, Mass. Vehicle-brake	496,071	Apr. 25	2468	623	63	505
Talbot, Benjamin, Pencoyd, Pa. Bottom plate for steel-ingot molds	509,701	Nov. 28	2875	695	65	1343
Talbot, Vackson L., St. Paul, Minn. Rein-holder	503,297	Aug. 15	1771	437	64	918
Talcott, Walter O. (See Budlong, Edward L., assignor.)						
Tallant, James F., Charleston, S. C. Picture	499,343	Jan. 3	554	150	62	119
Talley, Clarence C., et al. (See Sennett and Arnett, assignors.)						
Talley, William A., Jessieville, assignor of one-half to J. S. Fulton, Hot Springs, Ark. Cotton chopper and scraper	500,679	July 4	238	63	64	45
Tallmadge, James W., Albany, N. Y. Manufacturing hydrocarbon gas	499,606	June 13	1442	346	63	1657
Talpey, John H., assignor of one-half to C. H. T. J. Southard, Richmond, Me. Car-coupling	493,534	Mar. 14	1210	310	62	1608
Tambs, Robert C., Magog, Canada. Breast-collar coupling	493,311	Mar. 14	860	219	62	1542
Tandy, John L., Columbia, Mo. Corn-thinner	501,594	July 18	1684	420	64	339
Tangenberg, Christiaan, Chicago, Ill. Flour-bin	498,526	May 30	3458	857	63	1300
Tangenberg, Christiaan, Chicago, Ill. Carpet-sweeper	500,976	July 4	699	183	64	127
Tangney, Thomas, South Superior, Wis. Radiator	503,813	Aug. 22	2600	{ 649 650	{ 64	1087
Tangney, Thomas, South Superior, Wis. Hinge	509,702	Nov. 28	2876	696	65	1343
Tangye, George, et al. (See Pinkney, Charles W., assignor.)						
Tapley Machine Company. (See Loomer, Henry M., assignor.)						
Taplin, Alden, Lawrence, Mass. Stopping mechanism for looms	490,175	Jan. 17	1881	490	62	416
Taplin, Clarence A., New Britain, Conn. Drive-chain link	500,223	June 27	2476	604	63	1863
Taplin, Clarence A., Forestville, Conn. Lamp-burner	503,755	Aug. 22	2523	627	64	1072
Taplin, James B., Akron, Ohio. Outside friction-band clutch	489,045	Jan. 3	101	28	62	26
Taplin, John L., Circleville, assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	508,258	Nov. 7	466	113	65	814
Tarbell, Wendell P., Milford, N. H. Mirror-support and adjusting device	494,497	Mar. 28	2813	705	62	1943
Tarbet, Alexander H. (See Hughes, Robert S., assignor.)						
Tarbox, Fred O., West Kennecunk, Mo. Lamp-bracket	510,147	Dec. 5	515	119	65	1507
Tarrant, George, Brandon, N. Y., assignor of one-half to P. A. Ducey, Detroit, Mich. Railway tie and chair	492,446	Feb. 28	2198	550	62	1233
Tarrant, Jennie, Onalaska, Wis. Gravity-dog for gang-edgers	491,201	Feb. 7	230	58	62	791

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Tarrant, William P., assignor of one-half to T. C. Schallehn, Saratoga Springs, N. Y. Sleigh-runner attachment for baby-carriages.	493,416	Mar. 14	1006	259	62	1572
Tascher, John, Chicago, Ill. Bed-pan.	501,852	July 18	2098	518	64	411
Tassel, Julia E. von, Milwaukee, Wis. Educational appliance.	500,824	July 4	463	122	64	85
Tate, Christopher J. (See Smith and Tate.)						
Tate, George E. (See Smith and Tate.)						
Tate, John L., Chicago, Ill. Toy.	508,558	Nov. 14	952	234	65	950
Tate, Robert B., and J. C. Joseph, Malden, Mass. Pneumatic toy.	501,305	July 11	1219	309	64	236
Tatem, James W., and D. C. Mangum, Durham, N. C. Carpet-stretcher.	507,049	Oct. 17	2113	524	65	424
Tatham, Edwin, Balmain, near Sydney, New South Wales. Making gas.	499,483	June 13	1240		63	1622
Tatham, Edwin, London, England. Illuminating hydrocarbon gas.	502,642	Aug. 1	659		64	688
Tatham, Henry B., Jr., Philadelphia, Pa. Thermo-pneumatic temperature-regulator.	511,066	Dec. 19	2115	523	65	1830
Tatham, Henry B., Jr., Philadelphia, Pa. Temperature-controlling device.	511,283	Dec. 19	2484	606	65	1899
Tatman, Benjamin F., Owensborough, Ky. Aerating apparatus.	507,392	Oct. 24	2724	668	65	550
Tatro, Charles P., assignor of fifty-one one-hundredths to himself, S. F. Coons, and C. M. Patterson, Spokane, Wash. Underground conduit for electric railways.	489,422	Jan. 3	669	181	62	144
Tatro, Joseph A., Beaver Falls, Pa. Machine for weaving wire bands or netting.	502,148	July 25	2578	647 618 649	64	514
Tatum, Hamling, Troy, Ala. Car-coupling.	497,837	May 23	2335	585	63	1026
Tatum, Henry L., et al. (See McClure, James P., assignor.)						
Tauberschmidt, George A., assignor of one-half to E. S. Clarkson, Washington, D. C. Detecting apparatus for coin-actuated boxes.	492,592	Feb. 28	2445	608	62	1285
Tausk, Berthold, Berlin, Germany. Treating leather fur.	505,141	Sept. 19	1376		64	1556
Taxameter Fabrik Westendarp & Pieper. (See Erhardt, Friedrich, assignor.)	497,614	May 16	1984	497	63	1007
Taylor, Alfred, assignor of one-half to M. Cusack and F. Knobloch, San Francisco, Cal. Ratchet-brace.	490,617	Jan. 24	2601	670	62	569
Taylor, Alfred P., Denver, Colo. Vehicle-hub.	490,089	Jan. 17	1744	454	62	388
Taylor, Ambrose C. (See Whiton, Lucius E., assignor.)						
Taylor, Andrew, Edinburgh, Scotland, assignor to C. A. Hooper, San Francisco, Cal. Making extracts from the redwood-tree.	509,703	Nov. 28	2877		65	1344
Taylor, Andrew J., Glens Falls, N. Y. Vehicle-pole coupling.	499,404	June 13	1115	268	63	1599
Taylor, Andrew W., Pierce City, Mo. File-holder.	494,498	Mar. 28	2814	705	62	1943
Taylor, Benjamin F., Newark, N. J. Air-deflecting device.	509,337	Nov. 21	2244	543	65	1211
Taylor, Benjamin F., Newark, N. J., assignor to Taylor Improved Draught Company, of New Jersey. Draft device for stacks.	499,607	June 13	1444	346 347	63	1657
Taylor & Boggis Foundry Company. (See Clemen, William H., assignor.)						
Taylor Burner Company. (See Taylor, William G., assignor.)						
Taylor Burner Company. (See Taylor, William G., assignor.)						
Taylor, Casper R. (See Hughes and Taylor.)						
Taylor, Charles, Eccles, England. Keyhole-guide.	500,977	July 4	700	183	64	127
Taylor, Charles A., Jacksonville, Ill. Swinging gate.	494,449	Mar. 28	2733	684	62	1928
Taylor, Charles F., New York, N. Y. Type-writing machine.	511,374	Dec. 26	2652	644	65	1944
Taylor, Charles F., and H. P. Brown, New York, N. Y. Type-writing machine.	511,373	Dec. 26	2644	643	65	1942
Taylor, Charles H., et al. (See Davis, George A., assignor.)						
Taylor, Charles H., Lincoln, Nebr. Husking-machine.	490,727	Jan. 31	2804	719	62	624
Taylor, Charles H., Lincoln, Nebr. Roller for corn harvesting, husking, and separating machines.	493,453	Mar. 14	1074	276	62	1584
Taylor, Charles H., Lincoln, Neb. Corn-husking machine.	497,693	May 16	2111	527	63	1029
Taylor, Charles H., South Orange, N. J. Car-coupling.	504,637	Sept. 5	519	134	64	1368
Taylor, Charles H., assignor to R. L. F. Strathy & Co., Montreal, Canada. Wire-attaching device.	508,997	Nov. 21	1661	409	65	1101
Taylor, Christopher B., Idaho Falls, Idaho. Grading and ditching machine.	499,178	June 6	733	174	63	1517
Taylor, Christopher C., Rockingham, N. C. Combined planter and fertilizer-distributor.	501,113	July 11	934	239	64	184
Taylor, Cooper & Bednell. (See Taylor, George, assignor.)						
Taylor, David C., et al. (See Shaw, Harry C., assignor.)						
Taylor, David H. (See Westwood, John T., assignor.)						
Taylor, David H., Cincinnati, Ohio. Type-writing machine.	499,263	June 13	851	204	63	1552
Taylor, Eben H. B., and J. B. Wimer, Woodville, Oreg. Saw-tooth and means for securing same.	509,407	Nov. 28	2386	579	65	1248
Taylor, Edmund B., Lowell, Mass. Actuating mechanism for elevator-doors.	504,096	Aug. 29	3049	763	64	1189
Taylor, Edward T., Oakland, Cal. Cash register and indicator.	494,534	Mar. 28	2876	720	62	1954
Taylor, Edward T., Oakland, Cal. Cash register and indicator.	510,622	Dec. 12	1328	324 325	65	1673
Taylor, Elmer Z., Philadelphia, Pa. Sewing-machine for barring buttonholes.	509,970	Dec. 5	207	47, 48	65	1449
Taylor, Ernest H. P., Waterbury, Conn. Bicycle-gear.	501,381	July 11	1370	342	64	262
Taylor, Eugene H., et al. (See Harper, Fred D., assignor.)						
Taylor, Frederick. (See White, Albert, assignor.)						
Taylor, Frederick, Lowell, Mass. Hat and coat hook.	499,608	June 13	1447	347	63	1658
Taylor, Frederick, Lowell, Mass. Coat and hat hook.	499,609	June 13	1447	347	63	1658
Taylor, Frederick, Lowell, Mass. Whip-hanger.	501,196	July 11	1061	268	64	208
Taylor, Frederick, Lowell, Mass. Hook.	501,197	July 11	1062	268	64	208
Taylor, Frederick, Lowell, Mass. Hook.	501,198	July 11	1062	269	64	209
Taylor, Frederick, Lowell, Mass. Coat and hat hook.	505,336	Sept. 19	1673	431	64	1613
Taylor, Frederick, Lowell, Mass. Coat and hat hook.	505,337	Sept. 19	1673	434	64	1613
Taylor, Frederick, Lowell, Mass. Hat and coat hook.	509,629	Nov. 28	2765	666	65	1323
Taylor, Frederick, Lowell, Mass. Hat and coat hook.	509,630	Nov. 28	2766	666	65	1323
Taylor, Frederick D., assignor to Electro-Automatic Appliance Company, Hartford, Conn. Apparatus for stopping engines.	490,373	Jan. 24	2228	580	62	497
Taylor, Frederick G., Cranston, R. I. Wheel-tire.	496,671	May 2	448	121	63	701
Taylor, Frederick W., Lowell, Mass. Garment-supporter.	509,338	Nov. 21	2346	543	65	1212
Taylor, George, Jersey City, N. J. Pipe-support.	492,593	Feb. 28	2448	609	62	1285
Taylor, George, assignor to Taylor, Cooper & Bednell, Limited, Coventry, England. Apparatus for manufacturing metal balls.	491,452	Feb. 7	647	162 163	62	871
Taylor, George B., New Brunswick, N. J. Variable exhaust for locomotives.	497,970	May 23	2553	637	63	1124
Taylor, George H., New York, N. Y. Puzzle.	507,667	Oct. 31	3213	786	65	154
Taylor, George W., assignor of one-half to E. J. Middleswart, Butte, Mont. Wagon-axle.	507,181	Oct. 24	2365	584	65	482
Taylor, George W., and J. E. McElroy, Muscatine, Iowa. Door-stop.	511,662	Dec. 26	3120	762	65	2028
Taylor, Harris, Whitewright, Tex. Nut-lock.	503,065	Aug. 8	1379	341	64	834
Taylor, Henry B., assignor to Palmer & Taylor, Blair, Nebr. Parcel-cabinet.	491,145	Feb. 7	129	35	62	774
Taylor, Hilliard S., Homer, La. Gin-saw fender.	490,049	Jan. 17	1679	436	62	374
Taylor Improved Draught Company. (See Taylor, Benjamin F., assignor.)						
Taylor, Isaac R., Elmira, N. Y. Dredging-machine.	497,735	May 16	2168	542	63	1041

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Taylor, James. (See Galbraith and Taylor.)						
Taylor, James, London, England. Beating-engine for pulping fibrous materials	510,208	Dec. 5	612	144	65	1526
Taylor, James, assignor to C. W. Hubbard, Jr., Pittsburg, Pa. Manufacture of axes	500,084	June 20	2209	539	63	1804
Taylor, James P., Fort Worth, Tex. Coin-controlled apparatus	501,853	July 18	2099	518	64	411
Taylor, James W., Vermillion, S. D. Sled	497,143	May 9	1207	308	63	854
Taylor, John, <i>et al.</i> (See Irving, Samuel, assignor.)						
Taylor, John, Troy, N. Y. Car-truck	507,050	Oct. 17	2114	524	65	424
Taylor, John, Troy, N. Y. Car-truck	507,855	Oct. 31	3515	525	65	710
Taylor, John W., Birmingham, England. Machine for cutting metal blanks into cutters	510,207	Dec. 5	611	865	65	1525
Taylor, John W., and G. W. Walters, Cape Girardeau, Mo. Gate	505,009	Sept. 12	1155	143	64	1502
Taylor, Martin M., assignor, by mesne assignments, of one-half to himself, W. M. George, and J. Gregg, Springdale, Pa. Mail-bag depositor	505,996	Oct. 3	303	296	65	59
Taylor, Newton W. (See Campbell, Henry H., assignor.)						
Taylor, Phillips T., San Francisco, Cal. Cable-railway gripper	498,325	May 30	3134	781	63	1242
Taylor, Walter M., London, England. Substitute for sponges, brushes, &c.	489,697	Jan. 10	1091	282	62	242
Taylor, William. (See Youngjohns and Taylor.)						
Taylor, William, Allegheny, Pa. Hook	498,980	June 6	252	59	63	1437
Taylor, William, Allegheny, Pa. Greeting-die for wire-nail machines	511,174	Dec. 19	2306	564	65	1866
Taylor, William, Keuka College, N. Y. Harness-saddle	511,474	Dec. 26	2823	565	65	1974
Taylor, William B., Glenmore, Ga. Apparatus for washing glasses	502,868	Aug. 8	1057	683	64	776
Taylor, William G., Hulton, assignor to Taylor Burner Company, Limited, Pittsburg, Pa. Fuel-gas mixer	497,435	May 16	1703	280	63	957
Taylor, William G., Hulton, assignor to Taylor Burner Company, Limited, Pittsburg, Pa. Fuel-gas mixer	499,151	June 6	682	430	63	1509
Taylor, William G., Hulton, assignor to Taylor Burner Company, Limited, Pittsburg, Pa. Natural-gas burner	500,694	July 4	260	164	63	49
Taylor, William M., Rock Mills, Ala. Plow	507,509	Oct. 24	2916	70, 71	64	586
Taylor, William O., Malden, Mass. Mail receiving and collecting apparatus	509,969	Dec. 5	201	717	65	1447
Taylor & Boggis Foundry Company. (See De Mooy and Clemes, assignors.)						
Teague, Francis, assignor, by mesne assignments, to J. S. Fairfax and J. Wetter, London, England. Electric meter	496,371	Apr. 25	2952	737	63	596
Teague, William R., <i>et al.</i> (See Witt, James W. M., assignor.)						
Teal, Benjamin F., Paterson, N. J. Gate for railway-crossings	496,960	May 9	926	738	63	850
Teal, Levi, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Pedal-switch for electric motors	497,144	May 9	1209	243	63	854
Teate, Thomas A., Waukegan, assignor of one-half to G. W. Saxon, Tallahassee, Fla. Fly-trap	502,056	July 25	2433	309	63	854
Tebbo, Joseph, and A. Paquin, Claremont, N. H. Car-coupling	490,838	Jan. 31	2975	612	64	487
Tedlock, James M., Urbana, Mo. Churn	493,535	Mar. 14	1212	763	62	657
Teed, Oliver F., assignor of one-half to W. H. Glor, Covington, Ky. Hydraulic motor	503,015	Aug. 8	1308	1212	62	1609
Teegarden, Clark & Clark. (See Teegarden and Clark, assignors.)						
Teegarden, Freeman M., assignor to Chief Manufacturing Company, Colfax, Ind. Sawing machine	502,838	Aug. 8	1013	320	64	820
Teegarden, William R., and R. A. Clark, assignors to Teegarden, Clark & Clark, Colfax, Ind. Car-coupling	496,493	May 2	156	347	64	768
Teegarden, William R., R. A. Clark, Colfax, and J. G. Clark, Frankfort, assignors to Teegarden, Clark & Clark, Colfax, Ind. Car-coupling	496,494	May 2	157	44, 45	63	647
Teel, John, assignor of three-fourths to J. H. Wonderly, Grand Rapids, Mich. Shirt-bosom protector	494,656	Apr. 4	201	45, 46	63	648
Teepie, Peter, Watertown, N. Y. Chimney-cleaner	490,374	Jan. 24	2231	51	63	42
Teeter, Horace H., Carbondale, Ill. Filter	497,991	May 23	2587	540	62	497
Teeter, Jacob, Hagerstown, Ind. Mail-crane	503,221	Aug. 15	1651	647	63	1130
Teeters, William R. (See Miner, John J., assignor.)						
Teetor, Abraham L., Indianapolis, Ind. Molding-machine	495,570	Apr. 18	1683	1651	64	897
Telfer, John C., Kansas City, Mo. Compound railway-rail	500,825	July 4	464	434	63	349
Tellefsen, Gunder, Danevirke, and H. Hughes, Wellington, New Zealand. Apparatus for washing floors	497,359	May 16	1583	435	62	85
Tellier, Charles, Paris, France. Producing motive power	492,976	Mar. 7	325	400	63	936
Temmel, Richard, Berlin, Germany. Belting	505,142	Sept. 19	1377	82	62	1423
Temperley, Joseph, Reigate, England. Elevated carrier	504,257	Aug. 29	3318	353	64	1556
Temple, Morris D., Chicago, Ill. Pump	490,776	Jan. 31	2888	829	64	1239
Temple, Robert, Denver, Colo., assignor of one-fourth to S. Edgar. Rotary engine	511,311	Dec. 19	2529	741	62	639
Temple, Thomas H. (See Nelson and Temple.)						
Temple, Winfield S., Sidney, Ill. Chart-displayer	499,764	June 20	1707	615	65	1907
Templeton, William E., Indianapolis, Ind. Bath-tub	489,241	Jan. 3	399	409	63	1716
Templin, James L. (See Templin, John W. and J. L.)						
Templin, John W., Marion, and J. L. Templin, Kokomo, assignors to J. G. Templin & Sons, Marion, Ind. Valve mechanism for steam-pumps	503,883	Aug. 22	2691	111	62	89
Templin, Joseph H., Reading, Pa., assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	507,182	Oct. 24	2366	675	64	1104
Templin, Joseph H., Reading, Pa., assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	507,183	Oct. 24	2367	584	65	482
Templin, Joseph H., Reading, Pa., assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	507,184	Oct. 24	2369	584	65	483
Templin, Joseph H., Reading, Pa., assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	507,185	Oct. 24	2370	585	65	483
Templin, Joseph H., Reading, Pa., assignor, by mesne assignments, to T. V. Allis, New York, N. Y. Making barbed fencing	507,186	Oct. 24	2371	585	65	483
Templin & Sons, J. G. (See Templin, John W. and J. L., assignors.)						
Tench, George H., Pottsville, Pa. Washer, drier, and separator	497,615	May 16	1987	497	63	1007
Tengwall, Andreas, Helsingborg, Sweden. Letter-file	491,266	Feb. 7	324	82	62	811
Tenison, Albert P., Dallas, Tex. Riding-saddle	506,747	Oct. 17	1617	407	65	332
Tenner, Armin, Berlin, Germany. Cartridge-loading machine	494,905	Apr. 4	601	152	63	116
Tenney, Alfred E. (See Coleman and Tenney.)						
Tenney, Daniel G., Newbury, Mass. Horse-shield	511,558	Dec. 26	2948	153	65	1997
Tennyson, John H., New York, N. Y. Auxiliary cut-off for engines	506,565	Oct. 10	1323	718	65	286
Terew, Joseph F., assignor to R. W. Blake, Derby, Conn. Upright-piano action	497,992	May 23	2588	331	65	1130
Terlinden, Gerhard, Oberhausen, Germany. Hose coupling	508,448	Nov. 14	762	647	65	914

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Terney, Charles F., New York, N. Y. Fireproof floor	493,568	Mar. 14	1274	335	62	1622
Terpening, Charles S., Dayton, Wash. Ax-handle shield and protector	489,511	Jan. 10	832	218	62	189
Terreff, William W., <i>et al.</i> (See Triphagen, Charles H., assignor.)						
Terrell, Edward H. (See Carolan and Terrell.)						
Terrell, Henry D., Covington, Ga. Heel-sweep for plows	504,375	Sept. 5	103	26	64	1290
Terrell, Herbert L. (See Archbold, George, assignor.)						
Terrell, James K. (See Carolan and Terrell.)						
Terrell, John R., and W. E. Frasier, Osceola, Tex. Horse-power	493,370	Mar. 14	950	244	62	1561
Terrell, Thomas A., New Whatcom, Wash. Stump-puller	498,090	May 23	2736	684	63	1157
Terry, Alice V. (See Green, William W., assignor.)						
Terry, Edward C., Hartford, Conn. Steam-turbine	508,190	Nov. 7	340	84, 85	65	821
Terry, Eugene, assignor to S. Grant, Ithaca, N. Y. Type-writing machine	502,685	Aug. 1	750	180	64	704
Terry, George E. (See Stanton, Gilbert A., assignor.)						
Terry, Homer W., Springfield, Mass. Machine for cutting buttons	492,997	Mar. 7	354	89	62	1429
Terry, Jacob E., Hecla, Mont. Hitching device	489,510	Jan. 10	831	218	62	189
Terry, Willard S., Hilo, Hawaii. Chalk-rail for blackboards	496,708	May 2	501	134	63	710
Terstegen, Fred, Elizabeth, N. J. Stem winding and setting watch	498,494	May 30	3404	845, 846	63	1291
Terstegen, Fred, Elizabeth, N. J. Repeating mechanism for timepieces	502,917	Aug. 8	1138	281	64	791
Terstegen, Fred, Elizabeth, N. J. Repeating mechanism for timepieces	502,918	Aug. 8	1145	281, 282	64	792
Terwilliger, E. J., <i>et al.</i> (See Dahl, Alfred, assignor.)						
Teschner, Jacob, <i>et al.</i> (See Horn, Norbert, assignor.)						
Tesla Electric Company. (See Tesla, Nikola, assignor.)						
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. Electrical transmission of power	511,559	Dec. 26	2949	719	65	1998
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. System of electrical power transmission	511,560	Dec. 26	2950	718, 719	65	1998
Tessen, Ewald, Rostock, Germany. Manufacturing elastic glue or gelatine	505,615	Sept. 26	2192	64	64	1723
Testard, Adrian, San Antonio, Tex. Car-coupling	500,224	June 27	2477	604	63	1863
Peter, William L., Philadelphia, Pa. Boiler-furnace	499,054	June 6	545	128	63	1486
Peter, William L., Philadelphia, Pa. Generating heat by combustion of fuel	499,055	June 6	547	128	63	1486
Peter, William L., Philadelphia, Pa. Jacket for retorts	499,056	June 6	549	128	63	1486
Tetreau, George, Laconia, N. H. Dry-goods board	511,175	Dec. 19	2308	565	65	1867
Tettelbach, John, Cleveland, Ohio. Grate for stoves, ranges, &c.	498,326	May 30	3136	782	63	1242
Teufel, George W. (See Walter, Harry, assignor.)						
Teufel, George W., Philadelphia, Pa. Veterinary tooth-cutter	503,293	Aug. 15	1772	438	64	918
Teufel, Wilhelm J., Stuttgart, Germany. Abdominal corset	489,698	Jan. 10	1093	283	62	243
Terlin, James F., <i>et al.</i> (See Duesbury, William A., assignor.)						
Tew, John W., Rome, Ga., and J. D. Riggs, Selma, Ala. Switch	502,149	July 25	2581	649	64	515
Texas Invention Company. (See Franklin, Edward A., assignor.)						
Thacher & Co., George H. (See Hymas and Brockley, assignors.)						
Thacher, George H., Albany, N. Y. Oar-propelled ice-boat	500,826	July 4	466	123	64	86
Thacher, John B. (See Parke, Robert A., assignor.)						
Thacher, John B., and E. C. Fasoldt, Albany, N. Y. Air-gun	504,820	Sept. 12	846	217	64	1442
Thacher, Peter, assignor of one-half to E. E. Hooper, Chicago, Ill. Belt-fastener	495,439	Apr. 11	1474	371	63	290
Thacher, William A., New York, N. Y. Dumping-car	489,242	Jan. 3	400	111, 112	62	90
Thacher, William A., New York, N. Y. Dumping-car	489,243	Jan. 3	404	112, 113	62	90
Thacher, William A., New York, N. Y. Dumping-car	496,672	May 2	450	121	63	701
Thacher, William A., New York, N. Y. Dumping-car	508,998	Nov. 21	1662	409, 410	65	1101
Thackara Manufacturing Company. (See Peebles, George, assignor.)						
Thacker, Henry D., and J. V. Down, assignors to I. P. Hoag & Co., Petersburg, Va. Trunk	495,851	Apr. 18	2136	536, 537	63	427
Thacker, Thomas, Fall River, Mass. Weft stop-motion for looms	492,998	Mar. 7	356	90	62	1429
Thalacker, Carl, Charlottenburg, assignor to Siemens & Halske, Berlin, Germany. Electric safety-fuse	502,541	Aug. 1	501	120	64	658
Thaler, Louis, New York, N. Y. Electric circuit for railway signaling	491,387	Feb. 7	544	138	62	852
Thanner, Leonhard, Boerwang, Germany, assignor of two-fifths to E. Christiansen, Leavenworth, Kans. Velocipede-sled	497,290	May 9	1461	368	63	898
Tharp, John W. (See Cohen and Tharp.)						
That Manufacturing Company. (See Allen, Dwight, assignor.)						
Thatcher, James A., Mattoon, Ill. Apparatus for closing switches	501,382	July 11	1372	342, 343	64	263
Thatcher, Jesse W. (See Hullings, Charles W., assignor.)						
Thayer, Bernard, assignor of one-half to C. H. Stuart, Boston, Mass. Die-stock	491,453	Feb. 7	651	163	62	872
Thayer, Dexter J., Pittsburg, Pa. Oil-well-drilling apparatus	495,852	Apr. 18	2138	537	63	427
Thayer, George W. (See Grotz, Charles, assignor.)						
Thayer, Justin W., Whitman, Mass. Foldable bat-holder	509,832	Nov. 28	3092	747	65	1384
Thayer, Linus H., <i>et al.</i> (See Morgan, Charles, assignor.)						
Thayer, William H., Melrose, Mass. Vapor-burning stove	505,643	Sept. 26	2248	569, 570	64	1733
Thayer, William W., and A. P. Weld, River Falls, Wis. Apparatus for mixing air and gas	497,221	May 9	1320	336	63	875
Theberath, John H. (See Bippart and Theberath.)						
Theisen, Eduard, Sinzig, Germany. Surface condensing, refrigerating, and evaporating apparatus	496,757	May 2	580	155	63	723
Theiss, Emil. (See Bieg and Theiss.)						
Then, Christian D., Rochester, N. Y. Paper-punching device	500,442	June 27	2815	694	63	1922
Thermo-Electric Company. (See Mestern, Max, assignor.)						
Therye, Charles, and A. Oblasser, Paris, France. Secondary electric battery	500,978	July 4	701	184	64	128
Therye, Charles, and A. Oblasser, Paris, France. Box for secondary batteries, electric cells, &c.	502,643	Aug. 1	660	160	64	688
Theuerner, Christopher J., Newark, N. J. Cleansing silver	490,816	Jan. 31	2943	62	62	651
Theumann, Moriz. (See Bransil, Franz A., assignor.)						
Theurer, Jacob F., Milwaukee, Wis., assignor to Universal Carbonating Company, Newark, N. J. Apparatus for charging liquids with carbonic-acid gas	505,239	Sept. 19	1522	398	64	1583
Theurer, Jacob F., Milwaukee, Wis., assignor to Universal Carbonating Company, Newark, N. J. Apparatus for charging liquids with carbonic-acid gas	505,240	Sept. 19	1525	398	64	1583
Thew, Ruth, La Rue, Ohio. Device for teaching music	510,302	Dec. 5	769	187	65	1555
Thibault, Henry, assignor of thirteen-twentieths to A. H. Carpenter, S. A. Kitchener, Stockton, and W. R. Groff, Lincoln, Cal. Revolving-hull propeller for vessels	506,748	Oct. 17	1618	407	65	333
Thibodeau, Charles, Somerville, Mass. Pocket-guard	496,709	May 2	502	134	63	711

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Thiede, Carl. (See Hirsh and Thiede.)						
Thiel, Charles P. R., and M. M. Aust, Lawrence, Mass. Machine for grinding thread-cutting tools	504,000	Aug. 29	2902	726 727 696 697	64	1161
Thiel, Gustav, Medford, Wis. Window	509,704	Nov. 23	2879	696 697	65	1344
Thiel, Henry, Milwaukee, assignor of one-half to H. Venells, Port Washington, Wis. Seine-bauling apparatus	490,375	Jan. 24	2232	581	62	498
Thiel, Herman K., Alpena, Mich. Electric motor or dynamo	510,102	Dec. 5	440	98	65	1493
Thiele, Maximilian, O. K��pferling, and F. Sichtermann, Berlin, Germany. Toy	491,690	Feb. 14	1026	259	62	971
Thiell, George L., Baltimore, Md. Apparatus for controlling the draft in boiler-chimneys	490,177	Jan. 17	1883	490	62	417
Thies, Heinrich, Laaken, and E. Herzig, Reutlingen, Germany. Bleaching	496,072	Apr. 25	2469	624	63	505
Thies, John B., assignor to Gem City Manufacturing Company, Dayton, Ohio. Nozzle	497,480	May 16	1773	447 448	63	968
Thoens, Burchard, New Orleans, La. Machine for making candy	498,142	May 23	2811	703	63	1170
Thoens, Burchard, and A. Gerdes, New Orleans, La. Absorption ice-machine	494,906	Apr. 4	604	153	63	117
Tholen, Ben, Texarkana, Ark. Saw-filing machine	511,561	Dec. 26	2953	719	65	1998
Thom, Charles, Jr., Brooklyn, N. Y. Electric telegraphy	510,209	Dec. 5	615	145	65	1526
Thom, David, Watford, Canada. Riding-plow	502,106	July 25	2512	630	64	502
Thoma, George H., Three Rivers, Mich. Lawn-sprinkler	493,312	Mar. 14	861	219	62	1542
Thomas, Abner D., assignor to Thomas Manufacturing Company, Little Rock, Ark. Method of and apparatus for delinting cotton-seed	503,103	Aug. 8	1443	355 356	64	846
Thomas, Abner D., assignor to Thomas Manufacturing Company, Little Rock, Ark. Apparatus for delinting cotton-seed	503,104	Aug. 8	1446	356	64	846
Thomas, Albert D., assignor to H. O. Whitney, Keokuk, Iowa. Brick-machine	504,141	Aug. 29	3123	781	64	1202
Thomas, Albert L., New York, N. Y. Drying matrices and means therefor	506,349	Oct. 10	956	238	65	194
Thomas, Allen E. (See Rodgers, William E. L., assignor.)						
Thomas, Almer B., Hardwick, Vt. Handle for brooms	501,383	July 11	1374	343	64	263
Thomas, Benjamin F., assignor of one-half to P. Ray, Camden, Ind. Fence-post	501,747	July 18	1940	480	64	383
Thomas, Chauncer, Boston, Mass. Buckboard	499,057	June 6	549	129	63	1487
Thomas, Clotilde P., Evansville, Ind. Toilet-powder case	498,412	May 30	3266	814	63	1266
Thomas, De Witt C., Kensett, Iowa. Butter-packer	508,191	Nov. 7	343	85	65	821
Thomas, Edmund, and T. L. Fitzgerald, Erie, Pa. Mechanism for making crank-shafts	510,103	Dec. 5	441	98, 99	65	1493
Thomas, Edward W. (See Cloudman, Josiah D., assignor.)						
Thomas, Elihu H., Brattleborough, Vt. Clothes-drier	498,091	May 23	2738	684	63	1157
Thomas, George. (See Ellison and Unsworth, assignors.)						
Thomas, George L., Brooklyn, N. Y. Series system for railways	491,691	Feb. 14	1027	259	62	971
Thomas, George L., Brooklyn, N. Y. Pneumatic weather-strip	494,351	Mar. 28	2577	649	62	1900
Thomas, George L., Brooklyn, N. Y. Window-ventilator for railway cars	502,919	Aug. 8	1153	282	64	794
Thomas, George L., Brooklyn, N. Y., and E. C. Seward, Montclair, N. J., assignors to said Thomas. Railway signal system	500,827	July 4	469	123 124	64	86
Thomas, George L., Brooklyn, N. Y., and E. C. Seward, Montclair, N. J.; said Seward assignor to said Thomas. Railway signal system	508,356	Nov. 7	611	150 151 780 781	65	872
Thomas, Horace S., Elmira, N. Y. Pump	504,140	Aug. 29	3121	781	64	1202
Thomas, Guston D., Greenville, Miss. Book for bookkeeping	491,202	Feb. 7	231	58	62	791
Thomas, Henry E., San Francisco, assignor of one-half to J. C. Shrader, Oakland, Cal. Faucet	506,611	Oct. 10	1385	347	65	278
Thomas, Henry H., Santa Clara, assignor of one-half to E. Jackson, San Francisco, Cal. Spool-holder	509,498	Nov. 28	2560	619	65	1283
Thomas, Henry O., Kimball, assignor of one-half to J. W. Stevenson, North Bend, Nebr. Tree or shrub baler or binder	494,352	Mar. 28	2579	649 650	62	1900
Thomas, Henry O., Kimball, assignor of one-half to J. W. Stevenson, North Bend, Nebr. Tree-baler	494,353	Mar. 28	2585	650	62	1902
Thomas, Henry O., Kimball, Nebr., assignor of seven-tenths to L. Moss, Chicago, Ill. Hand-truck	509,054	Nov. 21	1747	432	65	1117
Thomas, Henry O., Kimball, assignor of two-thirds to J. W. Stevenson and C. Cusack, North Bend, Nebr. Combined badge, pencil, and bouquet holder	491,614	Feb. 14	915	230	62	947
Thomas, Isaac, et al. (See Rodgers, George W., assignor.)						
Thomas, James B., Sulphur Springs, Tex. Air-pipe coupling	496,758	May 2	581	155	63	724
Thomas, James C., et al. (See Thorp, Thomas J., assignor.)						
Thomas, James E., and E. P. Grow, Bay City, Mich. Water-distilling apparatus	491,028	Jan. 31	3301	842	62	721
Thomas, James E., and E. P. Grow, Bay City, Mich. Apparatus for aerating distilled water	502,408	Aug. 1	287	63	64	615
Thomas, James E., and E. P. Grow, Bay City, Mich. Aerating distilled water	502,409	Aug. 1	269	64	64	615
Thomas, John D., Scranton, Pa. Wire-splicer	504,638	Sept. 5	521	134	64	1369
Thomas, John H., Springfield, Ohio. Disk harrow	503,178	Aug. 15	1579	388	64	885
Thomas, John H., and D. B. Hiser, assignors to Thomas Manufacturing Company, Springfield, Ohio. Wheel	489,820	Jan. 10	1360	354	62	297
Thomas, Joseph F. (See Spahmer, Charles, assignor.)						
Thomas, Lewis R., Newton, Kans. Railway-lantern	495,530	Apr. 18	1623	408	63	338
Thomas Manufacturing Company. (See Thomas, Abner D., assignor.)						
Thomas Manufacturing Company. (See Thomas and Hiser, assignors.)						
Thomas, Nathan M., assignor of one-third to H. B. James, Aberdeen, Md. Metallic cross-tie	491,229	Feb. 7	275	69	62	800
Thomas, Oscar J., Peninsula, Ohio. Pail attachment	494,826	Apr. 4	484	122	63	93
Thomas, Owen, Rochester, N. Y. Stone-cutting machine	499,152	June 6	684	164	63	1509
Thomas, Richard B., Lydbrook, England. Dusting metal plates	501,746	July 18	1940	480	64	383
Thomas, Robert S. (See Elam and Thomas.)						
Thomas, Robert S., et al. (See Elam, William E., assignor.)						
Thomas, Septimus, Scranton, Pa. Slate-nicker	494,395	Mar. 28	2656	666	62	1914
Thomas, Theodore L., Chicago, Ill. Machine for folding and cutting sheets of metal	499,807	June 20	1775	430	63	1728
Thomas, Thomas, Denver, assignor of one-half to J. Burgess, Argo, Colo. Desulphurizing-furnace	491,274	Feb. 7	336	85	62	813
Thomas, Thomas C. J., London, England. Gas-lamp	495,280	Apr. 11	1227	307	63	245
Thomas, Victor F. (See Cross, Isaac T., assignor.)						
Thomas, William H. (See Vollmer and Thomas.)						
Thomas, William H., Jenkintown, Pa. Fastening for tool-handles, &c	502,107	July 25	2514	631	64	502
Thomas, William M., Grand Rapids, assignor to L. Warfield, Detroit, Mich. System of winding armatures for dynamo-electric machines	494,042	Mar. 21	2063	527	62	1790
Thomas, William M., Chicago, Ill., assignor to L. Warfield, Detroit, Mich. Electric cigar-lighter	494,091	Mar. 21	2146	548	62	1805
Thomason, Edwin R., San Francisco, Cal. Apparatus for reducing bituminous rock	492,639	Feb. 28	2524	625	62	1300
Thomason, Edwin R., San Francisco, Cal. Apparatus for reducing bituminous rock	502,211	July 25	2681	677	64	535
Thomason, Frank D., et al. (See James, John H., assignor.)						
Thomes, Charles W., Boston, Mass. Twine-cutter	494,606	Apr. 4	132	30	63	28

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Thommen, Gustave, Paterson, N. J., and G. Rothenbücher, New York, N. Y. Machine for watering and finishing silk or other fabrics	497,360	May 16	1585	401	63	936
Thompson, Addison, Huntington, W. Va. Glory-hole furnace	499,058	June 6	551	129	63	1487
Thompson, Allan S., Lansing, Mich. Machine for bending staples	505,862	Oct. 3	96	25	65	20
Thompson, Asad L., Beatrice, Nebr. Straw-burning stove	497,840	May 23	2342	557	63	1087
Thompson, Benjamin, Philadelphia, Pa. Coat	510,452	Dec. 12	1009	241	65	1615
Thompson & Bushnell Company. (See Thompson, Richard, assignor.)						
Thompson, Charles, <i>et al.</i> (See Todd, Matthew, assignor.)						
Thompson, Charles, assignor of eight-fifteenths to C. N. Hatch and W. H. Diets, Syracuse, N. Y. Car-axle frame	494,942	Apr. 4	649	166	63	125
Thompson, Charles H., assignor of one-half to G. A. Sheley, Detroit, Mich. Trolley-wire cleaner	507,247	Oct. 24	2475	610	65	502
Thompson, Charles T. (See Sanders and Thompson.)						
Thompson, Evert M., Indianapolis, Ind. Ice-cream freezer	491,930	Feb. 14	1397	343	62	1043
Thompson, Frank H., Philadelphia, Pa. Electric-arc lamp	497,558	May 16	1898	478	63	991
Thompson, Frederick C., East Tawas, Mich. Surgical instrument	496,711	May 2	504	134	63	711
Thompson, Frederick L., deceased, Neligh, Nebr.; M. I. Thompson, administratrix. Buckle-shield	502,057	July 25	2434	612	64	487
Thompson, George, Kansas City, Mo. Kitchen-cabinet	511,002	Dec. 19	2027	501	65	1812
Thompson, George A., Tombstone, Ariz. Ter. Cam for stamp-mills	493,129	Mar. 7	555	138	62	1468
Thompson, George D., <i>et al.</i> (See Kitton, John C., assignor.)						
Thompson, George W., Lynn, Mass. Relasting-machine	493,196	Mar. 7	656	167	62	1487
Thompson, George W., Leadville, Colo. Safety tunnel warning device	498,328	May 30	3137	782	63	1242
Thompson, Henry J., Springfield, Mass. Journal-box	493,665	Mar. 21	1437	366	62	1669
Thompson, Isaac, Philadelphia, Pa. Penholder	498,495	May 30	3412	847	63	1292
Thompson, Isaac F., assignor of one-half to W. L. Palmer, San Francisco, Cal. Clutch mechanism	505,257	Sept. 19	1550	404	64	1588
Thompson, James C., Fairfax Court-House, Va. Grubbing-hoe	509,264	Nov. 21	2116	509	65	1187
Thompson, James F., Rockland, assignor of one-half to C. F. Baker, Boston, Mass. Coloring or burnishing composition	494,514	Mar. 28	2839		62	1948
Thompson, James F., Rockland, assignor of one-half to C. F. Baker, Boston, Mass. Burnishing	494,943	Apr. 4	670		63	125
Thompson, James K., Leeds, England, assignor of two-thirds to C. F. Jahn, Pittsburg, Pa. Furnace	505,143	Sept. 19	1378	333 354	64	1556
Thompson, James K., Leeds, England, assignor of two-thirds to C. F. Jahn, Pittsburg, Pa. Boiler-furnace	505,144	Sept. 19	1382	354	64	1557
Thompson, John, New York, N. Y. Electric-arc lamp	492,312	Feb. 21	1966	494	62	1179
Thompson, John, assignor to Frey-Sheckler Company, Bucyrus, Ohio. Brick or tile cutting machine	491,747	Feb. 14	1110	280 281	62	986
Thompson, John, assignor to Frey-Sheckler Company, Bucyrus, Ohio. Brick or tile cutting machine	496,286	Apr. 25	2792	698 699	63	566
Thompson, John, assignor to Frey-Sheckler Company, Bucyrus, Ohio. Roller-die for brick or tile machines	497,839	May 23	2339	586	63	1087
Thompson, John, assignor to Frey-Sheckler Company, Bucyrus, Ohio. Grinding-mill	504,761	Sept. 12	744	185	64	1424
Thompson, John, Bucyrus, Ohio, and W. F. Vaughn, Altoona, Pa., said Thompson assignor to Frey-Sheckler Company, Bucyrus, Ohio. Pan grinding machine	501,583	July 18	1666	416	64	337
Thompson, John A., Howard, Kans. Window-shade hanger	508,783	Nov. 14	12-3	320	65	1016
Thompson, John B. (See Kelsey, Wallace, and Thompson.)						
Thompson, John G. (See Goodrich, Charles F., assignor.)						
Thompson, John M., and J. C. Ball, Rochester, N. Y. Building	498,891	June 6	253	60	63	1437
Thompson, John S. W. (See Thompson, William H., assignor.)						
Thompson, Joseph C. (See Boyce and Thompson.)						
Thompson, Joseph F., E. L. Murphree, and W. D. Harrison, Salado, Tex. Hay-press	496,457	May 2	110	30	63	638
Thompson, Lewis M., <i>et al.</i> (See Bates, Sadie M., assignor.)						
Thompson, Lucius E., Dunkirk, N. Y. Arc-lamp support and connection	510,303	Dec. 5	771	187	65	1555
Thompson, Mary I., administratrix. (See Thompson, Frederick L.)						
Thompson, Milton E., Boston, Mass. Electric meter	494,657	Apr. 4	202	51, 52	63	42
Thompson, Noble E., Richmond, Va. Wagon-brake	490,217	Jan. 17	1958	513	62	430
Thompson, Peter M., Anaconda, Mont. Washing-machine	510,726	Dec. 12	1498	370	65	1705
Thompson, Philip B., assignor of one-half to T. T. Gaesser, Troy, Ind. Kitchen-cabinet	511,176	Dec. 19	2310	565	65	1867
Thompson, Richard, New York, N. Y. Steam-boiler-tube cleaner	503,559	Aug. 15	2190	517	64	994
Thompson, Richard, assignor to Thompson & Bushnell Company, New York, N. Y. Boiler-tube cleaner	503,359	Aug. 15	1880	466	64	938
Thompson, Robert M., New York, N. Y. Obtaining and separating sulphide of nickel	489,574	Jan. 10	921		62	207
Thompson, Robert M., New York, N. Y. Obtaining and separating sulphide of nickel	489,575	Jan. 10	923		62	207
Thompson, Robert M., New York, N. Y. Obtaining and separating sulphide of nickel	489,576	Jan. 10	925		62	208
Thompson, Robert M., New York, N. Y. assignor to Orford Copper Company, of New Jersey. Obtaining and separating sulphide of nickel	489,881	Jan. 10	1362		62	227
Thompson, Samuel C. (See Engle and Thompson.)						
Thompson, Sarah R., Henrietta, Tex. Fruit-press	494,306	Mar. 28	2657	667	62	1914
Thompson, Sumner C., assignor of one-half to J. E. Adriance, Poughkeepsie, N. Y. Drill-chuck	489,722	Jan. 10	1132	293	62	250
Thompson, Thomas, <i>et al.</i> (See Walker, Alexander, assignor.)						
Thompson, Thomas, New London, Wis. Washer-cutter and carriage-tool	492,640	Feb. 28	2525	625	62	1300
Thompson, Thomas E., Chicago, Ill. Car-brake adjuster	495,191	Apr. 11	1084	269	63	219
Thompson & Son, Henry G. (See Mower and Haight, assignors.)						
Thompson, Walter B., assignor of one-half to F. X. Blumle, Emporium, Pa. Coffee-mill	507,051	Oct. 17	2117	525	65	425
Thompson, Walter N., St. Louis, Mo. Car-vestibule connection	497,145	May 9	1211	309	63	854
Thompson, William, <i>et al.</i> (See Austin, William H., assignor.)						
Thompson, William, <i>et al.</i> (See Walker, Alexander, assignor.)						
Thompson, William, and D. Dishart, Sunderland, England. Mooring apparatus	491,613	Feb. 14	914	229 230	62	946
Thompson, William D., assignor to J. A. Keenan, Jr., Philadelphia, Pa. Funnel	500,517	June 27	2934	720	63	1944
Thompson, William H., East Stroudsburg, Pa. Cash register and drawer	496,585	May 2	301	81	63	674
Thompson, William H., East Stroudsburg, Pa. Cash-register	511,663	Dec. 26	3121	762 763	65	2028
Thompson, William H., assignor of one-half to G. Morris, Hamilton, Canada. Apparatus for revolving and elevating screw-propellers	496,495	May 2	160	46	63	648
Thompson, William H., assignor to J. S. W. Thompson, Morristown, N. J. Roller-bearing for sheaves	504,287	Aug. 29	3362	840	64	1248
Thompson, William L., Port Huron, Mich. Bicycle-canopy	496,073	Apr. 25	2472	624	63	505
Thoms, Hermann, Berlin, Germany. Making para-phenetol carbamide	502,504	Aug. 1	430		64	645
Thoms, Hermann, Berlin, Germany. Salicylate of para-tolyldimethylpyrazolon	503,066	Aug. 8	1380		64	835

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Thoms, Hermann, assignor to L. F. Riedel, Berlin, Germany. Salicylate of tolyldimethyl-pyrazolon	509,055	Nov. 21	1'48		65	1118
Thomson, Charles F. (See Bustin and McMackin, assignors.)						
Thomson, Charles G. (See Noble and Thomson.)						
Thomson Electric Welding Company. (See Lemp, Hermann, assignor.)						
Thomson Electric Welding Company. (See Thomson, Elihu, assignor.)						
Thomson Electric Welding Company. (See Thomson and Harthan, assignors.)						
Thomson, Elihu, Swampscott, Mass. Thermal circuit-closer	490,839	Jan. 31	2976	764	62	658
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	489,046	Jan. 3	102	28	62	26
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Armature for dynamo-electric machines or motors	490,376	Jan. 24	2233	581	62	498
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Dynamo-electric machine	493,313	Mar. 14	862	219 220	62	1542
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Compressed-air apparatus	495,071	Apr. 11	850	218	63	178
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Lightning-arrester	495,853	Apr. 18	2141	538	63	428
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. System of electric distribution	496,020	Apr. 25	2383	603	63	469
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Commutator for dynamo-electric machines	496,456	May 2	108	29	63	638
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Friction-coupling for dynamos or motors	496,710	May 2	503	134	63	711
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Commutator-brush holder for dynamo-electric machines	497,361	May 16	1587	401	63	937
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Method of and means for producing alternating currents	500,630	July 4	148	39	64	29
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Rheostat	500,631	July 4	150	39	64	30
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Manufacture of incandescent electric lamps	501,172	July 11	1027	241	64	201
Thomson, Elihu, Swampscott, Mass., assignor to Thomson Electric Welding Company, of Maine. Shaping and spinning metals by electricity	501,547	July 18	1617	405	64	327
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Fusible cut-out	502,330	Aug. 1	133	30	64	590
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Regulator for electric generators	502,788	Aug. 8	931	226 227	64	752
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. System of electrical distribution	508,646	Nov. 14	1088	269	65	978
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-lighting system	508,647	Nov. 14	1092	270	65	979
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Lightning-arrester	508,648	Nov. 14	1094	270	65	979
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Protection for the insulation of dynamo-electric machines	508,649	Nov. 14	1095	270 271	65	980
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electrical transformer	508,650	Nov. 14	1099	271	65	980
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Contact apparatus	508,651	Nov. 14	1100	271	65	980
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric cut-out	508,652	Nov. 14	1101	272	65	980
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Insulating composition	508,653	Nov. 14	1104	272	65	981
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Cooling transformers	508,654	Nov. 14	1105	272	65	981
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric transformer	508,655	Nov. 14	1106	273	65	981
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	508,656	Nov. 14	1107	273	65	982
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Reactive coil	508,657	Nov. 14	1108	273	65	982
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Dynamo-electric machine or motor	508,658	Nov. 14	1109	273 274	65	982
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Leading-in wire for incandescent lamps	508,659	Nov. 14	1111	274	65	982
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Regulator for dynamo electric machines	509,499	Nov. 28	2561	619	65	1253
Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company, of New York. Electric-circuit breaker	490,178	Jan. 17	1885	491	62	417
Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company, of New York. Lightning-arrester	493,314	Mar. 14	864	220	62	1543
Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company, of New York. Detector for electric-current meters	508,660	Nov. 14	1112	274	65	982
Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company, of New York. Method of and means for compounding dynamo-electric machines	511,375	Dec. 26	2657	644 645	65	1945
Thomson, Elihu, Swampscott, assignor to Thomson-Houston Electric Company, Boston, Mass. Pole-piece for dynamo-electric machines	498,327	May 30	3136	782	63	1242
Thomson, Elihu, Swampscott, assignor to General Electric Company, Boston, Mass. Electric measuring-instrument	502,022	July 25	2377	597 598	64	477
Thomson, Elihu, Swampscott, assignor to General Electric Company, Boston, Mass. Winding coils for dynamo-electric armatures	503,445	Aug. 15	1998	496	64	959
Thomson, Elihu, Swampscott, assignor to General Electric Company, Boston, Mass. Electric meter	508,661	Nov. 14	1113	274	65	983
Thomson, Elihu, Swampscott, assignor to General Electric Company, Boston, Mass. Indicating apparatus for electric circuits	508,662	Nov. 14	1114	275	65	983
Thomson, Elihu, Swampscott, assignor to General Electric Company, Boston, Mass. Electric measuring-instrument	511,376	Dec. 26	2660	645	65	1945
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	493,739	Mar. 21	1566	399	62	1696
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Lightning-arrester	495,714	Apr. 18	1921	483	63	387
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Safety connection for induction-coil systems	496,918	May 9	869	229	63	794

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Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Safety appliance for systems of electric distribution	497,838	May 23	2336	{ 585 586 }	63	1086
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric switch	500,629	July 4	147	39	64	29
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Lightning-arrester	501,114	July 11	937	240	64	185
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Cut-out	506,383	Oct. 10	1021	254	65	207
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric soldering	496,019	Apr. 25	2381	603	63	489
Thomson, Elihu, and E. W. Rice, Jr., Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Electric-lighting system	496,455	May 2	106	99	63	638
Thomson, Elihu, Swampscott, and C. E. Harthan, Lynn, Mass., assignors to Thomson Electric Welding Company, of Maine. Automatic chain-welding machine	501,546	July 18	1604	{ 404 405 }	64	323
Thomson, Francis D., Wilkesburg, Pa. Label-holder	507,393	Oct. 24	2726	668	65	550
Thomson, George H., Sing Sing, N. Y. Drawbridge	496,074	Apr. 25	2473	{ 624 625 }	63	567
Thomson-Houston Electric Company. (See Bassett, Norman C., assignor.)						
Thomson-Houston Electric Company. (See Blackwell, Francis O., assignor.)						
Thomson-Houston Electric Company. (See Blood, John B., assignor.)						
Thomson-Houston Electric Company. (See Burnett and Doane, assignors.)						
Thomson-Houston Electric Company. (See Chase, Arthur T., assignor.)						
Thomson-Houston Electric Company. (See Ekström, Axel, assignor.)						
Thomson-Houston Electric Company. (See Elkins, William H., assignor.)						
Thomson-Houston Electric Company. (See Fiske, Jonathan P. B., assignor.)						
Thomson-Houston Electric Company. (See Hill, Warren S., assignor.)						
Thomson-Houston Electric Company. (See Hunter, Rudolph M., assignor.)						
Thomson-Houston Electric Company. (See Knight, Arthur P., assignor.)						
Thomson-Houston Electric Company. (See Mansfield and Baker, assignors.)						
Thomson-Houston Electric Company. (See Morris, Elmer P., assignor.)						
Thomson-Houston Electric Company. (See Parshall, Horace F., assignor.)						
Thomson-Houston Electric Company. (See Potter, William B., assignor.)						
Thomson-Houston Electric Company. (See Reist and Fiske, assignors.)						
Thomson-Houston Electric Company. (See Rice, Edwin W., Jr., assignor.)						
Thomson-Houston Electric Company. (See Riddell, John, assignor.)						
Thomson-Houston Electric Company. (See Rohrer, Albert L., assignor.)						
Thomson-Houston Electric Company. (See Rohrer and Mansfield, assignors.)						
Thomson-Houston Electric Company. (See Sperry, Elmer A., assignor.)						
Thomson-Houston Electric Company. (See Thomson, Elihu, assignor.)						
Thomson-Houston Electric Company. (See Thomson and Rice, assignors.)						
Thomson-Houston Electric Company. (See Van Depoele, Charles J., assignor.)						
Thomson Hydraulic Company. (See Thomson, John, assignor.)						
Thomson, John, Brooklyn, N. Y., assignor to Thomson Hydraulic Company, Newark, N. J. Stuffing-box for meters	503,884	Aug. 22	2693	675	64	1105
Thomson, John, Brooklyn, N. Y., assignor to Thomson Hydraulic Company, Newark, N. J. Differential gearing	507,695	Oct. 31	3249	795	65	661
Thomson, John, assignor of one-half to W. W. Tucker, Hartford, Conn. Milling-cutter	509,145	Nov. 21	1911	467	65	1149
Thomson, John L., Bayonne, N. J., assignor to Orford Copper Company, of New Jersey. Producing and separating sulphide of nickel	489,882	Jan. 10	1363		62	297
Thomson, John S., Melbourne, Victoria. Churn	501,324	July 11	1375	{ 343 344 }	64	263
Thomson, Metellus. (See Weston, Milton T., assignor.)						
Thomson Meter Company. (See Lambert, Frank, assignor.)						
Thomson, Robert, Tennallytown, D. C. Automatic file-holder	497,993	May 23	2589	648	63	1131
Thomson, Willard. (See Strattner, Frederick, assignor.)						
Thornburgh, Robert D. (See Branson, Thornburgh, and Starr.)						
Thornburgh, William, Cleveland, Ohio. Tilting-hoist	507,766	Oct. 31	3358	823	65	681
Thorne, James, Oregon City, Oreg. Index	506,566	Oct. 10	1325	{ 331 332 }	65	266
Thorne, Lawrence C., assignor of one-half to J. V. Emmitt, Sterling, Ill. Blind-stop	492,122	Feb. 21	1687	430	62	1116
Thorne, Lawrence C., Rock Falls, assignor of one-half to J. V. Emmitt, Sterling, Ill. Ignition-charger for gasoline-stoves	496,372	Apr. 25	2956	738	63	598
Thornley, William. (See Sandford, Thornley, and Silcocks.)						
Thornton, Rodolph D., Brooklyn, N. Y. Awning	493,130	Mar. 7	557	138	62	1469
Thornton, William, Chattanooga, Tenn. Clothes-wringer	504,483	Sept. 5	277	72	64	1322
Thornycroft, John I., London, England. Apparatus for lessening the rolling of vessels	507,944	Oct. 31	3649	{ 903 904 905 }	65	736
Thorp, Adelbert H., Toledo, Ohio. Railway time and block signal	507,510	Oct. 24	2917	717	65	586
Thorp, James, Lawrence, assignor of one-half to E. A. Leigh & Co., Boston, Mass. Stop-motion for combing-machines	506,803	Oct. 17	1708	{ 429 430 431 }	65	350
Thorp, Job, Westerly, R. I. Hot-water heater	504,852	Sept. 12	899	{ 231 232 }	64	1454
Thorp, Thomas, Whitefield, England. Regenerative gas-burner	496,586	May 2	303	81, 82	63	674
Thorp, Thomas J., assignor of one-half to G. E. Dawson and J. C. Thomas, Chicago, Ill. Elevator	495,234	Apr. 11	1148	{ 287 288 }	63	231
Thorp, Thomas J., assignor of three-fourths to G. E. Dawson, J. C. Thomas, and C. S. Wells, Chicago, Ill. Self-propelling vehicle	495,531	Apr. 18	1624	408	63	338
Thorsen, Thor. A., assignor to S. H. Sinclair Company, Chicago, Ill. Starching-machine	505,282	Sept. 19	1596	{ 415 416 }	64	1597
Thost & Richter. (See Zöllner, Theodor, assignor.)						
Thost, Wilhelm O., Zwickau, Germany. Smoke-consuming furnace	497,841	May 23	2344	587	63	1088
Threlfall, Richard, Sydney, New South Wales. Electro-magnetic reciprocating motor	509,705	Nov. 28	2882	{ 697 698 }	65	1344
Throckmorton, Isaac N. (See Conway, Harrison V., assignor.)						
Throop, Frank. (See Winston and Throop.)						
Thrun, Ferdinand J., Romeo, Wis. Boiler	489,344	Jan. 3	555	{ 150 151 }	62	119
Thuner, Charles, St. Louis, Mo. Table for mitering and joining moldings, &c	500,042	June 20	2146	520	63	1793
Thum, Fredrick A., Newark, N. J. Electric switch	501,173	July 11	1028	260	64	202
Thum, Otto and W., Grand Rapids, Mich. Sticky fly-paper	510,727	Dec. 12	1500	371	65	1705
Thum, William. (See Thum, Otto and W.)						
Thurman, John S., Indianapolis, Ind. Fuel-oil burner	505,931	Oct. 3	199	50	65	39

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Thurmond Car Coupling Company. (See McKeen, Thomas L., assignor.)						
Thurnan, Edward, <i>et al.</i> (See Pieper, Vincenz T., assignor.)						
Thurston, Charles H., assignor to F. W. Thurston, Boston, Mass. Suspension-hook	490,596	Jan. 31	3240	827	62	708
Thurston, Douglas A., Toronto, Canada. Window-jack	491,146	Feb. 7	131	35	62	774
Thurston, Edwin L., Cleveland, Ohio, assignor to L. Watson, Denver, Colo. Puzzle	490,689	Jan. 31	2748	707	62	612
Thurston, Frank W. (See Thurston, Charles H., assignor.)						
Thurston, George A., Brooklyn, assignor to Crandall & Godley Company, New York, N. Y. Ice-cream can	489,998	Jan. 17	1555	414	62	356
Thurston, James B., Concord, N. H. Shade-holding mechanism	493,879	Mar. 21	1778	454	62	1736
Thurston, James B., Concord, N. H. Interlocking-joint ferrule	505,579	Sept. 26	2135	541	64	1712
Thurston, Robert H., Ithaca, N. Y. Engine-governor	504,953	Sept. 12	1058	271	64	1483
Thurston, Spencer D., Camden, N. J. Indicating system	509,459	Nov. 28	2499	603 604	65	1271
Thurtle, George E. (See Thurtle, William and G. E.)						
Thurtle, William and G. E., Bay City, Mich. Railway-switch	491,500	Feb. 7	714	181	62	886
Thyill, Arthur K., assignor to Electric Cutter Company, New York, N. Y. Overhead support for conducting-wires of cloth-cutting machines	508,534	Nov. 14	918	225	65	944
Thyill, Arthur K., assignor to Electric Cutter Company, New York, N. Y. Cloth-cutting machine	511,562	Dec. 26	2955	720	65	1999
Thyill, Arthur K., assignor to Electric Cutter Company, New York, N. Y. Cloth-cutting machine	511,563	Dec. 26	2956	720	65	1999
Tibbals, Halsey J., Philadelphia, Pa. Label	493,641	Feb. 28	2926	626	62	1301
Tibbals, Horace W., Detroit, Mich. Sad-iron	507,338	Oct. 24	2633	648	65	532
Tibbals, Wallace, Lytle, Ohio. Wire fence	504,057	Aug. 29	2985	746	64	1176
Ticknor, James S. (See Wilson, Alfred E., assignor.)						
Tideman, Henry, Detroit, Mich. Toy pistol	496,545	May 2	241	64	63	663
Tideman, Henry, Detroit, Mich. Umbrella-stand	502,331	Aug. 1	135	31	64	590
Tidmarsh, Harry E. (See Wells and Tidmarsh.)						
Tiedge, Peter, Chicago, Ill. Grill for door or window openings	509,971	Dec. 5	209	48	65	1449
Tiefel, Leonard C., assignor of one-half to H. R. Lewis, Rochester, N. Y. Extension-ladder	505,072	Sept. 12	1266	325	64	1523
Tiemann, Frederick, Rice, Minn. Car-coupling	502,505	Aug. 1	431	103	64	645
Tiers, Cornelius. (See Pendleton and Tiers.)						
Tietjen, George H., San Francisco, Cal. Apparatus for transferring or stenciling upon transparent or other material	493,315	Mar. 14	865	220 221	62	1543
Tiffany, George S., Tecumseh, Mich. Brick or tile machine	507,248	Oct. 24	2476	610	65	502
Tiffany, Henry B., Clyde, Ohio. Attachment for wall-paper-trimming machines	489,345	Jan. 3	557	151	62	120
Tiffany, John N., assignor of one-half to R. Crockett, San Diego, Cal. Adjustable support for bracket-tables	493,605	Mar. 14	1342	342	62	1636
Tiffany, Oscar F., and W. L. Brewer, Rochester, N. Y. Letter-file	509,972	Dec. 5	210	49	65	1449
Tilbery, Scott. (See Bendure and Tilbery.)						
Tilden, Burt E., assignor to B. E. Tilden Co., Chicago, Ill. Car-replacer	489,109	Jan. 3	198	53	62	46
Tilden Co., B. E. (See Tilden, Burt E., assignor.)						
Tilden, Henry, Minneapolis, Minn. Stove	498,826	June 6	130	32	63	1415
Tilden, James A., Hyde Park, Mass., assignor to Hersey Manufacturing Company, Portland, Me. Disk water-meter	489,208	Jan. 3	345	97	62	79
Tilden, James A., Hyde Park, Mass., assignor to Hersey Manufacturing Company, Portland, Me., and Boston, Mass. Malting	500,305	June 27	2603	636	63	1884
Tilger, Carl, and P. Brenner, Dusseldorf, Germany. Cover-fastening for pots	508,066	Nov. 7	135	38	65	784
Tiller, George S. (See Kirkpatrick, Tiller, and Kirkpatrick.)						
Tillgren, Bengt R., Rockland, Mass. Shoe	500,681	July 4	238	63	64	45
Tillinghast, Pardon W., Providence, R. I. Pneumatic tire	497,971	May 23	2554	637	63	1124
Tillison, Hosea R. (See Woods and Tillison.)						
Tillison, Hosea R., assignor to S. A. Woods Machine Company, Boston, Mass. Friction-clutch device	495,440	Apr. 11	1474	371	63	290
Tillison, Hosea R., assignor to S. A. Woods Machine Company, Boston, Mass. Loose pulley	496,919	May 9	873	229	63	795
Tillman, John L. (See Chausse, Alfred J., assignor.)						
Tilloy, Charles A., Lille, France. Grate-bar	490,932	Jan. 31	3137	804 805	62	6-9
Tilman, Joseph M., assignor of one-half to J. W. Compton, Evansville, Ind. Kitchen utensil	504,376	Sept. 5	104	26	64	1290
Tilstone, George, Church, England. Machine for stretching or removing creases from woven fabrics	504,001	Aug. 29	2903	727 728	64	1161
Tilton, James B., Haverhill, Mass. Heel-nailing machine	498,092	May 23	2740	684 685	63	1157
Tilton, Joseph, <i>et al.</i> (See Shaw, Truman A., assignor.)						
Tilton, Wheelock G., assignor of one-half to O. H. Gardner, New Bedford, Mass. Shaft-coupling	502,686	Aug. 1	750	181	64	704
Timberlake, B. B. (See Ligon, Thomas S., assignor.)						
Timby, Theodore R., Washington, D. C. Process of and apparatus for aging wines, spirits, or other liquors	496,759	May 2	583	156	63	724
Time Stock Feeder Company. (See Weller, John H., assignor.)						
Time Stock Feeder Company. (See Weller, William L., Jr., assignor.)						
Timmerman, William T., assignor to himself and J. W. Alexander, New York, N. Y. Shoe-lace fastener	490,997	Jan. 31	3242	828	62	709
Timmis, Edgar W., London, England. Apparatus for casting battery-plates	506,281	Oct. 10	845	208	65	172
Timmis, Illius A., London, England. Railway signaling	503,505	Aug. 15	2098	524	64	977
Timmis, Illius A., London, England. Electro-magnet	506,282	Oct. 10	846	208	65	173
Timms Automatic Car Coupler Company. (See Timms, James, assignor.) (Reissue.)						
Timms, James, Columbus, Ohio. Unlocking-lever for car-couplings	491,388	Feb. 7	546	139	62	853
Timms, James, Columbus, Ohio. Dust-guard for axle-boxes	498,369	May 30	3210	799	63	1255
Timms, James, Columbus, Ohio. Draft device for cars	507,293	Oct. 24	2550	628	65	515
Timms, James, assignor to Buckeye Automatic Car Coupler Company, Columbus, Ohio. Buffer and end sill for cars	493,371	Mar. 14	951	244 245	62	1561
Timms, James, assignor to Buckeye Automatic Car Coupler Company, Columbus, Ohio. Car-coupling	496,920	May 9	875	230	63	795
Timms, James, assignor to Timms Automatic Car Coupler Company, Columbus, Ohio. Car-coupling. (Reissue)	11,348	June 27	2973	730	63	1952
Timolat, James G., and C. Jacobson, New York, N. Y. Portable drill	506,954	Oct. 17	1956	484 485	65	396
Timpfe, August, Denver, Colo. Beer-wagon	495,441	Apr. 11	1476	371	63	290
Tinder, James H. (See McNeill and Tinder.)						
Tiner, John F., Sutherland Springs, assignor of one-half to J. B. Polley, L. P. Hughes, E. D. Mayes, W. W. Polley, and E. M. Goldstein, Floresville, Tex. Car-coupling	506,955	Oct. 17	1957	485	65	396

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Tiner, John F., Sutherland Springs, assignor of three-fifths to E. D. Mayes, J. W. Dickey, J. P. Tunstall, W. W. and J. B. Polley, and J. Griffith, Floresville, Tex. Wagon-tongue support	510,728	Dec. 12	1501	371	65	1706
Tingley, Albert C. (See Peirce, Horatio L., assignor.)						
Tingley, John, Brockton, Mass., assignor to Mascotte Invalid Lifting Chair Company, New York, N. Y. Lifting-machine or invalid-lifter.	503,105	Aug. 8	1448	357	64	847
Tinkham, Charles A., Brockton, Mass. Smoke-consuming furnace	497,392	May 16	1632	412 413	63	945
Tinkham, Cortland O., and O. B. Sims, Akron, N. Y. Machine for scouring and cleaning grain, nuts, or similar articles	505,010	Sept. 12	1156	296 297	64	1502
Tinkham, Lemuel B., Quincy, Mass. Electric lock	504,462	Sept. 5	241	63	64	1315
Tinkham, Lewis W., Mancelona, Mich., assignor to Oval Wood Dish Company, Delta, Ohio. Method of and machine for cutting wood dishes	497,932	May 23	2494	622 623	63	1114
Tinnerholm, August, Schenectady, N. Y. Electric soldering-iron and heater	500,681	July 4	239	63	61	45
Tinsley, Gottlieb F., New York, N. Y. Clutch mechanism for machines for working hides.	497,146	May 9	1212	310	63	854
Tinsley, Wyatt H., assignor of one-half to H. H. McKee, Homer, La. Fish-trap	492,123	Feb. 21	1689	421	62	1116
Tinsman, Samuel H., assignor to Morris Manufacturing Company, Morris, Ill. Sulky-plow.	496,458	May 2	111	30	63	639
Tinsman, Samuel H., and C. M. Gould, Morris, Ill. Railway-crossing alarm	498,587	May 30	3555	882	63	1317
Tippett, William L. (See Adcock, Tippet, and Moss.)						
Tippner, Alexander M., Dresden, Germany. Fastening for the covers of ice-cisterns	511,475	Dec. 26	2824	653	65	1974
Tipton, John, Hymera, Ind. Post-hole digger.	493,536	Mar. 14	1213	310	62	1609
Tirard, Louis J., Caen, France. Fire signaling or alarm mechanism	504,062	Aug. 29	2906	729	64	1162
Tirrell, Jacob P., Boston, assignor to H. O. Edgerton, Greenfield, Mass. Electric time-alarm.	489,423	Jan. 3	671	181 182	62	144
Tirrell, Jacob P., Boston, assignor to H. O. Edgerton, Greenfield, Mass. Valve-controlling clutch	489,424	Jan. 3	673	182	62	145
Titcomb, Charles B., San Francisco, Cal. Air-purifying and ventilating apparatus for railway-cars	506,749	Oct. 17	1619	407	65	333
Titman, James R., Lowell, assignor of two-thirds to C. M. Nolen, King's Mountain, and H. F. Forbes, Crowder's Creek, N. C. Railway-switch.	496,624	May 2	365	99 100	63	686
Titsworth, David E., et al. (See Brooks, John, assignor.)						
Titsworth, Joseph M., et al. (See Brooks, John, assignor.)						
Tittle, James, Johnstown, Pa. Water-back for furnaces	495,072	Apr. 11	851	218	63	178
Tittle, John B. E., Jewell, Ohio. Car-coupling	498,827	June 6	131	32	63	1435
Titus, James H., Tarentum, Pa. Photographic background	505,968	Oct. 3	258	69	65	51
Titus, John, Oyster Bay, and W. Titus, North Hempstead, N. Y. Cart for transporting telegraph-poles, &c.	504,377	Sept. 5	105	26, 27	64	1290
Titus, Odeon H., Wilmington, Del. Hominy-mill	489,723	Jan. 10	1133	293	62	250
Titus, William. (See Titus, John and W.)						
Tobacco Company. (See Munson, Albert L., assignor.)						
Tobelman, Henry A., Brooklyn, N. Y. Touch-regulator for pianos	510,729	Dec. 12	1503	371	65	1706
Tobey, Franklin O., Boston, assignor to J. W. Brooks, Petersham, principal trustee, and F. F. Stanley, associate trustee, Swampscott, Mass. Nailing-machine	502,212	July 25	2683	677	64	535
Tobey, Fred W., Grand Rapids, Mich. Desk-support	491,615	Feb. 14	916	231	62	947
Tobey, Fred W., Grand Rapids, Mich. Latch	498,413	May 30	3257	814	63	1266
Tobey, Fred W., Grand Rapids, Mich. Latch	502,789	Aug. 8	933	227	64	752
Tobey, Fred W., Grand Rapids, Mich. Door-fastener	508,999	Nov. 21	1668	411	65	1102
Tobey, Fred W., Grand Rapids, Mich. Desk-support	509,000	Nov. 21	1669	411	65	1102
Tobey, William B. (See Stanly and Tobey.)						
Tobias, Ferdinand, Munich, Germany. Ship's brake	507,856	Oct. 31	3518	865	65	711
Tobin, Jeremiah. (See Whiting, Edward A., assignor.)						
Tobin, John, assignor of one-half to P. J. Daemicke, Chicago, Ill. Scale and bristle detach- ing machine	493,454	Mar. 14	1075	276 277	62	1584
Tobin, John, assignor of one-half to P. J. Daemicke, Chicago, Ill. Butter-molding machine	510,453	Dec. 12	1010	242	65	1616
Todd Applegate Company. (See Todd, John T., assignor.)						
Todd & Co., Edward. (See Smith, James B., assignor.)						
Todd Cotton Harvester Company. (See Todd, George N., assignor.)						
Todd, Eldoras, Clavering, Canada. Belting	492,880	Mar. 7	172	42	62	1392
Todd, George N., assignor to Todd Cotton Harvester Company, Chicago, Ill. Picker-stem for cotton-harvesters	497,462	May 16	1743	440	63	964
Todd, George N., Chicago, Ill., assignor, by mesne assignments, to G. N. Todd, trustee, New York, N. Y. Picker-stem	502,241	July 25	2736	690	64	545
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois. Cotton-harvester	510,730	Dec. 12	1503	371 372	65	1706
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois. Cotton-harvester	510,731	Dec. 12	1506	372 373	65	1706
Todd, James A., Brooklyn, N. Y. Banjo or similar musical instrument	508,586	Nov. 14	1002	246	65	960
Todd, John T., Newman, assignor to Todd Applegate Company, Chicago, Ill. Recorder	499,610	June 13	1448	347 348	63	1658
Todd, Libanus M., assignor to Compress Wheel Company, Chicago, Ill. Method of and apparatus for forming compress-wheel rims	503,360	Aug. 15	1882	466 467	64	938
Todd, Marquis J., Buffalo, N. Y. Lever and locking mechanism therefor	508,784	Nov. 14	1284	320	65	1016
Todd, Marquis J., Corning, assignor to Pitts Agricultural Works, Buffalo, N. Y. Horse hay-rake	498,921	June 6	304	70, 71	63	1446
Todd, Matthew, assignor of two-thirds to W. J. Cowing and C. Thompson, New Bedford, Mass. Thill-coupling	501,115	July 11	938	240	64	185
Todd, Richard. (See Speight, Chapman, and Todd.)						
Todd, William N. (See Draper, William B., assignor.)						
Tolan, Lewis, Jr., and F. L. Morton, Philadelphia, Pa. Lock-nut	502,477	Aug. 1	380	91	64	636
Toledo Nut Lock Company. (See Mills, Arthur L., assignor.)						
Toler, Henry W., assignor of one-half to R. Y. Woods, Carthage, Ala. Car-coupling	508,192	Nov. 7	346	85	65	822
Tollin, Marie P. A., Paris, France. Strainer for oil or similar presses	510,732	Dec. 12	1510	373	65	1707
Tollner, Hugo, Brooklyn, N. Y. Book-carrier	509,631	Nov. 28	2767	667	65	1325
Tolman, Edward K., Worcester, Mass. Registering and canceling ballot-box	503,626	Aug. 22	2319	578	64	1032
Tolson, Richard. (See Jones and Tolson.)						
Tomb, Frank B., et al. (See Curry, James H., assignor.)						
Tomey, Francis S., Birmingham, England. Thermometer	507,857	Oct. 31	3520	866	65	712
Tomkinson, George, assignor to Tomkinson & Mills, Tipton, England. Annealing-furnace	492,594	Feb. 28	2449	609	62	1286
Tomkinson & Mills. (See Tomkinson, George, assignor.)						
Tomlin, William H. T., assignor to C. H. Mickel, Swedesborough, N. J. Cultivator	494,993	Apr. 4	723	184	63	138
Tomlinson, Ambrose, South Lawrence, assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	504,288	Aug. 29	3364	841	64	1248
Tomlinson, Andrew, Penfield, Ill. Wagon-tongue support	506,567	Oct. 10	1327	332	65	286

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Tomlinson, Francis D., <i>et al.</i> (See Morgan, Charles, assignor.)						
Tomlinson, James G., Birmingham, Ala. Car-signal	491,203	Feb. 7	232	59	62	792
Tomlinson, John M., Archdale, N. C. Harrow-tooth	511,664	Dec. 26	3123	763	65	2029
Tompkins, Cornelius B., Elmira, N. Y. Water-heater	496,673	May 2	452	{ 121 122 }	63	701
Tompkins, George W., assignor of three-fourths to J. F. Wares, Chicago, Ill. Draw-bar for cars	498,329	May 30	3138	782	63	1243
Tompsett, Henry T., <i>et al.</i> (See Hodgkinson, Thomas C., assignor.)						
Tone, William J., Locust Corner, Ohio. Thill-coupling attachment	501,812	July 18	2043	503	64	400
Toney, Jay, Marseilles, Ill. Hay-sling	500,168	June 27	2388	580	63	1847
Toney, Squire, assignor to International Sheathing Lath Company, Viroqua, Wis. Lath	507,859	Oct. 31	3523	866	65	712
Tonkin, John O., West End, near Berlin, Germany. Coin-freed folding chair	500,783	July 4	399	{ 105 106 }	64	74
Tonns, Lewis N., Eriastina, assignor of two-thirds to E. H. Hall, Brooklyn, and G. H. Allen, New York, N. Y. Spar for vessels	499,808	June 20	1777	431	63	1729
Toohy, James, Kansas City, Kans. Water-motor	493,569	Mar. 14	1276	{ 326 327 }	62	1622
Toomay, Oliver, Canal Dover, Ohio. Cover for pneumatic tires	499,859	June 20	1868	454	63	1743
Toomer, Isaac, West Lake, La. Machine for straightening and expanding saws	510,210	Dec. 5	618	145	65	1527
Toomey, John A., Toledo, Ohio. Type-writing machine	507,853	Oct. 31	3320	866	65	712
Toomey, Samuel, Canal Dover, Ohio. Sulky	499,860	June 20	1869	454	63	1744
Topham, George, Washington, D. C. Coin-purse	505,145	Sept. 19	1384	354	64	1557
Toppliff, George F., Boston, Mass., and F. B. Comins, Providence, R. I. Car-fender	489,134	Jan. 3	230	62	62	53
Toppin, Charles, Salem, Mass. Treating oils	498,588	May 30	3556		63	1317
Toquet, Benjamin L., Westport, assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Pulley	496,328	Apr. 25	2869	716	63	580
Toquet, Benjamin H., Westport, Conn. Drafting-compasses	511,177	Dec. 19	2311	566	65	1867
Torbert Nathaniel T., Laurel, Del. Kiln for drying lumber	505,011	Sept. 12	1158	297	64	1503
Torkelson, Reinhard T., assignor of one-half to J. C. Speirs, Worcester, Mass. Bicycle	496,803	May 2	662	175	63	737
Torkelson, Reinhard T., assignor to J. C. Spiers, Worcester, Mass. Pipe-wrench	509,408	Nov. 28	2387	579	65	1248
Tornblom, Emil. (See Brundin, Per Walfrid, assignor.)						
Tornwall, Perry A., assignor of one-half to T. W. Bramlitt, Okolona, Miss. Fan attachment for chairs	490,234	Jan. 17	1980	519	62	435
Toronto Reaper and Mower Company. (See Bayley, William, assignor.)						
Torr, Charles L., Petaluma, Cal. Binding attachment for sewing-machines	506,888	Oct. 17	1854	462	65	376
Torr, Josiah, <i>et al.</i> (See Marshall, William M., assignor.)						
Torrance, Francis J. (See Stifel, Torrance, and Grant.)						
Torrance, Robert, administrator. (See Armstrong, John B.)						
Torrance, Robert, administrator. (See Armstrong, Parker, and Vernon.)						
Torrey, Augustus, <i>et al.</i> (See Susemihl, Francis G., assignor.)						
Torrey, Francis B., Bath, Me. Sheave	499,611	June 13	1457	349	63	1660
Torrey, Francis B., Bath, Me. Casting rollers	508,785	Nov. 14	1287	320	65	1016
Torrey, Levi F., and J. La Sha, assignors to M. Torrey and S. La Sha, Syracuse, N. Y. Game counter and register for pool-tables	501,632	July 18	1750	436	64	351
Torrey, Margaret, <i>et al.</i> (See Torrey and La Sha, assignors.)						
Torrey, William F., Providence, R. I. Camera-shutter	498,963	June 6	378	90	63	1458
Torrey, William F., Auburn, assignor of one-half to Z. R. Tucker, Providence, R. I. Eraser-case	505,733	Sept. 26	2397	606	64	1759
Torrillon, Jean B., Clermont-Ferrand, France. Apparatus for removing amorphous cellulose and fiber from cocoanut-husks	496,075	Apr. 25	2474	625	63	506
Tortat, William R. M., Atchison, Kans. Show-tray for dried fruit	508,449	Nov. 14	764	188	65	914
Torsch, Edward L., Baltimore, Md. Button-fastener	491,788	Feb. 14	1179	295	62	999
Tostevin, Thomas, Council Bluffs, Iowa. Drafting-instrument	494,944	Apr. 4	651	166	63	125
Totman, Edward, <i>et al.</i> (See Blackshaw, Wilfrid W., assignor.)						
Totman, John J., and E. G. Wheeler, Amsterdam, N. Y. Chair-pad	491,325	Feb. 7	441	114	62	832
Totten & Hogg Iron and Steel Foundry Company. (See Freeman, Francis I., assignor.)						
Totten, Robert C., New York, N. Y. Car-wheel	509,409	Nov. 28	2388	579	65	1249
Toucey, Ferris D., assignor of three-fourths to F. Dunham, G. McNeil, and F. C. Johnson, Minneapolis, Minn. Rod-packing	491,029	Jan. 31	3303	843	62	732
Toucheux, Bernard, and J. Delorieux, San Francisco, Cal. Mosaic and tile press	501,584	July 18	1669	417	64	337
Tourasse, Paul, La Broidoire, France. Making wire for paper-machines	502,067	July 25	2482	624	64	496
Tourasse, Paul, assignor to Society Paul Tourasse & Company of the Republic of France, La Broidoire, France. Wire-fabric machine	499,153	June 6	686	{ 164 165 }	63	1510
Toussachen, Paul, Paris, France. Registering device for photographic cameras	492,642	Feb. 28	2527	626	62	1301
Tousey, Moses S. (See Climer, Frank O., assignor.)						
Tousley, Edgar M., Jamestown, N. Y. Trolley-wheel	501,548	July 18	1621	405	64	328
Towel, Samuel A., assignor of one-half to J. B. Lanier, Salisbury, N. C. Grain-ventilator	501,116	July 11	939	{ 240 241 }	64	185
Tower, Augustus C. (See Tower, Justus D. and A. C.)						
Tower, Caleb E., assignor to Economist Plow Company, South Bend, Ind. Sulky-plow	510,733	Dec. 12	1510	{ 373 374 }	65	1707
Tower, Clinton A., assignor to National Malleable Castings Company, Cleveland, Ohio. Car-coupling	507,511	Oct. 24	2919	718	65	586
Tower, Daniel W., Grand Rapids, Mich. Tooth-brush	499,612	June 13	1459	349	63	1660
Tower, Daniel W., Grand Rapids, Mich. Exhibiting apparatus	511,104	Dec. 19	2186	537	65	1844
Tower, George A., assignor of one-half to E. V. Williams, Richmond, Va. Hose-hanger	508,786	Nov. 14	1287	321	65	1016
Tower, George M., Fitchburg, Mass. Valve-lock	492,313	Feb. 21	1987	495	62	1179
Tower, Justus D. and A. C., Mendota, Ill. Cultivator	489,346	Jan. 3	559	151	62	120
Towers, David I., New York, N. Y., assignor to N. Burgess, Highlands, N. J. Theatrical stage appliance	494,043	Mar. 21	2065	528	62	1790
Towle, Felix S., assignor to J. E. Hammill, New York, N. Y. Bottle-stopper	499,898	June 20	1932	469	63	1756
Towle, Frederick, Detroit, Mich. Merchandise-seller	491,147	Feb. 7	132	35, 36	62	774
Towle, George C., Hyde Park, Mass. Type-writing machine	496,496	May 2	161	46	63	648
Towle, James, Greenville, Mich. Commode	499,310	June 13	929	226	63	1566
Towle, William H., Minneapolis, Minn. Safety-stop for engines	498,330	May 30	3140	783	63	1243
Towler, Willard A., Detroit, Mich. Hook and eye	501,633	July 18	1753	436	64	351
Towne, Enoch H., Worcester, Mass. Registering and canceling ballot-box	489,169	Jan. 3	282	79	62	65
Towne, Enoch H., Worcester, Mass. Registering ballot-box	509,410	Nov. 28	2391	{ 579 580 }	65	1249
Towne, Frank H., Montpelier, Vt. Checkrein-loop	498,964	June 6	380	91	63	1459
Towne, Henry R., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Rotating automatic machine-tool	489,398	Jan. 3	631	{ 170 171 }	62	136
Towne, William H., Worcester, Mass., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental-disk holder	506,350	Oct. 10	958	238	65	194

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Towner, F. M., <i>et al.</i> (See Forsyth, Henry C., assignor.)						
Townsend, Emory L., Los Angeles, Cal. Manufacture of hose-couplings	493,316	Mar. 14	867	221	62	1543
Townsend, James L., Fulmore, N. C. Stalk-chopper	489,047	Jan. 3	104	29	62	26
Townsend, John J., Portsmouth, Va., assignor to Townsend Marine Invention Company, Baltimore, Md. Automatic recording-compass. (Reissue.)	11,380	Nov. 7	680	167	65	884
Townsend, Louis, Evansville, Ind. Harness-suspending device	503,814	Aug. 22	2602	650	64	1087
Townsend, Louis, assignor of one-half to E. Grill, Evansville, Ind. Wire shears	506,568	Oct. 10	1327	332	65	266
Townsend Marine Invention Company. (See Townsend, John J., assignor.) (Reissue.)						
Towse, William R., Columbus, Ohio. Holder for sewing-machine covers	492,851	Mar. 7	121	30	62	1381
Towson, Morris S., Cleveland, Ohio, assignor to Love Electric Traction Company, Chicago, Ill. Railway-rope	490,690	Jan. 31	2749	708	62	612
Toye, William H. R., Philadelphia, Pa., assignor to Simultaneous Chromogravure Printing Machine and Manufacturing Company, Camden, N. J. Offset mechanism for printing-machines	503,391	Aug. 15	1926	478	64	946
Trabue, Lyman. (See Trabue, Paul and L.)						
Trabue, Paul and L., Girard, Ill. Baling-press	511,665	Dec. 26	3124	763	65	2029
Tracy, Asabel B., Mayville, N. Y. Horseshoe	496,760	May 2	584	156	63	724
Tracy, Harriet R., New Brighton, N. Y. Shuttle-actuating mechanism for sewing-machines	493,131	Mar. 7	558	139	62	1469
Tracy, Henry, Chicago, and H. Noble, Fulton, Ill. Self-closing and self-locking switch	507,187	Oct. 24	2372	585	65	483
Tracy, Henry, Chicago, and H. Noble, Fulton, Ill. Lock	507,188	Oct. 24	2375	586	65	484
Tracy, John E., and A. N. Graham, Chicago, Ill. Ironing-board	506,283	Oct. 10	847	209	65	173
Tracy, John M., New York, N. Y., and G. S. Hodges, Orchard Lake, Mich. Photographic camera	494,354	Mar. 28	2590	651	62	1902
Tracy, William H. H., Troy, assignor of one-half to J. A. Scriven, New York, N. Y. Sewing-machine	498,331	May 30	3141	783	63	1243
Tracy, William H. H., Troy, assignor of one-half to J. A. Scriven, New York, N. Y. Sewing-machine	498,332	May 30	3144	784	63	1244
Trafford, Wesley, New York, N. Y. Electric signaling apparatus	492,545	Feb. 28	2372	590	62	1270
Trageser, Albert F., New York, N. Y. Apparatus for distilling and concentrating glycerine and heavy oils	510,734	Dec. 12	1512	374	65	1707
Trainer, John H. B. (See Ginter and Strous, assignors.)						
Trammell, Erasmus R., Lakeland, Fla. Car-coupling	490,592	Jan. 24	2556	657	62	560
Traphagen, William H., assignor to Emerson, Talcott & Co., Rockford, Ill. Cultivator	504,406	Sept. 5	151	39, 40	64	1298
Traphagen, William H., assignor to Emerson, Talcott & Co., Rockford, Ill. Gate for elevators	504,407	Sept. 5	154	40, 41	64	1299
Trapp, Edward A., Paterson, N. J. Dumping-car	490,324	Jan. 24	2144	559	62	480
Trapp, Edward A., Paterson, N. J. Guard-rail for railways	490,325	Jan. 24	2147	560	62	480
Trapp, Edward A., Paterson, N. J. Dumping-car	493,317	Mar. 14	868	222	62	1543
Traut & Hine Manufacturing Company. (See Adams, George E., assignor.)						
Traut & Hine Manufacturing Company. (See Richards, Hubert P., assignor.)						
Traut, Justus A., New Britain, Conn. Spirit-level	511,377	Dec. 26	2662	645	65	1945
Traut, Justus A., assignor to Stanley Rule and Level Company, New Britain, Conn. Marking-gage	504,003	Aug. 29	2908	729	64	1162
Trautman, Adam, assignor of two-thirds to A. W. Ball and C. A. Allen, Galion, Ohio. Car-coupling	490,604	Jan. 24	2578	664	62	565
Traver, Adelbert L., Mellenville, N. Y. Machine for sewing looped fabrics	490,417	Jan. 24	2290	595	62	508
Traver, Adelbert L., Mellenville, N. Y. Attachment for machines for sewing looped fabrics	502,478	Aug. 1	381	91, 92	64	636
Traver, Jeremiah F., Newburg, N. Y. Grease-arrester for steam engines or boilers	499,059	June 6	551	130	63	1427
Travers, Herman R. (See Welch, Travers, and Petersen.)						
Travers, Vincent P., New York, N. Y. Hammock-stretcher	492,852	Mar. 7	122	31	62	1381
Travers, Vincent P., New York, N. Y. Combined hammock-stretcher and awning-support	495,532	Apr. 18	1627	409	63	338
Traves, Charles E., Los Angeles, Cal. Lubricator	503,506	Aug. 15	2100	525	64	977
Travis, Charles L., Minneapolis, Minn. Stock-car	499,311	June 13	931	226	63	1567
Travis, Charles L., Minneapolis, Minn. Railway-rail	510,391	Dec. 5	909	218	65	1583
Travis, Charles L., assignor to Minneapolis Electro Matrix Company, Minneapolis, Minn. Matrix-making machine	496,373	Apr. 25	2957	738	63	598
Travis, Charles L., Minneapolis, Minn., assignor to American Change and Register Company, Chicago, Ill. Change making and delivering device	502,242	July 25	2737	691	64	545
Travis, James, Jr., Cascade, Mont. Bag-holder	503,627	Aug. 22	2321	578	64	1032
Travis, Marion H., Camden, N. J. Spinning-top	505,969	Oct. 3	259	69	65	51
Travis, William D. T., Burlington, N. J. Axle-bearing and hub	498,589	May 30	3558	882	63	1317
Treat, Charles H., and A. B. Banghart, Baltimore, Md.; said Banghart assignor to said Treat. Machine for pressing wood dishes	489,399	Jan. 3	634	172	62	136
Treat, Joseph A., Stuart, Iowa. Cash register and indicator	510,211	Dec. 5	620	145	65	1527
Trebbin, Max, Berlin, Germany. Nail-trimmer	490,377	Jan. 24	2234	581	62	498
Trecy, Laurence J., assignor of five-eighths to T. Albes and A. M. Blinks, St. Louis, Mo. Smoke-consuming furnace	498,197	May 23	2913	724	63	1187
Tredegar Company. (See Johnson, John W. R., assignor.)						
Tredgway, John W., and J. Wirth, Philadelphia, Pa. Recoil-check for firearms	490,129	Jan. 17	1815	474	62	404
Tregoning, Charles, New York, N. Y. Lubricator	491,389	Feb. 7	547	139	62	853
Treiber, Theodore R., Chicago, Ill. Attachment for bath-tubs	492,949	Mar. 7	278	71	62	1414
Treiber, Theodore R., Chicago, Ill. Waste-pipe	498,093	May 23	2742	685	63	1159
Treier, Friedrich, Vienna, Austria-Hungary. Penholder-regulator	509,632	Nov. 28	2768	667	65	1323
Tremain, Charles W., Portland, Oreg. Stamp	502,839	Aug. 8	1016	247	64	768
Tremain, James K. (See Schwab, Sercomb, and Tremain.)						
Tremmel, Leonard, Walton, N. Y. Cellar-window	500,169	June 27	2390	580	63	1848
Tremper, Frank E., San Francisco, Cal., assignor to Safety Vapor Engine Company of New Jersey. Explosive engine	495,281	Apr. 11	1229	307	63	245
Tremper, Frank E., New York, N. Y., assignor to Safety Vapor Engine Company, of New Jersey. Electric igniting device for gas-engines	503,016	Aug. 8	1309	320	64	821
Trench, Charles, Boston, Mass. Oil-burner	498,198	May 23	2913	725	63	1187
Trench, Charles, assignor to Trench Lamp Company, Boston, Mass. Oil-burner	497,842	May 23	2345	588	63	1088

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Trench Lamp Company. (See Trench, Charles, assignor.)						
Trent, Lamartine C., <i>et al.</i> (See Allen, Charles M., assignor.)						
Trent, Lamartine C., Salt Lake City, Utah Ter., assignor of two-thirds to W. J. Chalmers and C. S. Leeds, Chicago, Ill. Stone-cutter	498,995	June 6	442	104	63	1468
Trent, Thomas A., Jr., Des Moines, Iowa. Adding-machine	508,450	Nov. 14	765	189	65	914
Trenton Iron Company. (See Dickinson, Joseph H., assignor.)						
Trentowsky, Albert E., St. John, Canada. Sifting attachment for stoves	501,748	July 18	1341	480	64	383
Trépreau, Henri, Angers, France. Speed-multiplying mechanism for cycles	502,332	Aug. 1	136	31	64	590
Trepus, William H., Chicago, Ill. Stovepipe-hanger	502,150	July 25	2583	649	64	516
Trethewey Manufacturing Company. (See Trethewey, Samuel, assignor.)						
Trethewey, Samuel, assignor to Trethewey Manufacturing Company, Pittsburg, Pa. Shearing-machine	490,777	Jan. 31	2889	741	62	640
Trethewey, Samuel, assignor to Trethewey Manufacturing Company, Pittsburg, Pa. Clutch	495,686	Apr. 18	1872	470	63	379
Trethewey, Samuel, assignor to Trethewey Manufacturing Company, Pittsburg, Pa. Clutch	495,687	Apr. 18	1874	470	63	380
Trehella, William, Newbury, Victoria. Hanger	507,394	Oct. 24	2727	669	65	550
Trexler, David L., assignor of three-fourths to R. L. Payne, Sr., and Jr., and J. B. Smith, Lexington, N. C. Bed-brace	489,347	Jan. 3	561	152	62	120
Tribble, Joel P., <i>et al.</i> (See Kelley, Calhoun L., assignor.)						
Trice, William E., assignor to Self Adjusting Shoe Company, St. Louis, Mo. Sole	490,998	Jan. 31	3243	828	62	709
Trick, Philip, Crestline, Ohio. Wire-fence machine	495,533	Apr. 18	1627	409	63	339
Triggs, Harry A. (See Woltmann and Triggs.)						
Trillat, Jean A., Paris, France. Preserving food	507,084	Oct. 17	2165		65	433
Trillich, Heinrich, assignor to Kathrein's Malzkaffeeabriken Wilhelm & Brongier, Munich, Germany. Coffee-roasting apparatus	493,606	Mar. 14	1344	342	62	1636
Trilling, N. D., <i>et al.</i> (See Bryant, William H., assignor.)						
Trimble, Cairo D., Ottawa, Ill. Glory-hole furnace	509,146	Nov. 21	1913	468	65	1159
Trimble, James A., New York, N. Y. Street-car	498,333	May 30	3146	785	63	1244
Trimble, James A., New York, N. Y. Draw-bar for street-cars	498,334	May 30	3147	785	63	1244
Trimble, William D., Hanesville, Md. Insulator for electric wires	503,778	Aug. 22	2555	636	64	1078
Trimby, Thomas W., Rochester, N. Y. Shoe	498,965	June 6	380	91	63	1459
Trimmer, David S. (See Stevens, Samuel J., assignor.)						
Trinder, Henry, Worcester, Mass. Last	501,699	July 18	1858	462	64	369
Triphagen, Charles H., assignor of two-thirds to W. W. Terreff and C. L. Ramsey, Portland, Mich. Foot-guard for railway-frogs	492,199	May 23	2914	725	63	1188
Triplett, Leonidas, Jr., and J. Fry, Mount Jackson, Va. Car-coupling	504,408	Sept. 5	156	41	64	1299
Tripp, Augustus F., assignor to S. Shepard & Co., Buffalo, N. Y. Milk-can	489,644	Jan. 10	1014	264	62	226
Tripp, John W., Sedalia, Mo., assignor of one-third to M. B. Mason, Falls City, Nebr. Band-cutter and feeder	492,067	Feb. 21	1599	398	62	1098
Tripp, Thomas, Avon, Mass. Metallic packing	490,050	Jan. 17	1680	437 438	62	374
Tripp, Thomas, Avon, Mass. Metallic packing	490,051	Jan. 17	1682	438	62	375
Tripp, Thomas, Avon, assignor, by mesne assignments, to W. G. Means, Boston, Mass., and A. Blood, Manchester, N. H. Electric-car truck	489,883	Jan. 10	1365	354 355	62	298
Tripp, William J., New York, N. Y. Locomotive	511,564	Dec. 26	2958	720 721	65	1999
Trippie, Merrill H., Baltimore, Md., assignor of two-thirds to D. M. Harrison. Fan for vehicles	491,454	Feb. 7	652	163	62	872
Trisendorfer, Maurice, New York, N. Y. Combined dress stay and fastener	504,004	Aug. 29	2910	729	64	1162
Trix, John. (See Austin, Eugene, assignor.)						
Troast, William F., assignor to himself, S. R. Slaymaker, and J. F. Barry, Lancaster, Pa. Padlock	496,921	May 9	875	230	63	795
Troesch, Charles A., Jersey City, N. J. Tray for rings	499,264	June 13	853	204	63	1552
Trogon, Como, Paris, Ill. Game apparatus	491,298	Feb. 7	395	101	62	822
Trojan Button Fastener Company. (See Ham, Albert W., assignor.)						
Trojan Car Coupler Company. (See Renshaw, Alfred H., assignor.)						
Tropp, Bernhard, assignor of one-half to G. O. Wright, New York, N. Y. Electric lighter	500,357	June 27	2690	660	63	1900
Trotter, Andrew W., Petersburg, Ind. Furrow-closing attachment for corn-planters	491,390	Feb. 7	549	139	62	853
Trout, Amos. (See Wollé and Trout.)						
Trout, Emerson W., assignor of two-thirds to S. L. Jacques and F. B. Wemple, Detroit, Mich. Hat, coat, and umbrella rack	500,632	July 4	152	40	64	30
Trout, Frank B., Detroit, Mich. Locking hat-rack	490,326	Jan. 24	2149	561	62	481
Trout, William H. (See Hinkley, Hanson, and Trout.)						
Trouvé, Gustave, Paris, France. Fountain	490,378	Jan. 24	2235	581 582	62	498
Trouvé, Gustave, Paris, France. Luminous fountain	492,999	Mar. 7	357	90	62	1430
Trow, William A. (See Van Ness, Albert, assignor.)						
Trowbridge, Stephen A. (See Twitt, Charles E., assignor.)						
Trowbridge, Stephen A., and C. E. Twitt, Ravenna, Ohio. Clutch	505,545	Sept. 26	2057	525	64	1696
Troxell, Felix J., Lock Haven, Pa. Hedge fence	502,058	July 25	2435	613	64	487
Troxler, Gustavus, Jr., Newark, N. J., assignor to Troxler Novelty Introduction Company, of New Jersey. Coin-controlled striking and strength-testing machine	495,571	Apr. 18	1687	425 426	63	350
Troxler Novelty Introduction Company. (See Troxler, Gustavus, Jr., assignor.)						
Troy, Robertus F. (See Hicks and Troy.)						
Tuax, George E., Denver, Colo. Boiler-cleaner	504,426	Sept. 5	188	49	64	1306
Trude, Frank E., Amboy, Ill. Clothes-drier	496,961	May 9	928	243	63	805
True, George A., Detroit, Mich. Sand-screen	509,706	Nov. 28	2886	698	65	1344
True, Laforest P., Clinton, Me. Can	490,418	Jan. 24	2292	595	62	508
True, Moses E., Batavia, N. Y. Crosscut-saw handle	490,691	Jan. 31	2751	708	62	613
True, Richard S., assignor to R. S. True Company, Syracuse, N. Y. Bicycle-saddle	495,442	Apr. 11	1476	372	63	291
Trumble, Chauncey B., assignor of one-half to H. G. Moe, Groton, N. Y. Vegetable-chopper	500,695	July 4	261	71	64	49
Trumbull, Emmons T., <i>et al.</i> (See Lewis, Edward D., assignor.)						
Trumbull, George A., Bellevue, assignor of one-half to N. R. Brice, Covington, Ky. Wire-connector	508,587	Nov. 14	1002	246	65	960
Trumbull, Morice C., <i>et al.</i> (See Lewis, Edward D., assignor.)						
Trump, John G., <i>et al.</i> (See Heinlein, John F., assignor.)						
Trundle, Milton, Kansas City, Mo. Mail-bag hanger	505,863	Oct. 3	97	26	65	20
Truslow, Louis B., Milburn, N. J. Nursing-bottle nipple	497,994	May 23	2590	648	63	1131
Tryon, Henry P., Sedalia, Mo. Socket-wrench	494,994	Apr. 4	724	184	63	139
Tryon, John, <i>et al.</i> (See Harper, Henry, assignor.)						
Tschopp, Johann H., Ziefen, Switzerland. Shedding mechanism for looms	510,657	Dec. 12	1392	341 342	65	1685
Tubbesing, Frank R., Quincy, Ill. Dashboard	490,692	Jan. 31	2752	708	62	613

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Tubular Lock Syndicate. (See Biggs, Frederick J., assignor.)						
Tubular Twin Screw Amidships Propulsion Company. (See Richardson, Frederic W., assignor.)						
Tueck, Marie, New York, N. Y. Breast-supporter	494,397	Mar. 28	2653	667	62	1914
Tucker, Andrew. (See Nottingham and Tucker.)						
Tucker, Carrie B., et al., executors. (See Roberts, Cyrus.)						
Tucker & Dorsey Manufacturing Company. (See Dorsey, Robert L., assignor.)						
Tucker, E. H., et al. (See Weare, Enoch W., assignor.)						
Tucker, Edwin J. (See Gerhard, Henry E. T., assignor.)						
Tucker, Frank W., Winthrop, assignor of one-half to F. F. French, Winchester, Mass. Wheel-tire	497,995	May 23	2591	648	63	1131
Tucker, George, assignor, by mesne assignments, of one-half to A. Shoup, Los Angeles, Cal. Attachment-holder for sewing-machines	503,222	Aug. 15	1652	405	64	897
Tucker, Gilbert W. (See Reniff and Tucker.)						
Tucker, John G. D., Perrysville, Ohio. Elevated railway	493,132	Mar. 7	559	{ 139 140 }	62	1469
Tucker, Lorenzo B., assignor of one-half to W. R. and R. C. Omohundro, Chicago, Ill. Skipping-rope	498,753	May 30	3364	952	63	1371
Tucker, Mina, et al. (See Lattimore, Daniel J., assignor.)						
Tucker, Stephen D., et al. (See Crowell, Luther C., assignor.)						
Tucker, Stephen D., et al. (See Shattuck, Edwin L., assignor.)						
Tucker, Thomas, Sereno, Mo. Packing-box lid	505,012	Sept. 12	1160	298	64	1503
Tucker, William W. (See Thomson, John, assignor.)						
Tucker, William W., Hartford, Conn. Screw-cutting machine	500,043	June 20	2147	{ 520 521 }	63	1793
Tucker, Zachariah R. (See Torrey, William F., assignor.)						
Tuffs, John H. (See Wood and Tuffs.)						
Tuffs, John H., assignor of one-half to A. C. Wood, Syracuse, N. Y. Gas-furnace	492,367	Feb. 21	2072	{ 517 518 }	62	1195
Tufts, Harry W., North Attleborough, Mass. Snap-hook	503,446	Aug. 15	1999	496	64	959
Tufts, Lewis C., New York, N. Y. Automatic fire-shutter	499,647	June 13	1507	361	63	1668
Tuggle, John W., Sheltonville, Ga. Seed-planter	492,479	Feb. 28	2254	563	62	1245
Tuley, William W., executor. (See Harris, Frank M.)						
Tuller, Wilbur E. (See Cleveland and Tuller.)						
Tullis, John K., Glasgow, Scotland. Leather link-belt	499,613	June 13	1461	349	63	1660
Tullis, John T., assignor of one-half to J. Burress, Chip, Ark. Cotton-seed grinder	503,259	Aug. 15	1706	419	64	907
Tullis, Lyman O., and J. M. Cox, Athens, Ohio. Sad-iron	498,370	May 30	3212	799	63	1255
Tully, H. Clinton, Mechanicsburg, Ohio. Bale-tie	499,809	June 20	1778	431	63	1729
Tunnard, Henry S., Rugby, and A. M. Keays, Sutton, England. Thermostat	509,056	Nov. 21	1749	432	65	1118
Tunniff, John C., Galesburg, assignor to H. H. Perkins Manufacturing Company, Kewanee, Ill. Corn-planter split wheel	506,750	Oct. 17	1621	408	65	334
Tunstall, John P., et al. (See Tiner, John F., assignor.)						
Tupper, Ayret G., Springfield, Mass. Car-coupling	509,779	Nov. 28	3005	{ 726 727 }	65	1368
Turbayne-Tamblyn Company. (See Turbayne, William A., assignor.)						
Turbayne, William A., Detroit, Mich. Automatic switch for mast-arms	497,104	May 9	1146	293	63	843
Turbayne, William A., Detroit, Mich. Lightning-arrester	500,828	July 4	475	124	64	86
Turbayne, William A., Detroit, Mich. Electric-arc lamp	500,829	July 4	476	124	64	87
Turbayne, William A., assignor to Liggett, Turbayne & Company, Detroit, Mich. Globe-holder for electric-arc lamps	494,499	Mar. 28	2815	706	62	1943
Turbayne, William A., assignor, by mesne assignments, to Turbayne-Tamblyn Company, Detroit, Mich. Electric-arc lamp	495,643	Apr. 18	1808	454	63	369
Turek, Frederick M., New York, N. Y. Bag or pouch	491,148	Feb. 7	134	36	62	775
Turgard, Henri D., Nanterre, France. Denitration of nitro-cellulose and its compounds	508,124	Nov. 7	241	241	65	803
Turley, Theodore J., Nashville, Tenn. Chromatic-printing device	500,784	July 4	400	106	64	74
Turley, Theodore J., Nashville, Tenn. Chromatic-printing device	500,785	July 4	402	106	64	74
Turley, Theodore J., Nashville, Tenn. Chromatic-printing machine	508,067	Nov. 7	135	38	65	724
Turnbull & Company. (See Egbert, William H., assignor.)						
Turnbull, George A., Chicago, Ill. Composition of matter for roofing	503,336	Aug. 15	1842		64	931
Turnbull, Mungo, Toronto, Canada. Dynamical-arranged celestial sphere	506,084	Oct. 3	441	{ 115 116 }	65	86
Turnbull, Robert C. (See Clark and Turnbull.)						
Turnbull, William F., and J. C. Council, Newport News, Va. Wheel-guide for railway-cars	493,666	Mar. 21	1439	{ 366 367 }	62	1669
Turner, Allen and F. E., assignors to Kansas City Elevator Manufacturing Company, Kansas City, Mo. Controlling device for elevators	493,607	Mar. 14	1346	342	62	1636
Turner, Alonzo G., Durango, Colo., assignor of two-thirds to F. A. Kimball and A. Levy. Drill	499,312	June 13	932	227	63	1567
Turner, Byron L., Pittsford, Mich. Plate-holder attachment for cameras	429,512	Jan. 10	833	218	62	190
Turner, C. F., et al. (See White, Charles A., assignor.)						
Turner, Charles P., Johnstown, Pa. Timber-mortising machine	493,133	Mar. 7	562	{ 140 141 }	62	1469
Turner, Caleb R., Brooklyn, N. Y. Fifth-wheel	505,616	Sept. 26	2192	554	64	1723
Turner, Clarence E. (See Park, Evans, Turner, and Morris.)						
Turner, Claude A. P., Ashton, R. I., and P. A. Warner, West Newton, Mass. Drawbridge	500,633	July 4	153	40	64	30
Turner, Claude A. P., Ashton, R. I., and P. A. Warner, West Newton, Mass. Drawbridge	503,273	Aug. 15	1726	{ 425 426 }	64	911
Turner, Edward A., Marshalltown, Iowa. Packing-case	508,451	Nov. 14	766	189	65	915
Turner, Ephraim M., St. Louis, Mo., assignor of one-half to R. E. Maddox, Fort Worth, Tex. Truck for railway-carriages	500,358	June 27	2631	661	63	1900
Turner, Ephraim M., St. Louis, Mo., assignor of one-half to R. E. Maddox, Fort Worth, Tex. Truck or vehicle for elevated railways	501,174	July 11	1029	{ 260 261 }	64	202
Turner, Eugene P., Elmira, N. Y. Torpedo-holder	493,455	Mar. 14	1081	277	62	1585
Turner, Frederick E. (See Turner, Allen and F. E.)						
Turner, George D. (See Smith, David J., assignor.)						
Turton, Jabez, London, England. Extraction of metal from ores	494,044	Mar. 21	2067		62	1790
Turner, Jacob W., Van Wert, Ohio. Mechanical toy	502,790	Aug. 8	935	227	64	753
Turner, Jacob W., Van Wert, Ohio, assignor of one-half to T. Clapper, Hartford City, Ind. Device for overcoming dead-centers	496,374	Apr. 25	2963	740	63	599
Turner, Jacob W., Van Wert, Ohio, assignor of one-half to T. Clapper, Hartford City, Ind. Saw-swage	497,616	May 16	1989	497	63	1008
Turner, Jacob W., Van Wert, assignor to Oval Wood Dish Company, Delta, Ohio. Machine for cutting wood dishes	497,933	May 23	2499	623	63	1115
Turner, James, assignor of one-half to J. J. Cox, High Point, N. C. Washing-machine	495,854	Apr. 18	2143	538	63	428

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Turner, John W., Jones' Mill, Ala. Artificial stone	502,023	July 25	2380	64	477
Turner, Jonathan, New Bedford, Mass. Picker-staff check for looms	495,644	Apr. 18	1810	454	63	369
Turner, Joseph R. (See Stubbs, Riley A., assignor.)						
Turner, Nancy L., Washington, D. C. Motor	507,464	Oct. 24	2832	693	65	571
Turner, Peter F., New York, N. Y. Preparing and holding sausage-casings	494,907	Apr. 4	606	153	63	117
Turner, Samuel K., Ethel, Miss. Planter	501,385	July 11	1376	344	64	264
Turner, Samuel N. (See Dwelly, Charles H., assignor.)						
Turner & Seymour Manufacturing Company. (See Day, John, assignor.)						
Turner & Seymour Manufacturing Company <i>et al.</i> (See Brothwell and Phillips, assignors.)						
Turner, Vaughn & Taylor. (See Vaughn, Calvin W., assignor.)						
Turner, William A., assignor to E. Converse, Worcester, Mass. Sheet-metal knob	511,178	Dec. 19	2412	566	65	1867
Turney, Ellsworth, Fairfield, Iowa. Vehicle-tire rivet	497,222	May 9	1322	336	63	875
Turney, Ellsworth, Fairfield, Iowa. Hound for vehicles	497,223	May 9	1323	337	63	875
Turney, John. (See Murray, Alexander, assignor.)						
Turnipseed, Selman U. (See Missildine, Thomas J., assignor.)						
Turnquist, Frank. (See Norren, William, assignor.)						
Turnvall, Swan J. (See Hempel, John F., assignor.)						
Turton, Albert W., Newark, N. J., assignor of one-half to Richardson Manufacturing Company, of New Jersey. Jewelry-holder	511,223	Dec. 19	2381	580	65	1880
Turton, William M. D., Philadelphia, Pa. Printing-machine	508,535	Nov. 14	919	{ 225 226 }	65	944
Tust, Paul. (See Schmidt and Tust.)						
Tuthill, Horace S., New York, N. Y. Delivery-box	510,212	Dec. 5	624	147	65	1528
Tutt, John C., Guthrie, Oklahoma Ter. Corn-popper	496,021	Apr. 25	2388	604	63	490
Tuttle, Charles B., Detroit, Mich. Horse-shield	500,085	June 20	2209	539	63	1804
Tuttle, Constant L., <i>et al.</i> (See Stevens, John C., assignor.)						
Tuttle, David K., Philadelphia, Pa., and C. Whitehead, Washington, D. C. Treating precious-metal-bearing slimes	509,633	Nov. 28	2769	.....	65	1323
Tuttle, David K., Philadelphia, Pa., and C. Whitehead, Washington, D. C. Refining slimes from the electrolytic refining of copper	509,634	Nov. 28	2771	.....	65	1324
Tuttle, Dennis O., North Haven, Conn. Powder-duster	506,889	Oct. 17	1856	462	65	376
Tuttle, Gutie H., Shorter's Depot, Ala. Folding chair	510,735	Dec. 12	1514	{ 374 375 }	65	1708
Tuttle, Henry W., Chicago, Ill. Compression gas-engine	510,213	Dec. 5	625	{ 147 148 }	65	1528
Tuttle, William H., Detroit, Mich. Nail	496,625	May 2	369	100	63	686
Tweddell, Ralph H., London, J. Platt and J. Fielding, Gloucester, England. Hydraulic bending-press	509,265	Nov. 21	2116	509	65	1187
Tweed, William J. (See Rooks, Alva N., assignor.)						
Tweedy & Co. (See Baglin, William A., assignor.)						
Tweedy & Company <i>et al.</i> (See Baglin, William A., assignor.)						
Tweedy, Edmund, Danbury, Conn. Apparatus for hardening steel	500,979	July 4	703	184	64	128
Twigg, Robert H., London, England. Time-circuit-closer	491,692	Feb. 14	1028	260	62	971
Twilley, Joshua M., Dover, Del. Artificialtooth	493,318	Mar. 14	875	222	62	1544
Twin City Iron Works. (See Fletcher, William J., assignor.)						
Twining, Ida H., Chicago, Ill. Automatic powder-box	511,565	Dec. 26	2960	721	65	2000
Twiss, Freeman L., and L. A. Barber, Groton, N. Y. Pipe-wrench	489,048	Jan. 3	106	29	62	27
Twist Pipe Company. (See White, James, assignor.)						
Twist Pipe Company. (See White and Kittredge, assignors.)						
Twitchell, Oscar. (See Gildemeyer, Charles A., assignor.)						
Twitt, Charles E. (See Trowbridge and Twitt.)						
Twitt, Charles E., assignor of one-half to S. A. Trowbridge, Ravenna, Ohio. Friction-clutch	505,617	Sept. 26	2193	555	64	1723
Twose, George M. R., Chicago, Ill. Hat-holder	501,972	July 25	2296	574	64	461
Twyford, Emanuel S., Philadelphia, Pa. Saw-sharpening machine	489,275	Jan. 3	453	{ 125 126 }	62	100
Twyman, Aaron, Pullman, Ill. Car-truck	510,370	Dec. 5	868	209	65	1575
Twyman, Thomas, London, England. Separating tin from iron or steel	491,254	Feb. 7	308	.....	62	808
Tydemann, William H., Walsenburg, Colo. Thill-coupling	495,855	Apr. 18	2144	538	63	429
Tyers, Frederick, Nottingham, England. Mold for making plumbers' joints	502,893	Aug. 8	1099	270	64	763
Tyers, Frederick, and O. Farnsdale, Nottingham, England. Mold for making plumbers' joints	504,005	Aug. 29	2910	729	64	1162
Tyler, Charles N., Buffalo, N. Y. Can	495,073	Apr. 11	852	218	63	178
Tyler, George, assignor to J. A. McNary, Greenville, Pa. Clothes-drier	493,880	Mar. 21	1780	454	62	1737
Tyler, Harry L., Corning, N. Y. Telephone-transmitter	491,275	Feb. 7	339	86	62	813
Tyler, Harry L., Corning, N. Y. Means for closing an electric circuit	494,765	Apr. 4	873	94	63	74
Tyler, Harry L., Corning, N. Y. Automatic draft-regulator	506,569	Oct. 10	1328	332	65	267
Tyler, Harry L., assignor of two-thirds to J. Magee and L. P. Miller, Corning, N. Y. Dynamo-electric machine	501,117	July 11	941	241	64	186
Tyler, James A. M., Lexington, Nebr. Grain-drill	500,725	July 4	313	84	64	59
Tyler, Radolphus D. S., Washington, D. C. Metallic label-case	490,759	Jan. 31	2856	733	62	632
Tyler, Thaddeus F., Lynn, Mass. Blank-cutting machine	492,342	Feb. 21	2032	506	62	11-7
Tyler, Thaddeus F., Lynn, Mass. Machine for shaping shoe-shanks	511,666	Dec. 26	3125	764	65	2029
Tyler, Thomas W., Tuscola, Ill. Dehorning implement	500,443	June 27	2816	694	63	1923
Tyler, Walter L. (See See and Tyler.)						
Tyler, William W. (See Bookwalter and Tyler.)						
Tymeson, Eugene, and L. Ducros, assignors to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Yarn-drying machine	500,634	July 4	155	40, 41	64	31
Type Writing Machine Company. (See Fairfield, John M., assignor.)						
Tyra, Joseph, Minneapolis, Minn. Metallic roofing	508,193	Nov. 7	346	86	65	822
Tyrril, Alvin D., and J. B. Aufdush, Dayton, assignors to Columbia Cash Register Company, Cincinnati, Ohio. Cash register and indicator	511,257	Dec. 19	2435	{ 593 594 }	65	1890
Tyrril, Arthur H., and G. A. Zibell, Waterbury, Conn. Bookbinding	508,154	Nov. 7	288	72	65	811
Tyson, George E., Reading, Pa. Lock	489,049	Jan. 3	106	29	62	27
Tyson, George E., Reading, Pa. Lock	500,696	July 4	262	71	64	49
Uebermann, Fredrik S., Christiansand, Norway, assignor of one-half to J. T. Odegard, Cooperstown, N. D. Metallic fastening for umbrella-covers	490,999	Jan. 31	3244	828	62	709
Uebel, Charlotte, Chicago, Ill. Waist-garment	499,861	June 20	1870	454	63	1744
Uehling, Edward A., and A. Steinbart, Birmingham, Ala. Pyrometer	503,337	Aug. 15	1843	457	64	931
Uffreduzzi, Vuffredo. (See Fabbri, Egisto, assignor.)						
Uhl, Joseph, Würzburg, Germany. Tool for holding screw-hooks, &c	510,104	Dec. 5	443	99	65	1493
Uhl, Roman, Hausach, Germany. Miter-saw	493,667	Mar. 21	1440	{ 367 368 }	62	1670
Uhler & Cadisch, Louis. (See Uhler, Louis, assignor.)						
Uhler, Louis, assignor to L. Uhler & Cadisch, Geneva, Switzerland. Steam-superheater with independent furnace	510,658	Dec. 12	1395	{ 342 343 }	65	1686

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Uhlmann, Charles R., Peoria, Ill. Lock and latch	496,497	May 2	164	47	63	649
Ulfers, Jacob, Maryland, Ill. Butchering-derrick	494,398	Mar. 28	2660	667	62	1915
Ullom, George S., Pomona, Kans. Well-bucket	490,052	Jan. 17	1624	438	62	375
Ulrich, Albert H., Evanston, Ill. Cash register and indicator	508,194	Nov. 7	348	86, 87	65	822
Ulrich, Lewis L., assignor of one-half to J. A. Livers, Gettysburg, Pa. Pump	494,970	Apr. 4	694	177	63	133
Ulmer, William E., Hoquiam, Wash. Electrical foot-warmer	492,247	Feb. 21	1889	472	62	1158
Ulman, William F., New York, N. Y. Mop-wringer	502,448	Aug. 1	337	81	64	628
Ulrich, Franz. (See Haast, Emil, assignor.)						
Ulrich, Moritz. (See Bammann and Ulrich.)						
Ulrich, Moritz. (See Kothe, Ulrich, and Dressel.)						
Ulrich, Moritz, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Violet azo dye. (Reissue)	11,308	Feb. 21	2003	.....	62	1199
Ulrich, Moritz, and R. Lauch, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue-black tetrazo dye	501,118	July 11	941	.....	64	186
Ulrich, Moritz, and J. Bammann, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue coloring-matter and making same	506,284	Oct. 10	843	.....	65	173
Ulrich, Moritz, and J. Bammann, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Brown dye	509,635	Nov. 28	2773	.....	65	1324
Ulah, John L., assignor of one-half to W. P. Jones, Wabash, Ind. Belt-tightener	492,314	Feb. 21	1988	495	62	1179
Umberhauer, Charles C., assignor of one-half to W. A. Black, Miamisburg, Ohio. Ham-holder	501,973	July 25	2297	574	64	461
Umpleby, Joseph A., Trenton, N. J. Water-closet	498,866	June 6	205	49	63	1429
Umstead, George P., Pittsburg, Pa. Means for securing rubber shoes together	505,734	Sept. 26	2398	606	64	1759
Underdown, John K. (See Zimmerman and Underdown.)						
Underhill, Edwin H., Fremont, Ohio. Elevated carrier	507,767	Oct. 31	3360	823	65	682
Underhill, Francis M., assignor to Whittall, Tatum & Co., New York, N. Y. Flexible water-bottle	504,058	Aug. 29	2986	746	64	1176
Underkoffler, Jesse, Belmond, Iowa. Animal-stock	490,053	Jan. 17	1685	439	62	375
Underwood, Harold G. (See Brenk, Joseph J., assignor.)						
Underwood, Walter H., Yonkers, N. Y. Tip for mullage-bottles	492,068	Feb. 21	1602	398	62	1098
Underwriters' Hatch Door Company. (See Caywood, Albert D., assignor.)						
Ungar, Ignatz, Buda-Pesth, Austria-Hungary. Kiln for drying wood	494,045	Mar. 21	2067	528	62	1790
Unger, Ernest, and P. F. Krug, New York, N. Y.; said Krug assignor to said Unger. Pressure-regulator	498,996	June 6	443	104	63	1469
Unger, Isaac, Iron Mountain, Mich. Shipping-case	509,001	Nov. 21	1670	411	65	1162
Unlack, Annie, Baltimore, Md. Crust-supporter for pot-pie pans	503,756	Aug. 22	2525	628	64	1072
Union Gas Engine Company. (See Rolfsen, Rolf J., assignor.)						
Union Hardware Company. (See Hoerle, Christian G., assignor.)						
Union Manufacturing and Plating Company. (See Edwards, William J., assignor.)						
Union Manufacturing Company. (See Burnham, Frank A., assignor.)						
Union Metallic Cartridge Company. (See Richards, Charles R., assignor.)						
Union Paper Bag Machine Company. (See Claussen, Edward E., assignor.)						
Union Paper Bag Machine Company. (See Stilwell, Charles B., assignor.)						
Union Special Sewing Machine Company. (See Fefel, Henry H., assignor.)						
Union Special Sewing Machine Company. (See McNeil, Chester, assignor.)						
Union Special Sewing Machine Company. (See Munsing, George D., assignor.)						
Union Special Sewing Machine Company. (See Muther, Lorenz, assignor.)						
Union Special Sewing Machine Company. (See Onderdonk, Lansing, assignor.)						
Union Special Sewing Machine Company. (See Woodward, Russel G., assignor.)						
Union Store Service Company. (See Owen, Edward A., assignor.)						
Union Switch and Signal Company. (See Goodman, Edward H., assignor.)						
Union Switch and Signal Company. (See Stapakoff, Simon H., assignor.)						
Unique Novelty Company. (See Fontaine, Eugene, assignor.)						
Unique Powder Company. (See Blomén, Jonas E., assignor.)						
United Columbian Electric Company. (See Ashley, Ralph, assignor.)						
United Columbian Electric Company. (See Groswith and Ashley, assignors.)						
United Columbian Electric Company. (See Winkler, Charles F., assignor.)						
United Gas Improvement Company. (See Collins, Charles R., assignor.)						
United Gas Improvement Company. (See Humphreys, Alexander C., assignor.)						
United Gas Improvement Company. (See Morrison, Henry K., assignor.)						
United Gas Improvement Company. (See Page, Carter H., Jr., assignor.)						
United Indurated Fibre Company of New Jersey. (See Keyes, Frank E., assignor.)						
United Indurated Fibre Company of New Jersey. (See Ormiston, Cyrus D., assignor.)						
United States Automatic Sprinkler Company. (See Wood, Robert, assignor.)						
United States Baking Company. (See Zeller, John G., assignor.)						
United States Burglar Alarm Company. (See Powell, Noah M., assignor.)						
United States Butter Extractor Company. (See Ohlsson, Olof, assignor.)						
United States Camera Company. (See Hetherington, Frederick A., assignor.)						
United States Cotton Picking Company. (See Weller, Chester A., assignor.)						
United States Desulphurizing, Dry-Chloridizing, and Amalgamating Company. (See Calhoun and Beam, assignors.)						
United States Electric Fire Signal Company. (See Martin, Morris, assignor.)						
United States Engine Company. (See Eickershoff, John H., assignor.)						
United States Fire Supply Company. (See Blake and Gilhaus, assignors.)						
United States Indicator Company. (See Krasky, Henry G., assignor.)						
United States Metallic Packing Company. (See Long, Samuel F., assignor.)						
United States Metallic Packing Company. (See Longstreth, Charles, assignor.)						
United States Postage Stamp Delivery Company. (See Drew, George H., assignor.)						
United States Printing Telegraph Company. (See Linville and Hettmansperger, assignors.)						
United States Sheathing Lath Company. (See Brown, Theodore H., assignor.)						
United States Swing Treadle Company. (See Sleight, William E., assignor.)						
United States Wind Engine and Pump Company. (See Burnham and Miller, assignors.)						
United States Wind Engine and Pump Company. (See Miller, John H., assignor.)						
United States Wind Engine and Pump Company. (See Miller and Burnham, assignors.)						
United States Wind Engine and Pump Company. (See Willard, Theodore A., assignor.)						
Universal Carbonating Company. (See Theurer, Jacob F., assignor.)						
Universal Electric Company of the City of New York. (See Dale, John H., assignor.)						
Universal Electric Company of the City of New York. (See Woods, Granville T., assignor.)						
Universal Gas Construction Company. (See Moses, Frank D., assignor.)						
Universal Street Sweeping Machine Company. (See Fisher, Elmendorf C., assignor.)						
Unkefer, George R., Cleveland, Ohio. Hose-nozzle support	509,187	Nov. 21	1981	482	65	1163
Unruh, Charles S., Steele City, Nebr. Shock-binder	491,391	Feb. 7	550	139	62	853

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Unsinger Manufacturing Company. (See Unsinger, Peter, assignor.)						
Unsinger, Peter, assignor to Unsinger Manufacturing Company, Fremont, Ohio. Scraper.	499,060	June 6	553	130	63	1487
Unsworth, James, Jr. (See Ellison and Unsworth.)						
Unz, Henry H., Philadelphia, Pa., assignor to National Type Writer Company, of Pennsylvania. Type-writing machine.	490,235	Jan. 17	1981	{ 519 520 }	62	435
Unz, Henry H., New York, N. Y., assignor to National Type Writer Company, of Pennsylvania. Manufacturing device for type-writers.	507,189	Oct. 24	2377	586	65	424
Unzicker, Hermann, assignor to W. Schmidt, Chicago, Ill. Dough-dividing machine.	498,590	May 30	3559	{ 882 883 }	63	1318
Updegrave, Thomas F., Avery, Kans. Wagon running-gear.	491,230	Feb. 7	277	69, 70	62	801
Upham, Addison L., et al. (See Sanford, David B., assignor.)						
Upington, John V., Lexington, Ky. Sulky.	497,224	May 9	1324	337	63	876
Upp, Melville P., and J. C. Young, Kilbourne, Ill. Corn-planter.	499,862	June 20	1870	{ 454 455 }	63	1744
Upton Nut Company. (See Larsson and Brouillard, assignors.)						
Uptain, Francis M., et al. (See Witt, James W. M., assignor.)						
Upton, Arthur E., Goehner, Nebr. Pipe-wrench.	499,765	June 20	1708	409	63	1716
Upton, Benjamin F., St. Augustine, Fla. Tent.	506,956	Oct. 17	1959	485	65	396
Upton, James B., Coalfield, Tenn. Brake mechanism for vehicles.	499,839	Jan. 10	1309	342	62	287
Urbach, John T., assignor of one-half to H. W. Lightburn, Weston, W. Va. Churn.	496,674	May 2	453	122	63	701
Urban, George H., Buffalo, N. Y. Means for attaching handles.	489,170	Jan. 3	284	79	62	65
Urbanek, Johann, Frankfurt-on-the-Main, Germany. Running-gear for vehicles.	500,980	July 4	705	185	64	128
Uren, Richard, Ripley, Mich. Windmill.	502,479	Aug. 1	383	92	64	637
Urich, Charles, Paterson, N. J. Draftsman's tool.	497,147	May 9	1214	310	63	855
Urick, William P. B., Newark, N. J. Casting solid ingots of steel.	509,973	Dec. 5	211	49	65	1450
Urie Dredge Manufacturing Company. (See Urie, William T., assignor.)						
Urie, William T., Kansas City, Mo. Dredging-machine.	498,143	May 23	2312	{ 703 704 }	63	1170
Urie, William T., assignor to Urie Dredge Manufacturing Company, Kansas City, Mo. Agitator for suction-dredges and sand-pumps.	491,748	Feb. 14	1112	281	62	987
Urie, William T., assignor to Urie Dredge Manufacturing Company, Kansas City, Mo. Dredger.	510,736	Dec. 12	1517	375	65	1709
Urmston, Leroy. (See Dwiggins, John W., assignor.)						
Urmy, Henry C., and E. Huether, New York, N. Y. Wardrobe-trunk.	489,699	Jan. 10	1093	283	62	243
Urquhart, John M. (See Dingle and Urquhart.)						
Urquhart, Joseph A., Rose Hill, Ala. Turning shovel-plow.	507,668	Oct. 31	3214	786	65	654
Urquhart, William S., Cambridge, and H. P. Mallory, Newton, Mass. Machine for crushing clay.	511,566	Dec. 26	2961	722	65	2000
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,266	Nov. 21	2118	509	65	1188
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,267	Nov. 21	2119	510	65	1188
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,268	Nov. 21	2120	510	65	1188
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,269	Nov. 21	2121	510	65	1188
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,270	Nov. 21	2122	510	65	1188
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,271	Nov. 21	2123	511	65	1188
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company of West Virginia, of West Virginia. Storage-battery.	509,272	Nov. 21	2125	511	65	1189
Uthbrok, Christopher W., et al. (See Stevens, Alfred L., assignor.)						
Utica Electrical Manufacturing and Supply Company. (See Bossert, William F., assignor.)						
Utley, Thomas, Liverpool, England. Combined side light or scuttle and ventilator.	495,856	Apr. 18	2145	{ 538 539 }	63	429
Utter, Samuel N., Pittsburg, Pa. Blackboard and desk.	493,134	Mar. 7	565	141	62	1470
Utzing, August, assignor to Schuckert & Co., Nuremberg, Germany. Indicator.	500,359	June 27	2694	661	63	1901
Utzing, August, assignor to Schuckert & Co., Nuremberg, Germany. Electric-arc lamp.	506,490	Oct. 17	1857	463	65	376
Vach, William E., et al. (See Smith, Emery B., assignor.)						
Vachon, Henry, Golden, Canada. Shoe-fastening.	509,707	Nov. 28	2887	698	65	1345
Vail, Allen. (See Cumming and Magee, assignors.)						
Vail, George L., and T. Charlton, Denver, Colo. Purifying ammonia-gas.	505,427	Sept. 19	1841	473	64	1643
Vail, James B., S. E. Jackson, and W. C. Smith, Weston, Mich. Anti-freezing automatic cut-off valve for water-tanks.	495,074	Apr. 11	854	218	63	178
Vail, James E. (See Pittman, Harrison L., assignor.)						
Vail, Jonathan H., New York, N. Y. Electric railway.	509,002	Nov. 21	1671	{ 411 412 }	65	1103
Vail, Warren E., Brockton, Mass. Overflow-alarm.	507,570	Oct. 31	3045	744	65	622
Vail, William. (See Haydon and Vail.)						
Val D'Aosta Syndicate. (See Viarengo, Emile, assignor.)						
Vale, Stephen W., Forest Lodge, near Sydney, New South Wales. Amalgamating-machine.	507,465	Oct. 24	2834	693	65	571
Vale, William T., Toronto, Canada, assignor to New York Barrel Machine Company, of New York. Barrel-making machine.	497,105	May 9	1147	{ 293 294 }	63	843
Valentine, Abram S., et al. (See Rodgers, George W., assignor.)						
Valentine, Kimball E. (See Psota, Anton, assignor.)						
Valentine, Theodore S., Sr., Cumberland, Md. Corn-cutter.	493,135	Mar. 7	566	141	62	1470
Valin, Frank, Fairfield, Me. Window-sash.	499,405	June 13	1116	268	63	1600
Valliquet, Louis P., assignor, by mesne assignments, to American Typewriter Company, New York, N. Y. Type-writing machine.	510,214	Dec. 5	628	148	65	1528
Vallandigham, William, Rose Hill, Iowa. Weather-strip.	502,644	Aug. 1	661	161	64	688
Vallée, Louis A. J., and A. L. G. Schultz, Paris, France. Apparatus for molding the heads of dolls.	500,682	July 4	240	63, 64	64	45
Valley, John N. (See Reynolds, Watson L., assignor.)						
Valley, John N., Jersey City, N. J. Brako for elevated railways.	496,237	Apr. 25	2720	681	63	552
Valley, John N., Jersey City, N. J. Elevated railway.	506,570	Oct. 10	1330	333	65	267
Valley, John N., Jersey City, N. J. Elevated railway.	511,179	Dec. 19	2313	566	65	1668
Vallin, Jonas P., Skattmanso Bruk, Vittinge, Sweden. Bearing.	508,787	Nov. 14	1289	321	65	1077
Van Allen, Charles A., Detroit, Mich. Device for overcoming dead-centers.	500,044	June 20	2150	521	63	1794
Van Alstine, Cyrenus G., Rockford, Ill. Pitch-board.	493,048	Mar. 7	431	109	62	1444
Van Alstena, Henry, Brooklyn, N. Y. Telescoping-satchel harness.	497,736	May 16	2170	543	63	1042
Van Auken, Byron E., assignor to C. E. Van Auken, Chicago, Ill. Temperature-regulator.	494,399	Mar. 28	2660	{ 677 678 }	62	1915

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Van Auken, Clarence E. (See Van Auken, Byron E., assignor.)						
Van Auken, Clarence E., Chicago, Ill., assignor to C. P. Monash. Safety-plug for boilers.	504,896	Sept. 12	964	{ 248 249 }	64	1466
Van Auken, Willis G., et al. (See Crackel, William H., assignor.)						
Van Auker, Charles S., Salt Lake City, Utah Ter. Hasp-lock.	502,938	Aug. 8	1188	292	64	799
Van Beek, George L. (See Sheldon, Murnane, and Van Beek.)						
Van Benschoten, Henry E., Hudson, N. Y. Heel plate.	491,149	Feb. 7	135	36	62	775
Van Benthuyssen, Frank, Albany, N. Y. Roller-bearing.	509,003	Nov. 21	1672	412	65	1103
Van Brunt, Willard A., Horicon, Wis. Grain-drill.	490,728	Jan. 31	2805	{ 719 720 }	62	624
Van Brunt, Willard A., Horicon, Wis. Shoe for grain-drills.	495,075	Apr. 11	855	219	63	178
Van Brunt, Willard A., Horicon, Wis. Manufacture of drill-shoes.	499,061	June 6	554	130	63	1487
Van Buren, Robert. (See Powers and Van Buren.)						
Van Buskirk, Charles, Boston, Mass. Photographic-printing machine.	510,371	Dec. 5	870	209	65	1575
Van Buskirk, Samuel A., and W. P. Wilson, Canon City, Colo. Coffee or tea pot.	494,607	Apr. 4	133	30	63	28
Van Camp, Anson, Decatur, Ind. Scalper.	491,392	Feb. 7	551	140	62	854
Van Cole, Omer, Monte Vista, Colo. Terret-ring.	509,004	Nov. 21	1674	413	65	1103
Van Denburgh, Nathan, and F. H. Loveridge, Chicago, Ill. Means for switching generators or motors in or out of circuit.	494,608	Apr. 4	135	31	63	28
Van Depoele, Charles J., deceased, Chicago, Ill.; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. Overhead contact device and switch.	495,383	Apr. 11	1383	345	63	273
Van Depoele, Charles J., deceased, Chicago, Ill.; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. Traveling contact for electric railways.	495,443	Apr. 11	1478	{ 372 373 }	63	291
Van Depoele, Charles J., deceased, Lynn, Mass.; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. Telfer system.	496,329	Apr. 25	2870	717	63	581
Van Depoele, Charles J., deceased, Lynn, Mass.; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. Electric locomotive.	496,330	Apr. 25	2873	718	63	581
Van Depoele, Charles J., deceased, Lynn, Mass.; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. Electro-magnetic reciprocating pump.	496,331	Apr. 25	2875	718	63	581
Van Depoele, Charles J., deceased, Lynn; A. Wahl and C. A. Coffin, executors, assignors to Thomson-Houston Electric Company, Boston, Mass. Electric-railway trolley.	502,243	July 25	2744	693	64	546
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. System of electrical transmission of power.	507,945	Oct. 31	3657	905	65	737
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, administrators, assignors to Thomson-Houston Electric Company, Boston, Mass. Portable electric pump.	507,946	Oct. 31	3659	905	65	737
Van der Heyden, William, Yokohama, Japan. Sanitary house.	504,544	Sept. 5	387	97, 98	64	1342
Van der Mynsbrugge, Mary. (See Van der Mynsbrugge, Victor and M.)						
Van der Mynsbrugge, Victor and M., New York, N. Y. Type-writing machine.	501,220	July 11	1093	278	64	215
Van Derveer, Benjamin B., New York, N. Y. Sealed package.	510,621	Dec. 12	1327	324	65	1673
Van Derver, John R. (See Holmes, Daniel M., assignor.)						
Van Derwerken, Alfred. (See Mason, James H., assignor.)						
Van Dorn, James H., Cleveland, Ohio. Balloting-booth.	501,119	July 11	946	242	64	186
Van Dorn, James H., Cleveland, Ohio. Balloting-booth.	501,120	July 11	948	242	64	187
Van Dorn, William T., Lincoln, Nebr. Car-coupling.	503,017	Aug. 8	1310	321	64	821
Van Duzee, Harold. (See Brown and Van Duzee.)						
Van Duzee, William D., Minneapolis, Minn. Timber-driver for sewer-sheathing.	495,126	Apr. 11	976	244	63	200
Van Duzer, Lewis S., assignor of one-half to N. E. Mason, U. S. Navy. Electric steering-gear.	499,000	Mar. 7	358	91	62	1430
Van Etten, Charles D., assignor to Brown Folding Machine Company, Erie, Pa. Paper-folding machine.	504,119	Aug. 29	3085	{ 772 773 }	64	1196
Van Evera, Dewitt, and S. Brand, assignors to said Van Evera and Brand Stove Company, (Limited,) Milwaukee, Wis. Extension-magazine for stoves.	497,559	May 16	1899	478	63	991
Van Fleet, John M., Kenton, Ohio. Vessel for beverages.	505,073	Sept. 12	1267	325	64	1523
Van Hoeseen, Eugene M., Preble, N. Y. Device for catching mail-bags.	489,276	Jan. 3	455	126	62	100
Van Hoevenbergh, Henry, New York, N. Y. Electric-annunciator system.	490,327	Jan. 24	2150	561	62	481
Van Hoevenbergh, Henry, New York, N. Y. Billiard-chalk cup.	500,360	June 27	2696	661	63	1901
Van Horn, Charles F., et al. (See Van Stavoren, Samuel J., assignor.)						
Van Horn, Isaiah H., and W. Neil, Thornville, Ohio. Potato-digger.	497,148	May 9	1215	310	63	855
Van Horn, Jacob C. (See Cummins, Theodore, assignor.)						
Van Horn, William, Piqua, Ohio. Fence-stay for wire fences.	505,146	Sept. 19	1385	355	64	1557
Van Houten, Charles W., Philadelphia, Pa. Wheel-tire.	501,386	July 11	1377	344	64	264
Van Loozen, Fred H., Cleveland, Ohio. Feeding mechanism for printing-presses.	509,974	Dec. 5	212	49, 50	65	1450
Van Mater, John S., Hazlet, N. J. Asparagus bundler and cutter.	490,179	Jan. 17	1886	491	62	417
Van Matre, Benjamin F. and G. H., New Castle, assignors of one-third to J. U. Miller, Indianapolis, Ind. Throttle-valve.	502,939	Aug. 8	1189	293	64	799
Van Matre, George H. (See Van Matre, Benjamin F. and G. H.)						
Van Meter, Miles E., San Francisco, Cal. Speculum.	497,064	May 9	1087	279	63	833
Van Ness, Albert, assignor of one-half to W. A. Trow, Lowell, Mass. Machine for making confections.	503,885	Aug. 22	2694	{ 675 676 270 271 272 }	64	1105
Van Norman, Charles E., Springfield, Mass. Setting lacing-studs, eyelets, &c.	502,894	Aug. 8	1101	{ 271 272 }	64	784
Van Norman, Charles E., Springfield, Mass. Hopper and delivery mechanism for studs.	502,895	Aug. 8	1106	272	64	785
Van Nuis, Charles S., New Brunswick, N. J. Lightning-arrester.	500,726	July 4	314	81	64	59
Van Oostrum, Otto, Portland, Oreg. Waterproof suit.	492,643	Feb. 28	2528	626	62	1301
Van Oostrum, Otto, Portland, Oreg. Waterproof suit.	507,466	Oct. 24	2836	694	65	572
Van Orden, John M. (See Edland, Joseph L., assignor.)						
Van Orden, John M., New York, N. Y. Corset-stay.	489,700	Jan. 10	1094	283	62	243
Van Patten, Frederick, Auburn, N. Y., and L. Parmelee, New Haven, Conn. Shoe-lace fastener.	494,766	Apr. 4	374	94	63	74
Van Patten, Horace S., Manlius, N. Y. Vehicle.	505,563	Sept. 26	2104	534	64	1706
Van Patten, Horace S., Manlius, N. Y. Vehicle.	509,975	Dec. 5	217	50	65	1451
Van Patten, John J. A., Schenectady, N. Y. Trace or rein supporter.	504,378	Sept. 5	106	27	64	1290
Van Slyke, David B. (See Payne, Howard B., assignor.)						
Van Slyke, Stephen, assignor of one-half to S. Paugh, Indianapolis, Ind. Fifth-wheel.	501,549	July 13	1622	406 50 51 52 53	64	328
Van Stavoren, Samuel J., Philadelphia, Pa., assignor of two-thirds to S. W. Clark, Delanco, N. J., and C. F. Van Horn, Philadelphia, Pa. Attachment for brick-machines.	509,976	Dec. 5	219	{ 51 52 53 }	65	1451
Van Syckel, Stephen W., Hopewell, N. J. Apparatus for the manufacture of gas.	502,791	Aug. 8	937	228	64	753

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Van Tuyl, Andrew P., Jr. (See Silsbee, Samuel, assignor.)						
Van Tuyl, Benjamin S. (See Kleinstiver, Abel, assignor.)						
Van Tuyl, Benjamin S. (See Luke, James A., assignor.)						
Van Tuyl, Benjamin S. (See Morrison, Joseph, assignor.)						
Van Vianen, Gerhard W., Cologne, Germany. Electric time-signal	499,062	June 6	555	131	63	1488
Van Vleet, Charles W., assignor of one-half to J. P. Osborne, Rochester, N. Y. Device for packing cigarettes	507,696	Oct. 31	3250	796	65	662
Van Vradenburg, Peter D., Binghamton, N. Y. Cloth-cutting machine	495,174	Apr. 11	1057	263	63	214
Van Wagenen, George, New York, N. Y. Turn-table	492,069	Feb. 21	1603	399	62	1099
Van Wagenen, George, New York, N. Y. Sugar-wagon	493,799	Mar. 21	1669	425	62	1715
Van Wagenen, George, New York, N. Y. Sugar-wagon	493,950	Mar. 21	1905	485 486 204 205	62	1760
Van Wagenen, George, New York, N. Y. Machine for dumping sugar-wagons	499,265	June 13	854	205	63	1552
Van Wagner, George H., Wappinger's Falls, N. Y. Check-hook	505,147	Sept. 19	1386	355	64	1557
Van Wagoner, Charles H., Homer, Mich. Fence-post	500,635	July 4	159	41	64	32
Van Wagoner, Charles H., Homer, Mich. Fence	507,697	Oct. 31	3254	796	65	662
Van Wagoner, Charles H., Homer, Mich. Means for securing fence-wires	511,378	Dec. 26	2664	646	65	1946
Van Wagoner, Cornelius S., Brooklyn, N. Y., assignor to Van Wagoner & Williams Company, Jersey City, N. J. Spring-hinge	500,086	June 20	2210	540	63	1804
Van Wagoner & Williams Company. (See Pomeroy, Le Dru R., assignor.)						
Van Wagoner & Williams Company. (See Van Wagoner, Cornelius S., assignor.)						
Van Wagoner & Williams Company. (See Wetmore, Jerome W., assignor.)						
Van Wordragen, John. (See McIver, James M., assignor.)						
Van Wormer, Chauncey E., assignor of two-thirds to C. S. Pharis and C. H. Knapp, Syracuse, N. Y. Door-bell	492,070	Feb. 21	1604	399	62	1099
Van Wyck, Timothy C., Brooklyn, N. Y. Mechanical movement	509,977	Dec. 5	227	53	65	1452
Vance, Edward A., assignor of one-half to E. P. Vance, Indianapolis, Ind. Wire fence	505,781	Sept. 26	2475	624	64	1775
Vance, Edward P. (See Vance, Edward A., assignor.)						
Vance, Emery J. (See Leaver, James M., assignor.)						
Vance, Emery J., and J. M. Leaver, Bay City, Mich. Packing-box for bottles	495,534	Apr. 18	1629	409	63	339
Vance, George M., Anderson, Ind. Cresting for roofs	493,344	Mar. 14	905	232	62	1550
Vance, James R., Geneva, N. Y. Steam-generator	494,180	Mar. 28	2304	584	62	1849
Vance, Theodore J., Rosebud, Mont. Water-motor	507,294	Oct. 24	2552	629	65	515
Vance, William H., assignor of one-half to G. Humphreys, San Francisco, Cal. Folding grate-front and hearth	494,046	Mar. 21	2068	529	62	1791
Vandegrift, James A., New York, N. Y. Vacuum-pump	495,173	Apr. 11	1055	263	63	213
Vandegrift, William C., Toledo, Ohio. Kite	497,393	May 16	1633	413	63	945
Vander Bent, Tennis J., Jersey City, N. J. Sliding door	499,766	June 20	1709	410	63	1716
Vander Veer, A. W., et al. (See Fasching, Elias E., assignor.)						
Vanderbeck, Alexis, Huntsville, Mo. Car-coupling	505,562	Sept. 26	2103	533 534	64	1705
Vanderbeck, R. J., Sheldon, Iowa. Horse-collar fastener	502,213	July 25	2685	678	64	536
Vanderbeck, Abraham. (See Worron, Lewis C., assignor.)						
Vanderbeck, Abraham, Hartford, Conn. Photographic camera	494,400	Mar. 28	2664	668	62	1915
Vanderbeck, Abraham, Hartford, Conn. Tripod or stand for cameras or other purposes	494,401	Mar. 28	2665	668 669	62	1916
Vanderbeck, Abraham, and L. C. Worron, Hartford, Conn., assignors to said Vanderbeck. Drilling-machine	504,289	Aug. 29	3364	841	64	1248
Vanderbilt Sash Balance Company. (See Jenkinson, Samuel, assignor.)						
Vandercok, Michael E., et al. (See Stephens, Jesse A., assignor.)						
Vanderlinda, Peter J., Grand Rapids, Mich. Refrigerator	493,410	Mar. 14	1000	258	62	1571
Vanderman, William, Willimantic, Conn. Hot-water heater	501,974	July 25	2297	574	64	462
Vanderploeg, William L., assignor to R. A. Kelly & Co., Xenia, Ohio. Shaping-machine	498,733	May 30	3837	946	63	1365
Vandervoeth, Peter, New York, N. Y. Window	494,047	Mar. 21	2069	529	62	1791
Vanderveer, James, Middle Village, N. Y. Wagon-brake	494,639	Sept. 5	521	134	64	1368
Vandyke, Edward B. (See Parry, John A., assignor.)						
Vanes, John, Brazil, Ind. Boiler	505,735	Sept. 26	2399	606	64	1759
Vankeirsbilck, John. (See Broderick and Vankeirsbilck.)						
Vanlandingham, Benjamin F., Crittenden, Ky. Tobacco-elevator	495,763	Apr. 18	1995	505	63	402
Vann, Perry C., Morris, Ala. Cultivator	498,867	June 6	206	50	63	1429
Vansteenkiste, Achille, Brussels, Belgium. Decorticator	510,304	Dec. 5	772	187 188	65	1556
Vanstone, Samuel, assignor of three-fourths to W. K. Atwood and J. Nichols, Providence, R. I. Machine for making pipe-clips	494,535	Mar. 28	2878	720 721	62	1954
Vanstone, Samuel, assignor of three-fourths to W. K. Atwood and J. Nichols, Providence, R. I. Machine for making pipe-clips	494,536	Mar. 28	2881	722	62	1955
Vantrees, Cevanus, Butler, Mo. Tire-tightener	498,415	May 30	3270	815	63	1267
Varian, Samuel T., East Orange, N. J. Playing-card	499,406	June 13	1116	268 269	63	1600
Varley, John J., London, England. Machine for filling bottles closed by screw-stoppers	508,357	Nov. 7	617	151	65	872
Varley, Richard, Jr., Englewood, N. J. Electro-magnet	489,277	Jan. 3	456	126	62	100
Varns, Harvey B. (See Gerhardt, Lincoln, assignor.)						
Varwig, Henry. (See Bedgood, George A., assignor.)						
Varwig, Henry. (See La Boiteaux, Frank M., assignor.)						
Vary, Calvin P. H., Newark, N. Y. Mast-hoop	502,542	Aug. 1	502	120	64	659
Vasey, Eugene M., et al. (See Houghton, Thomas J., assignor.)						
Vassar, George, Jr., New York, N. Y. Elevator-shaft	503,392	Aug. 15	1927	478	64	947
Vasson, Raphaël G. de, assignor to La Subérine, Paris, France. Machine for the reduction of cork, &c.	490,817	Jan. 31	2944	755 756	62	651
Vatcký, Carl, Bornheim, assignor of one-half to E. Goll, Offenbach-on-the-Main, Germany. Plating metals	506,285	Oct. 10	849	209	65	173
Vattier, Charles, Paris, France. Converter	503,179	Aug. 15	1581	389	64	885
Vattier, Charles, Paris, France. Furnace for roasting dust of copper and other ores	511,476	Dec. 26	2825	683	65	1974
Vauclair, Samuel M., Philadelphia, Pa. Injector for locomotives	499,063	June 6	556	131	63	1488
Vauclair, Samuel M., Philadelphia, Pa. Piston	499,064	June 6	556	132	63	1488
Vauclair, Samuel M., Philadelphia, Pa. Compound locomotive-engine	499,065	June 6	557	132	63	1488
Vauclair, Samuel M., Philadelphia, Pa. Starting-valve for compound engines	499,066	June 6	559	133	63	1488
Vaughan, Edmund A., Cambridge, Ill. Double-acting force-pump	492,699	Feb. 28	2611	646	62	1318
Vaughan, Frank, Elizabeth City, N. C. Car-coupling	500,981	July 4	707	186	64	128
Vaughan, Fred W., assignor of one-half to J. D. Sibley, San Francisco, Cal. Cash register and indicator	506,891	Oct. 17	1858	463	65	377
Vaughan, Henry F., Richmond, Va. Bill-sheet	503,918	Aug. 22	2749	629	64	1116

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Vaughan, Henry H. (See Pattee and Vaughan.)						
Vaughan, Henry H., and M. E. McKee, St. Paul, Minn. Engineer's brake-valve	504,290	Aug. 29	3366	{ 841 842 }	{ 64 62 }	1249 1099
Vaughan, Jay W., Eaton Rapids, Mich. Bag-fastener	492,071	Feb. 21	1606	399	62	1099
Vaughan, John, Ashton-under-Lyne, assignor to J. Bullough, Accrington, England. Stop mechanism for carding-engines	501,387	July 11	1378	345	64	264
Vaughan, Luther B. (See Campbell, James M., assignor.)						
Vaughan, Robert M., assignor of one-half to W. P. Mayo, Richmond, Va. Shaper for plug-tobacco	501,749	July 18	1943	480	64	384
Vaughn, Calvin W., Cuyahoga Falls, Ohio. Clay-mill	494,515	Mar. 28	2840	{ 710 711 }	{ 62 63 }	1948 231
Vaughn, Calvin W., Cuyahoga Falls, Ohio. Combination clay-mill	495,235	Apr. 11	1150	288	63	231
Vaughn, Calvin W., assignor to Turner, Vaughn & Taylor, Cuyahoga Falls, Ohio. Sheave for bunching wire	507,947	Oct. 31	3661	906	65	738
Vaughn, Clarence E., East Palestine, Ohio. Valve mechanism for engines	491,670	Feb. 14	993	250	62	963
Vaughn, James W., Greenville, Pa. Vehicle-axle	489,577	Jan. 10	926	240	62	208
Vaughn, James W., Greenville, Pa. Sulky-axle	489,578	Jan. 10	927	240	62	208
Vaughn, Ralph B., Kingston, Pa. Steam-boiler	499,948	June 20	1999	485	63	1767
Vaughn, William F. (See Thompson and Vaughn.)						
Vaught, Albert M., Portland, Ind. Feed-roller	492,072	Feb. 21	1606	399	62	1099
Vanse, Charles H., New York, N. Y. Conformer	496,675	May 2	454	122	63	702
Vauthier, David, Waterbury, Conn. Winding mechanism for clocks	500,683	July 4	241	64	64	46
Vautin, Claude T. J., London, England. Facing pulleys	507,467	Oct. 24	2838	694	65	572
Vauzelle, Emile J., Paris, France. Valve for pneumatic tires	510,215	Dec. 5	633	149	65	1520
Vawter, William A., Chicago, Ill. Mailing bag or envelope	497,037	May 9	1042	266	63	824
Veal, John S., Rome, Ga. Pencil-holder	497,065	May 9	1088	279	63	833
Veazie, Albert S., and J. H. Bevan, Castine, Me. Lantern	489,999	Jan. 17	1586	415	62	356
Vedder, Wentworth D. (See Sweet, William F., assignor.)						
Veeschoten, William, Hornellsville, N. Y. Elevator	494,658	Apr. 4	206	52	63	42
Veesenmeyer, George. (See Finrock and Veesenmeyer.)						
Veirs, James P., Omaha, Nebr. Continuous brick-kiln	493,951	Mar. 21	1907	{ 486 487 }	{ 62 65 }	1760 1453
Veitch, William, Kansas City, Mo. Hinge	509,979	Dec. 5	229	54	65	1453
Veith, Friedrich, Gelnhausen, Germany. Pump for pneumatic tires	504,853	Sept. 12	901	232	64	1454
Veith, Friedrich, Kreuznach, Germany. Pneumatic tire	509,978	Dec. 5	228	53	65	1453
Velie, Charles E., assignor of one-half to J. M. King, Denver, Colo. Refrigerator	501,854	July 18	2101	519	64	411
Velten, Augustus, and C. J. Rose, Chicopee, Mass. Device for capping and recapping cartridge-shells	496,143	Apr. 25	2572	647	63	524
Vender, William, Kinde, Mich. Manger	489,349	Jan. 3	563	152	62	121
Venells, Henry. (See Thiel, Henry, assignor.)						
Venema, Tjark J., Grand Rapids, Mich. Fire-escape	498,997	June 6	446	105	63	1469
Venen, Albert P., Seattle, Wash. Musical instrument	496,238	Apr. 25	2720	682	63	552
Venners, James H., Pittsburg, Pa. Continuous-cigarette machine	503,507	Aug. 15	2101	{ 525 526 }	{ 64 65 }	978 1189
Venners, Thomas, et al. (See Heatley, John, assignor.)						
Venners, Thomas R., Jr., et al. (See Heatley, John, assignor.)						
Veon, Andrew E., assignor of one-half to J. Westfall, Brainerd, Minn., and W. C. Middleton, Milwaukee, Wis. Shotgun-wad	509,273	Nov. 21	2126	511	65	1189
Vereinigte Zündwaarenfabriken Actien-Gesellschaft Zanow-Hannover et al. (See Küstermann and Gottschalk, assignors.)						
Verhagen, Adolph, San Francisco, Cal. Mosaic art-glass	504,506	Sept. 5	326	83	64	1331
Verharen, Frank T., Spencer, Iowa. Fish-hook disgorgers	498,094	May 23	2743	685	63	1158
Verley, Horace S. L., Hoboken, N. J. Relay	502,449	Aug. 1	338	81	64	628
Vermilyea, Eugene, Waterford, assignor to Campbell & Clute, Cohoes, N. Y. Adjustable support for the cloth-wheels and burr-wheels of rotary knitting-machines	508,452	Nov. 14	768	{ 189 190 }	{ 65 66 }	415 121
Verner, John D. (See Stribling, John V., assignor.)						
Verner, William A. (See McQuillen, Owen, assignor.)						
Vernier, Julius J., Toledo, Ohio. Pessary	489,050	Jan. 3	108	29	62	27
Vernon, Charles W. (See Armstrong, Parker, and Vernon.)						
Vernon, George, et al. (See Vernon, William E., assignor.)						
Vernon, George H. (See Huff and Vernon.)						
Vernon, Richard R., Woodbridge, N. J. Binder	498,414	May 30	3268	{ 814 815 }	{ 63 63 }	1266 1756
Vernon, Richard R., Woodbridge, N. J. Binder	499,899	June 20	1933	469	63	1756
Vernon, Richard R., Woodbridge, N. J. Binder	506,021	Oct. 3	338	90	65	66
Vernon, William E., Sipe Springs, assignor to himself, G. Vernon, J. N. Farmer, and J. E. Murphy, Comanche, Tex. Pneumatic conveyor	489,348	Jan. 3	562	152	62	121
Vernor, Henry E. (See Anderson, Anders P., assignor.)						
Vernor, Henry E. (See Norcross, George A., assignor.)						
Verona Tool Works. (See Armstrong, Harry W., assignor.)						
Veronee, James F., and G. McInerney, Charleston, S. C. Car-roof	491,909	Feb. 14	1363	340	62	1036
Verstraete, Edmond. (See Koedding, William, assignor.)						
Very, Theodore S., Boston, Mass. Means for manufacturing metal bars or rods	494,659	Apr. 4	207	52	63	43
Vesfal, William B., Dallas, Texas. Black-land plow	494,309	Mar. 28	2505	632	62	1887
Vetter, Alexander F., assignor to J. C. Vetter & Co., New York, N. Y. Electric-lamp socket and tap	490,605	Jan. 24	2578	665	62	565
Vetter & Co., J. C. (See Vetter, Alexander F., assignor.)						
Vetter, Frederick, Rochester, N. Y. Type-writer cabinet	490,593	Jan. 24	2556	658	62	560
Vetter, George, and H. Broeker, St. Louis, Mo. Water-gage	500,444	June 27	2818	694	63	1923
Vetter, George F., et al. (See Lewis, Frank M., assignor.)						
Vetter, John W. (See Gibbs, James E., assignor.)						
Vetter, Rudolph C. (See Out, George B., assignor.)						
Vetter, William B., et al. (See Lewis, Frank M., assignor.)						
Vevia, Francis X., et al. (See Curtis, Frederic A., assignor.)						
Violet-Chabrand, Lucien, Ciotat, France. Electric-lighting system	503,688	Aug. 22	2409	600	64	1049
Viarengo, Emile, Turin, Italy, assignor to Val D'Aosta Syndicate, Limited, London, England. Manufacturing copper wire	506,957	Oct. 17	1961	485	65	397
Vibrometer Company. (See Godman, Emory J., assignor.)						
Vicars, John, T., and J., Jr., Liverpool, England. Baker's oven	498,335	May 30	3148	{ 785 786 }	{ 63 63 }	1245 1494
Vicars, John, T., and J., Jr., Liverpool, England. Machine for cutting and panning biscuits	510,105	Dec. 5	444	99	65	1494
Vicars, John, T., and J., Jr., Liverpool, England. Apparatus for feeding fuel to steam-generator furnaces	510,737	Dec. 12	1518	{ 375 376 }	{ 65 65 }	1709 1709

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Vicars, Thomas. (See Vicars, John, T., and J., Jr.)						
Vickers, Joseph. (See Rishworth, Ingham, and Vickers.)						
Vickers, William, Jersey City, N. J. Machine for cleaning currants, &c	492,644	Feb. 28	2529	627	62	1301
Victor G. Bloede Company. (See Bloede, Victor G., assignor.)						
Victor Key-Opening Can and Machinery Company. (See Barrath, Edward, assignor.)						
Victor Manufacturing Company. (See Smith, Ezra B., assignor.)						
Victor, Robert J. (See Bryant and Victor.)						
Victor Safe and Lock Company. (See Baum, Jacob, assignor.)						
Victorson, Victor, Boston, Mass. Finishing the surface of wood or like material	507,512	Oct. 24	2923		65	587
Vierck, William J., assignor to Alaska Refrigerator Company, Muskegon, Mich. Trap	507,190	Oct. 24	2378	587	65	484
Viering, Frederick, Allegheny, Pa. Railway-switch lock	505,804	Sept. 26	2512	634	64	1782
Vielt, Emile T., Charleston, S. C. Bush-hammer	494,266	Mar. 28	2443	{ 615 616 }	62	1874
Villamor, Timoteo, Merida, Mexico. Machine for cleaning vegetable fiber	492,173	Feb. 21	1772	442	62	1134
Villard, John, Wolfe City, Tex. Curtain-fixture	492,447	Feb. 28	2201	550	62	1234
Villardy de Montlaur, Amaury de. (See Gall and Villardy de Montlaur.)						
Vincent, Mitchell. (See Hicks, Lewis C., assignor.)						
Vine, George, Ansonia, Conn. Roll-grinding machine	493,952	Mar. 21	1909	{ 487 488 }	62	1760
Vine, James S., assignor of one-half to Strobridge Lithographing Company, Cincinnati, Ohio. Device for amusement and for advertising	502,896	Aug. 8	1108	273	64	785
Viner, August, assignor of one-half to C. H. Huss, Cardiff, England. Composition for glazing collars, cuffs, &c	499,685	June 13	1561		63	1676
Vint, Thomas D., Hastings, England. Menthol cone	507,860	Oct. 31	3524	587	65	713
Vinton, Arthur D., New York, N. Y. Railway-signal	499,484	June 13	1241	{ 296 297 }	63	1622
Violet, Francis N., assignor of one-half to B. A. Jacobs, Milwaukee, Wis. Trunk-fastening	493,456	Mar. 14	1082	278	62	1585
Virtue, William W. (See Moffat and Virtue.)						
Virtue, William W., Sydney, New South Wales. Mechanism for converting motion	491,910	Feb. 14	1364	340	62	1037
Vlasak Mathias. (See Nowotny and Vlasak.)						
Vobach, Herman, Pewaukee, Wis. Fence-post driver	504,762	Sept. 12	746	186	64	1434
Voelkle, Andreas, New York, N. Y. Dumping-cart	497,934	May 23	2500	624	63	1115
Voelpel, William, et al. (See Hohulin, Timotheus and J., assignors.)						
Voeltzkow, Georg W., Berlin, Germany. Folding stand, &c	509,005	Nov. 21	1676	413	65	1104
Voerde, Frederick W., Quincy, Ill. Car-coupling	507,861	Oct. 31	3525	867	65	713
Vogel Cable Construction Company of Colorado. (See Vogel and McIntosh, assignors.)						
Vogel, Charles, Fort Lee, N. J. Valve for steam-engines	495,282	Apr. 11	1232	308	63	245
Vogel, Charles, Fort Lee, N. J. Speed-gear for velocipedes	503,919	Aug. 22	2750	689	64	1116
Vogel, Charles, San Anselmo, Cal., and C. McIntosh, Tacoma, Wash., assignors to Vogel Cable Construction Company of Colorado. Subway for cable railways	509,833	Nov. 28	3093	747	65	1384
Vogel, Ernest H., New York, N. Y. Grinding-machine	504,006	Aug. 29	2911	730	64	1163
Vogel, Hermann W., Charlottenburg, assignor to Hochstein & Weinberg, Berlin, Germany. Glue for cardboard and photographs	505,618	Sept. 26	2194		64	1723
Vogel, Kasimir, Chelsea, assignor of one-fourth to C. M. Reed, Boston, Mass. Sewing-machine	500,518	June 27	2934	720	63	1945
Vogel, Philip. (See Wood, George W., assignor.)						
Vogt, A. F. (See Vonk, Ferdinand, assignor.)						
Vogt, Axel S. (See Kinder and Vogt.)						
Vogt, Axel S., Altoona, Pa. Pipe-coupling	491,299	Feb. 7	396	102	62	823
Vogt, Charles, Kansas City, Mo. Railway-crossing plate	491,616	Feb. 14	917	231	62	947
Vogt, Georg, Lahr, Germany. Permutation-lock	509,006	Nov. 21	1677	413	65	1104
Vogt, John, Winesburg, Ohio. Grain-conveyer	508,788	Nov. 14	1990	392	65	1017
Vogt, William, Dallas, Oreg. Animal-trap	509,561	Nov. 28	2861	644	65	1302
Voight, George F., Lower Lake, Cal. Swinging gate	501,813	July 18	2044	503	64	400
Voigt, Gustave C., Waukesha, Wis. Loom-shuttle	509,339	Nov. 21	2248	544	65	1212
Volger, Bernard G. (See Buck and Volger.)						
Volk, Jacob, St. Louis, Mo. Railway-crossing	497,694	May 16	2115	{ 527 528 }	63	1030
Vollbrecht, Henry. (See Rissmüller and Vollbrecht.)						
Vollhering, Friedrich W., and C. Bernhardt, Lubeck, Germany. Excavating-machine	502,151	July 25	2584	650	64	516
Vollmar, Jacob C., assignor of two-fifths to G. Frank, Port Huron, Mich. Suspenders	502,792	Aug. 8	939	228	64	753
Vollmar, Philip, Chatham, Canada. Washing-machine	492,616	Feb. 28	2488	617	62	1293
Vollmer, William, Philadelphia, Pa. Bolt-rolling machine	503,393	Aug. 15	1928	{ 478 479 }	64	947
Vollmer, William, and N. S. Campbell, Philadelphia, Pa. Oil-burner	498,591	May 30	3563	883	63	1318
Vollmer, William, and W. H. Thomas, assignors to Burnham, Williams & Co., Philadelphia, Pa. Machine for swaging or expanding tubes	489,439	Jan. 3	704	188	62	151
Volz, Carl O., Berlin, Germany. Making nitric acid	500,786	July 4	404	106	64	75
Volz, John, Baltimore, Md. Fastening for table-legs	495,857	Apr. 18	2146	539	63	429
Vonhaus, Friedrich L., and H. Becker, assignors to Spohr & Krämer, Frankfurt-on-the-Main, Germany. Parallel pliers	491,231	Feb. 7	278	70	62	801
Voorhees, Gardner T., Boston, assignor to J. E. Maynadier, Taunton, Mass. Relay fuse-block	499,485	June 13	1246	297	63	1623
Voorhees, Gardner T., Boston, assignor to J. E. Maynadier, Taunton, Mass. Multiple-fuse block	499,614	June 13	1461	350	63	1660
Voorhees, Gardner T., Boston, assignor to J. E. Maynadier, trustee, Taunton, Mass. Multiple fuse	502,333	Aug. 1	138	31	64	591
Voorhees, John J., Jersey City, N. J. Rubber packing-ring or gasket	499,266	June 13	858	205	63	1553
Voorhees, Samuel H., Delaware, N. J. Suspenders	511,003	Dec. 19	2028	501	65	1812
Voos, George E., et al. (See Hanson, Joseph H., assignor.)						
Voos, Johanna, New York, N. Y. Combined kitchen and ironing table	502,597	Aug. 1	583	140	64	673
Vorkeller, August F., Chicago, Ill. Velocipede	489,840	Jan. 10	1311	342	62	287
Vortmann, Georg. (See Messinger, Vortmann, and Janssen.)						
Vose, Albert, Pittsfield, Vt. Chair	491,300	Feb. 7	397	102	62	823
Vose, Ambrose S., Boston, Mass. Rotary cutter	498,144	May 23	2814	704	63	1171
Voshardt, Herman. (See Friedley, Albert, assignor.)						
Voss, Adolph, Gloucester, Mass. Gaff or boom	507,052	Oct. 17	2118	525	65	425
Voss, Ernest B., Exira, Iowa. Hen-coop	494,181	Mar. 28	2305	584	62	1849
Voss, Frederick. (See Hegbom Marselius, assignor.)						
Voss, William C., Geneseo, Ill. Device for shampooing the hair and scalp	493,953	Mar. 21	1912	{ 488 753 755 }	62	1761
Votey, Edwin S., Detroit, Mich. Adjustable combination-pedal attachment for pipe-organs	509,850	Nov. 28	3123	{ 753 755 }	65	1390
Vouk, Ferdinand, assignor to A. F. Vogt, Emporium, Pa. Tan-liquor heater	499,067	June 6	560	133	63	1489

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Vowles, Frank J., New Hudson, Mich. Car-coupling	499,267	June 13	858	205	63	1553
Voysey, Arthur A., Mid Higham, and H. H. Hosack, Shorne, England. Apparatus for breaking up roads, &c	510,738	Dec. 12	1519	{ 376 377	65	1709
Voysey, Arthur A., Mid Higham, and H. H. Hosack, Shorne, England. Apparatus for breaking up roads or other surfaces	510,739	Dec. 12	1521	{ 377 378	65	1710
Vreeland, Jeremiah. (See Ruble, Martin R., assignor.)						
Vroom, Eugene L. (See Stocking and Vroom.)						
Vry, Bernhard J. H. de, Chicago, Ill. Device for simultaneously moving double doors	503,361	Aug. 15	1885	467	64	938
Vulcan Iron Works. (See McIntire and Koefoed, assignors.)						
Vuillier, Aimé, Millis, Mass. Machine-die	508,789	Nov. 14	1291	322	65	1017
Vulliez, Victor. (See Honman and Vulliez.)						
W. C. De Pauw Company. (See Krampf, John M., assignor.)						
W. Dewees Wood Company. (See Wood, Waters D., assignor.)						
W. H. Hill Envelope Company. (See Rheutan, Abram A., assignor.)						
W. H. Moore Mattress Company. (See Moore, William H., assignor.)						
W. O. Hickok Manufacturing Company. (See Bigelow, Lucius S., assignor.)						
W. S. Hill Electric Company. (See Hill, Warren S., assignor.)						
W. W. Kimball Company. (See Hedgeland, Frederick W., assignor.)						
W. W. Kimball Company. (See Rice, Dnane L., assignor.)						
Wachalec, John, Cleveland, Ohio. Molding-machine	511,224	Dec. 19	2381	581	65	1880
Wachtel, Charles, Newark, N. J. Dynamo-electric machine	490,460	Jan. 24	2352	{ 608 609 610	62	520
Waddell, Harvey, Chicago, Ill. Wardrobe-bedstead	489,209	Jan. 3	317	98	62	79
Waddell, John A. L., Kansas City, Mo. Lift-bridge	506,571	Oct. 10	1331	{ 333 334 335	65	267
Wade, Frank M., Chicago, Ill. Egg-case tray or filler	497,225	May 9	1326	{ 337 338	63	876
Wade, James. (See Smethurst and Wade.)						
Wade, James J. (See Burke, Patrick J., assignor.)						
Wade, James R., Millfield, Ohio. Neck-yoke	502,793	Aug. 8	940	223	64	754
Wade, Joseph A., and J. Cherry, Hornsea, England. Dynamometer	496,962	May 9	929	244	63	805
Wade, Joseph A., and J. Cherry, Hornsea, England. Dynamometer	496,963	May 9	931	{ 244 245	63	806
Wade, Joseph A., and J. Cherry, Hornsea, England. Apparatus for dredging and pump- ing	500,445	June 27	2819	{ 694 695	63	1923
Wade, Linley G., Holly, Mich. Bag-holder	494,908	Apr. 4	607	153	63	117
Wade, Robert H., Washington, D. C. Clothes-form	503,815	Aug. 22	2603	650	64	1087
Wadhams, Arthur, Galveston, Tex. Apparatus for freezing wine	496,922	May 9	878	230	63	795
Wadleigh, Joseph, Milks Grove, Ill. Car-coupling	506,287	Oct. 10	852	210	65	174
Wadleigh, Joseph, Milks Grove, Ill. Farm-gate	506,288	Oct. 10	853	210	65	174
Wadley, George D., Savannah, Ga. Drawbar	492,853	Mar. 7	123	31	62	1381
Wadley, George D., Savannah, Ga. Drawbar	492,819	Mar. 14	875	223	62	1544
Wadley, Hun G., Wytheville, Va. Loading device for lumber-kilns	506,286	Oct. 10	856	209	65	173
Wadlin, Melville T., assignor to Davis & Farber Machine Company, North Andover, Mass. Machine for opening and cleaning fibrous material	494,500	Mar. 28	2815	706	62	1944
Wadsworth, Ernest A., Cambridge, England. Bottle-washer	498,371	May 30	3213	799	63	1255
Wadsworth, Howland & Company. (See Anderson, Carl P., assignor.)						
Wadsworth, William P., Zolfo, Fla. Fruit-gatherer	509,007	Nov. 21	1678	414	65	1104
Waeber, Gustavus, New York, N. Y. Sheet-metal can or box	501,199	July 11	1063	269	64	209
Waeber, Gustavus A. (See Reiset and Waeber.)						
Waeber, Gustavus A., New York, N. Y. Constructing and opening hermetically sealing sheet-metal vessels	496,175	Apr. 25	2620	660	63	533
Waffenfabrik Mauser. (See Mauser, Paul, assignor.)						
Wagandt, Charles L., Baltimore, Md. Pocket window-screen	498,868	June 6	207	50	63	1429
Wagandt, Charles L., Baltimore, Md. Roller-seaming machine	506,022	Oct. 3	340	90, 91	65	67
Wagandt, Charles L., assignor to Keen & Hagerty, Baltimore, Md. Strainer	494,355	Mar. 28	2592	651	62	1903
Wagandt, Charles L., assignor to Keen & Hagerty, Baltimore, Md. Tank-can for varnish, &c	505,208	Sept. 19	1483	387	64	1575
Wagener, Hermann H., Cassel, Germany. Corset-stiffener	501,221	July 11	1096	278	64	215
Wagener, Nicolas, Baltimore, Md. Propeller	506,572	Oct. 10	1335	335	65	268
Wagener, William, assignor of one-half to W. Ernst, Rochester, N. Y. Sash-fastener	501,451	July 11	1465	368	64	282
Waggoner, James H. and W. H., and W. K. Cardwell, Harrodsburg, Ky. Wagon-body	496,459	May 2	114	31	63	639
Waggoner, William H. (See Waggoner and Cardwell.)						
Waggoner, Albert. (See Westlake and Waggoner.)						
Waggoner, Fred, et al. (See Kaltenbeck, William H., assignor.)						
Waggoner, William F., Raymond, Ill. Stem winding and setting watch	510,740	Dec. 12	1524	378	65	1710
Wagner, Alfred B., Miamisburg, Ohio. Rounding-machine	500,519	June 27	2937	721	63	1945
Wagner, Amos S., Williamsport, Pa. Mortising-machine	507,571	Oct. 31	3046	745	65	623
Wagner, Anton, Philadelphia, Pa. Stereoscope	502,450	Aug. 1	340	81	64	629
Wagner, Aubert H., Chicago, Ill. Shaft-hanger	494,767	Apr. 4	376	94	63	75
Wagner, Edward V., and S. H. Penquite, Urbana, Ohio. Fifth-wheel	504,640	Sept. 5	523	135	64	1369
Wagner, Franz X. (See Wagner, Herman L., assignor.)						
Wagner, Frederick, Omaha, Nebr. Screen	492,073	Feb. 21	1608	400	62	1099
Wagner, Harry C., Cleveland, Ohio. Electric body-battery	501,550	July 18	1623	406	64	328
Wagner, Herman L., Brooklyn, assignor to F. X. Wagner, New York, N. Y. Type-writ- ing machine	497,560	May 16	1899	{ 479 480	63	991
Wagner, Jacob, et al. (See Aker, Anton, assignor.)						
Wagner, Nickolans, et al. (See Aker, Anton, assignor.)						
Wagner, Peter A., and N. Beauregard, San Francisco, Cal. Machine for rounding and straightening bars	510,454	Dec. 12	1016	243	65	1617
Wagner, William A., Central City, Iowa. Cultivator	491,822	Feb. 14	1227	307	62	1010
Wagner, William F. (See Dages and Wagner.)						
Wagner, William K., Youngstown, Ohio. End-gate	491,617	Feb. 14	919	231	62	948
Wagoner, Thomas S., assignor of one-half to M. J. Carnahan & Co., Loogootee, Ind. Post- driver	500,170	June 27	2392	580	63	1848
Wahl, Albert, et al., administrators. (See Van Depoele, Charles J.)						
Wahl, Ethelbert J., Cumberland, Md. Handle for erasers or brushes	510,106	Dec. 5	446	99	65	1494
Wahl, J. A. (See Culp, Benjamin F., assignor.)						
Wahl, William H. (See Greene and Wahl.)						
Wahle, Charles G. F., Jr. (See Berrigan, William H., Jr., assignor.)						
Wahlenius, Carl W., Westeras, Sweden. Combined snap-hook and fastener	508,259	Nov. 7	467	113	65	844
Wahlin, Adolph, Stockholm, Sweden, assignor to R. D. Harris, New York, N. Y. Cen- trifugal butter-extractor	491,501	Feb. 7	716	181	62	886

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Wahlin, Adolph, Stockholm, Sweden, assignor, by mesne assignments, to Swedish Cream and Butter Separator Company, of New Jersey. Centrifugal butter-extractor	498,828	June 6	132	33	63	1415
Wahlin, Adolph, Stockholm, Sweden, assignor, by mesne assignments, to Swedish Cream and Butter Separator Company, of New Jersey. Centrifugal creamer and butter-extractor	498,829	June 6	134	33	63	1416
Waibel, Oscar, San Francisco, Cal. Picture-block	510,216	Dec. 5	634	149	65	1530
Wailles, John W., Prescott, England. Open-hearth steel-melting furnace	501,200	July 11	1065	269	64	209
Wailles, John W., Gateshead-on-the-Tyne, England. Hot-blast valve	501,750	July 18	1945	481	64	324
Wailles, William S. H., Waterproof, La. Combination-cultivator	507,295	Oct. 24	2554	629	65	516
Waine, David and I., Willenhall, England. Padlock	507,948	Oct. 31	3662	906 907	65	739
Waine, Isaac. (See Waine, David and I.)						
Wainwright Manufacturing Company. (See Hall, Bicknell, assignor.)						
Wainright Manufacturing Company of Massachusetts. (See Hall, Bicknell, assignor.)						
Wait, Charles L. (See Peters, Robert D., assignor.)						
Wait, Henry W., Lake Charles, La. Traction-wheel	489,400	Jan. 3	636	172	62	137
Wait, Howard S., New York, N. Y. Electric railway-signal	492,645	Feb. 28	2531	627 628	62	1302
Wait, Jason W. (See Morris, Simeon I., assignor.)						
Waite, Charles N., Newton, Mass. Electrical diaphragm	489,551	Jan. 10	887		62	201
Waite, Charles W., Newton, Mass. Manufacturing chlorine or caustic alkali by electrolysis	501,121	July 11	949		64	187
Waite, Hamilton D. (See Hitchcock and Waite.)						
Waite, Henry E., New York, N. Y. Influence-machine	497,226	May 9	1328	338	63	876
Waite, John F., et al. (See McDonnell, Patrick E., assignor.)						
Wakefield, James W. (See Carr, Warren H., assignor.)						
Wakefield Rattan Company. (See Henry, Fred H., assignor.)						
Wakefield, William O., and S. H. Libby, Lynn, Mass. Friction-clutch	508,663	Nov. 14	1117	275	65	983
Wakeman, Charles E., Pontiac, Mich. Steam-heater	492,174	Feb. 21	1774	443 444	62	1135
Walbridge, Henry L., Springfield, Mass. Truss	501,551	July 18	1624	406	64	328
Walch, Gustav T., Kaufbeuren, Germany. Lightning-conductor	508,068	Nov. 7	136	38, 39	65	784
Walden, Joseph, Orange, N. J. Lace-fastener	505,909	Oct. 3	173	44	65	84
Walden, Joseph, Orange, N. J. Boot-pull and trousers-guard	506,958	Oct. 17	1963	486	65	397
Waldie, Annie A., Philadelphia, Pa. Combined cutting-gage and marker	508,453	Nov. 14	770	190	65	915
Waldman, Adolph, St. Louis, Mo. Electric coin-controlled fortune-telling machine	507,768	Oct. 31	3362	824	65	682
Waldrip, Thomas A., Alexander, Tex. Twin cultivating-harrow	501,609	July 18	1712	427	64	344
Waldron, George E. (See Brown, Stephen J., assignor.)						
Waldurff, Eugene C., Buffalo, N. Y. Time trip-lever mechanism	489,350	Jan. 3	564	153	62	121
Walentowitz, Albert, Guttenberg, N. J. T-square	500,727	July 4	317	84	64	60
Wales, Herbert E. (See Sellers, William, assignor.)						
Walgren, Isidore, and F. Haglund, Seattle, Wash. Fire-escape	496,923	May 9	878	230	63	796
Walker, Albert H., Brooklyn, N. Y. Outlet-valve and valve-seat for oil-cans	509,411	Nov. 28	2393	520	65	1249
Walker, Alexander, assignor of two-thirds to W. and T. Thompson, What Cheer, Iowa. Handle-attaching device for picks or other tools	500,447	June 27	2821	695	63	1924
Walker, Alexander W., Boston, Mass. Lubricator	495,535	Apr. 18	1632	409	63	339
Walker, Arthur W., Malden, Mass. Pipe-section damper	492,854	Mar. 7	125	31	62	1382
Walker Automatic Car Coupler Manufacturing Company. (See Walker, William J., assignor.) (Reissue.)						
Walker, Cassius M. (See Pearsall and Walker.)						
Walker, Charles B., Trinidad, Colo. Ore-concentrator	497,843	May 23	2346	588	63	1088
Walker, Charles E., Chicago, Ill. Smoke-consuming furnace	491,931	Feb. 14	1398	349	62	1043
Walker, Charles W., Blue Springs, assignor of one-half to H. S. Olney, Beatrice, Nebr. Well boring and drilling machine	501,261	July 11	1158	293 294	64	225
Walker, Dwight F., Philadelphia, Pa. Grindstone, emery-wheel, &c.	491,789	Feb. 14	1179	296	62	999
Walker, Dwight F., Philadelphia, Pa. Paper holder and cutter	510,742	Dec. 12	1527	379	65	1711
Walker, Edwin, Erie, Pa. Corkscrew	501,975	July 25	2299	575	64	462
Walker, Ernest, New Albany, Ind. Device for chalking lines	497,362	May 16	1588	401	63	937
Walker, Ernest N., Lakeview, Oreg. Spring-snap	499,615	June 13	1463	350	63	1660
Walker, Francis M., assignor of one-half to J. H. Smith, Newark, Ohio. Valve-gear	490,698	Jan. 31	2752	708	62	613
Walker, George H., Cincinnati, Ohio. Hydraulic air-compressor	491,232	Feb. 7	279	70	62	801
Walker, George L. (See Gross, William M., assignor.)						
Walker, George L., Detroit, Mich. Trunk	511,180	Dec. 19	2314	567	65	1868
Walker, George W., Malden, Mass. Grate	500,446	June 27	2821	695	63	1924
Walker, Hugh R., Chicago, Ill. Variable-exhaust nozzle	490,000	Jan. 17	1588	415	62	356
Walker, Isaac, Philadelphia, Pa. Cone-winding machine	493,049	Mar. 7	432	109	62	1444
Walker, James C., Waco, Tex. Rotary engine	495,283	Apr. 11	1234	308	63	246
Walker, James C., Waco, Tex. Wind-wheel	505,736	Sept. 26	2400	606 607	64	1759
Walker, James C., Waco, Tex. Wave-motor	510,741	Dec. 12	1526	379	65	1711
Walker, James E., Denver, Colo. Support for trolley-wires	510,217	Dec. 5	635	149	65	1530
Walker, James V. K. (See Murry and Walker.)						
Walker, John, Cleveland, Ohio. Clutch	496,460	May 2	115	31	63	640
Walker, John, Cleveland, Ohio. Gear-cutting machine	496,676	May 2	456	122 123	63	702
Walker, John, assignor of one-half to J. Bowden, Oldham, England. Apparatus for spinning and doubling yarns	499,068	June 6	561	133 134	63	1489
Walker, John K. (See Brown and Walker.)						
Walker, John W., Philadelphia, Pa. Device for securing cans or other receptacles	501,552	July 18	1626	407	64	329
Walker Manufacturing Company. (See Gokey, Frank F., assignor.)						
Walker, Melbourne, assignor of one-half to W. W. Bobier, Florence, Canada. Trace-buckle	500,087	June 20	2211	540	63	1804
Walker, Orlando O., assignor of two-thirds to R. G. Moon and C. S. McCloud, Bedford, Iowa. Cyclone-cave	503,689	Aug. 22	2412	601	64	1049
Walker, Robert, Glasgow, Scotland. Chain-clip for cloth-finishing machines	501,855	July 18	2103	519	64	411
Walker, Sampson, Winnipeg, Canada. Lubricator for car-journals	503,018	Aug. 8	1311	321	64	821
Walker, Samuel, and L. Marshall, Milwaukee, Wis. Switch-operating mechanism	509,340	Nov. 21	2249	544	65	1212
Walker, Sarah B., Castle Rock, Colo. Ornamental screen	501,262	July 11	1160	294	64	226
Walker, Thomas. (See Kitson and Walker.)						
Walker, Virgil. (See Newlin, Joseph S., assignor.)						
Walker, Walter, London, assignor to Dan Rylands, Limited, Barnsley, England. Process of and apparatus for recovering carbon dioxide	496,546	May 2	242	64	63	663
Walker, William J. (See Bedford, Alexander L., assignor.)						
Walker, William J., St. Louis, Mo. Pipe-wrench	491,255	Feb. 7	309	78	62	808

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Walker, William J., St. Louis, Mo. Car-coupling	491,823	Feb. 14	1329	307	62	1010
Walker, William J., St. Louis, assignor of one-half to A. L. Bedford, Savannah, Mo. Electric-alarm money-drawer	491,824	Feb. 14	1230	307 308	62	1010
Walker, William J., St. Louis, assignor of one-half to A. L. Bedford, Savannah, Mo. Electric-alarm money-drawer	492,646	Feb. 28	2536	628	62	1303
Walker, William J., St. Louis, assignor of one-half to A. L. Bedford, Savannah, Mo. Vise	496,498	May 2	165	47	63	640
Walker, William J., assignor of one-half to A. L. Bedford, St. Louis, Mo. Car-coupling	496,924	May 9	879	231	63	796
Walker, William J., St. Louis, Mo., assignor to Walker Automatic Car Coupler Manufacturing Company, East St. Louis, Ill. Car-coupling. (Reissue)	11,353	July 25	2783	703	64	554
Walker, William J., and L. Hammerschmidt, St. Louis, Mo. Car-coupling	489,770	Jan. 10	1211	317	62	266
Walker, William J., St. Louis, and A. L. Bedford, Savannah, Mo. Vehicle-wrench	499,863	June 20	1872	455	63	1744
Walker, William J., and A. L. Bedford, St. Louis, Mo. Electric-alarm money-drawer	499,864	June 20	1873	455	63	1744
Walker, William J., and A. L. Bedford, St. Louis, Mo. Car-coupling	500,448	June 27	2822	695	63	1924
Walker, William J., and A. L. Bedford, St. Louis, Mo. Draw-bar attachment	500,728	July 4	318	85	64	60
Walker, William J., and A. L. Bedford, St. Louis, Mo. Electric-alarm money-drawer	501,306	July 11	1220	309	64	236
Walker, William J., and A. L. Bedford, St. Louis, Mo. Motor	507,769	Oct. 31	3365	824	65	683
Walker, William R., Concord, N. H. Sash-holder	490,001	Jan. 17	1589	415	62	357
Walker, William R., Concord, N. H. Sash-fastener	511,379	Dec. 26	2665	646	65	1946
Walker, William V., assignor of one-half to H. M. Jewett, Moravia, N. Y. Feed-water apparatus	491,825	Feb. 14	1232	308	62	1010
Walkley, Webster E. (See Kempshall, Eleazer, assignor.)						
Walkup, Andrew E., Omaha, Nebr. Attachment for type-writing machines	494,356	Mar. 28	2593	652	62	1903
Walkup, Andrew E., Omaha, Nebr. Ribbon attachment for type-writing machines	494,357	Mar. 28	2594	652	62	1903
Wall, Carl P., La Crosse, Wis. Harvester-reel	504,795	Sept. 12	801	204	64	1433
Wall, Christopher F., et al. (See Chapman, Frederick A., assignor.)						
Wall, Enos A., Ophir, Utah Ter. Ore-jigger or concentrating-machine	506,751	Oct. 17	1623	408	65	334
Wall, George H., London, England. Protector for water-gages	490,818	Jan. 31	2945	756	62	651
Wall, James J. (See Fairchild, Frank J., assignor.)						
Wallace, Charles S. (See Hamlet, Thomas J., assignor.)						
Wallace, Charles S. (See McMillen, Charles W. and H. F., assignors.)						
Wallace, Edgar B., et al. (See King, William S., assignor.)						
Wallace, Edward L., Rochester, N. Y. Washing-machine	504,763	Sept. 12	748	186	64	1425
Wallace, Edward L., Spencerport, assignor of one-half to F. D. Hill, Dryden, N. Y. Stiffening-plate for neckties	494,501	Mar. 28	2817	706	62	1944
Wallace, Eugene, assignor to L. P. Blair, Minneapolis, Minn. Street-sweeper and loader	494,660	Apr. 4	208	52, 53	63	43
Wallace, Jacob B., assignor to Metric Metal Company, Erie, Pa. Gas-meter	502,388	Aug. 1	235	55	64	609
Wallace, Jacob B., assignor to Metric Metal Company, Erie, Pa. Fuel-gas burner	504,821	Sept. 12	848	217 218	64	1442
Wallace, James. (See Brandau, George F., assignor.)						
Wallace, James. (See Kelsey, Wallace, and Thompson.)						
Wallace, James M., Portland, Oreg. Fire-ladder	493,345	Mar. 14	906	232	62	1551
Wallace, John, Albany, N. Y. Railway-track	498,336	May 30	3149	786	63	1245
Wallace, John, Union, Ill. Windmill	506,804	Oct. 17	1711	430 431	65	350
Wallace, John A., et al. (See Smith, Thomas, assignor.)						
Wallace, John S. (See Junge, William and C., assignors.)						
Wallace, Martin E., Aurora, Ill., assignor to Gould Coupler Company, New York, N. Y. Car-bufter	489,135	Jan. 3	231	62, 63	62	53
Wallace, Martin E., Aurora, Ill., assignor to Gould Coupler Company, New York, N. Y. Car-coupling	491,301	Feb. 7	399	102	62	823
Wallace, Robert A. (See Phillips and Wallace.)						
Wallace & Sons. (See Bohner, Joseph E., assignor.)						
Wallace, Victor, Oneida, assignor of two-thirds to C. E. Fish, H. and A. C. Potter, and W. A. Wallace, New York, N. Y. Car-coupling	493,902	Mar. 21	1815	462	62	1743
Wallace, William, Ansonia, Conn. Tool for manipulating the overfeed of rolling-mills	494,945	Apr. 4	653	166	63	126
Wallace, William, New York, N. Y. Window	511,105	Dec. 19	2187	538	65	1844
Wallace, William A., et al. (See Wallace, Victor, assignor.)						
Wallace, William D., and V. C. Osborn, North Salem, Ind. Corn-planter attachment	495,858	Apr. 18	2147	539	63	429
Wallace, William H., Henry, Ill. Car-coupling	509,588	Nov. 28	2701	653	65	1310
Wallensrein, Jacob, Cincinnati, Ohio. Safety device for platform-elevators	490,328	Jan. 24	2152	562	62	481
Waller, Elwyn, New York, N. Y. Making white lead	509,057	Nov. 21	1751	433	65	1118
Waller, Elwyn, New York, and B. C. Hinman, Brooklyn, N. Y. Manufacture of white lead	509,059	Nov. 21	1753	433	65	1118
Waller, Elwyn, and C. A. Sniffin, New York, N. Y. Concentrating ores	509,058	Nov. 21	1752	433	65	1118
Wallheiser, Wendell P. (See Denniston and Wallheiser.)						
Wallin, Joseph, assignor to C. O. Danforth, Boston, Mass. Calendar	490,618	Jan. 24	2602	670	62	569
Walling, Charley, and W. T. Metcalf, Grapeland, Tex. Fence	495,076	Apr. 11	856	219	63	179
Wallis, Edward N., Philadelphia, Pa. Curve or crossing for cable railways	505,737	Sept. 26	2402	607	64	1760
Wallis, Fred, Birmingham, England. Match-box	492,700	Feb. 28	2612	647	62	1318
Wallis, John E., Basingstoke, England. Road-machine	494,909	Apr. 4	607	154	63	117
Wallis-Lispenard Cotton Picker and Machinery Company. (See Lispenard, George, assignor.)						
Walls, Cicero V., Arcola, Ill. Gas-engine	498,700	May 30	3759	927 928	63	1352
Walls, Marion C., Plymouth, Ind. Electrical fuse-link	497,844	May 23	2348	588	63	1088
Wallwork, Roughsedge, and A. C. Wells, Manchester, England. Self-generating gas or vapor burner	489,244	Jan. 3	406	113 114	62	91
Walrad, Peter. (See Martin and Walrad.)						
Walrand, Charles, and E. Legenisel, Paris, France. Manufacturing steel	503,816	Aug. 22	2603	416	64	1087
Walrath, Jesse, Racine, Wis. Friction-clutch	490,002	Jan. 17	1590	416	62	357
Walrath, Lu L. (See Robbins and Walrath.)						
Walscheid, Otto W., Jersey City, N. J. Wringer-roller	503,019	Aug. 8	1312	321	64	821
Walsh, Edward, Jr., St. Louis, Mo. Regenerative kiln	503,729	Aug. 22	2475	615	64	1062
Walsh, Edward, Jr., St. Louis, Mo. Glass-cutter and guide therefor	507,395	Oct. 24	2728	669	65	550
Walsh, Edward, Jr., St. Louis, Mo. Machine for ornamenting bed-plates for casting sheet-glass	507,572	Oct. 31	3047	745	65	623
Walsh, Edward, Jr., St. Louis, Mo. Making imitation leaded glass	511,568	Dec. 26	2968	723	65	2001
Walsh, Francis A., Milwaukee, Wis. Sheet-metal vessel	492,074	Feb. 21	1608	400	62	1099
Walsh, Francis A., Milwaukee, Wis. Machine for making sheet-metal vessels	492,075	Feb. 21	1609	400	62	1100
Walsh, Francis A., Milwaukee, Wis. Machine for working sheet-metal vessels	492,076	Feb. 21	1612	401	62	1100
Walsh, Francis A., Milwaukee, Wis. Machine for working sheet-metal	511,567	Dec. 26	2964	723 723	65	2000
Walsh, Harry C. H. (See Edsall and Walsh.)						
Walsh, James. (See Moseley and Walsh.)						
Walsh, James, Jr., Philadelphia, Pa. Cable-gripper	492,248	Feb. 21	1839	472	62	1158

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Walsh, John B., Wapakoneta, Ohio. Postage-stamp or envelope moistener.....	505,495	Sept. 26	1940	500	64	1675
Walsh, John C., assignor to Gasoline Torch Manufacturing Company, Chicago, Ill. Plumb- er's torch.....	489,513	Jan. 10	834	219	62	190
Walsh, John E., Halifax, England. Machine for straightening steel wire.....	495,384	Apr. 11	1387	{ 345 346 }	63	274
Walsh, John E., assignor to M. A. Walsh, New York, N. Y. Dredging-machine.....	501,122	July 11	950	242	64	187
Walsh, Mary A. (See Walsh, John E., assignor.)						
Walsh, Philip, Prescott, Canada. Car-brake.....	497,561	May 16	1908	{ 480 481 }	63	993
Walsh, Richard, Philadelphia, Pa. Gasket-packing.....	494,402	Mar. 28	2667	669	62	1916
Walsh, William H. (See Berne, Arthur W., assignor.)						
Walsh, William J., Worcester, Mass. Apparatus for reversing motion.....	491,732	Feb. 14	1075	271	62	980
Walston, John T., Bell's Depot, Tenn. Churn mechanism.....	509,780	Nov. 28	3007	727	65	1368
Walter A. Wood Mowing and Reaping Machine Company, <i>et al.</i> (See Lowry, George A., assignor.)						
Walter A. Wood Mowing and Reaping Machine Company. (See Watrous, Earl G., assignor.)						
Walter, Charles, Stapleton, N. Y. Siphon-top.....	502,451	Aug. 1	340	82	64	629
Walter, Charles F. (See Walter, Henry G. and C. F.)						
Walter, Harry, assignor to G. W. Teufel, Philadelphia, Pa. Dental forceps.....	511,067	Dec. 19	2117	523	65	1830
Walter, Henry G. and C. F., Scranton, Pa. Cash register and indicator.....	492,897	Mar. 7	197	49	62	1397
Walter, Johann B., Nuremberg, Germany. Target.....	494,285	Mar. 28	2475	624	62	1880
Walter, Melchior. (See Olejnik, Franz, assignor.)						
Walter, Otto, Cologne-on-the-Rhine, Germany. Cup and saucer.....	503,508	Aug. 15	2104	527	64	978
Walter, Sebastian, assignor to Kieckhefer Brothers Company, Milwaukee, Wis. Attach- ing spouts, &c., to vessels.....	509,412	Nov. 28	2394	580	65	1249
Walter, William, New York, N. Y. Vacuum-pan.....	499,486	June 13	1248	297	63	1623
Walters, Andrew J., Adrian, Mich. Cash-recorder.....	491,150	Feb. 7	136	36, 37	62	775
Walters, George W. (See Taylor and Walters.)						
Walters, Harry E. (See Purdon and Walters.)						
Walters, Harry E. (See Purdon, Walters, and Woodcock.)						
Walters, John. (See Musselman, George A., assignor.)						
Walters, Nels P., Fort Madison, Iowa. Cattle-guard for railways.....	511,477	Dec. 26	2829	684	65	1975
Walther, Adolf, St. Louis, Mo. Recording-thermometer.....	511,258	Dec. 19	2440	595	65	1891
Walther, Jacob F. (See Moore, Mortimer M., assignor.)						
Waltman, Henry B. (See Eisenhart, Morton, and Waltman.)						
Walton, James B. (See Smith and Walton.)						
Walton, Jonathan, Brooklyn, N. Y. Folding chair.....	510,659	Dec. 12	1398	344	65	1686
Walton, Joseph O., Titusville, Fla. Calking-tool.....	494,516	Mar. 28	2841	711	62	1948
Walton, Pierson T., Sutton, Nebr. Cutting apparatus for mowing or harvesting machinery.....	504,641	Sept. 5	524	135	64	1369
Walton, William, Denton, England. Feed mechanism for card-setting machines.....	493,136	Mar. 7	567	{ 141 142 }	62	1470
Walton, William A. (See Saati, Nowman M., assignor.)						
Walton, William M., <i>et al.</i> (See Moore and Willett, assignors.)						
Watrous, John F., Chelsea, Mich. Cultivator.....	491,618	Feb. 14	920	231	62	948
Wanamaker, Edward A., assignor to H. and W. Muender, Montfort, and W. A. Johnson, Lancaster, Wis. Machine for raising or lowering well-tubing.....	493,392	Mar. 14	977	252	62	1566
Wand, Thomas, Almo, assignor of one-half to O. Johnson, Bridge, Idaho. Detachable buckle-frame.....	496,804	May 2	664	176	63	737
Wands, John C., St. Louis, Mo. Car-roof.....	496,332	Apr. 25	2877	{ 718 719 }	63	582
Wands, John C., St. Louis, Mo. Car-roof.....	503,886	Aug. 22	2698	676	64	1106
Wangler, Joseph F., <i>et al.</i> (See Stempel, Omar A., assignor.)						
Wanich, John N. (See Baker and Wanich.)						
Wankel, Frank, assignor of one-half to H. B. Rebscher, Newburg, N. Y. Rotary force- pump.....	500,361	June 27	2696	{ 661 662 }	63	1901
Wannenwetsch, George R., <i>et al.</i> (See Hieatzman, Arthur H., assignor.)						
Wanner, Martin, Denver, Colo., assignor of eleven-twentieths to W. B. Crittenden and J. M. Millman, Bucyrus, Ohio. Reducing sulphide ores and manufacturing carbon bisul- phide.....	497,256	May 9	1376	.....	63	885
Wanner, Martin, assignor of eleven-twentieths to W. B. Crittenden and J. M. Millman, Denver, Colo. Refrigerating apparatus.....	500,088	June 20	2213	540	63	1805
Wanner, Martin, Denver, Colo., assignor of one-half to W. B. Crittenden and J. M. Mill- man, Bucyrus, Ohio. Refrigerating apparatus.....	500,107	June 20	2245	546	63	1810
Wansbrough, William D., Lincoln, England. Lawn-mower.....	503,509	Aug. 15	2104	527	64	978
Wantling, Isaac, and J. T. Johnson, Peoria, Ill., assignors to Handy Coal Cutter Company of Illinois. Coal-cutting machine.....	510,455	Dec. 12	1017	243	65	1617
Waples, Rufus, Jr., New York, N. Y. Umbrella-cane.....	489,351	Jan. 3	566	153	62	121
Ward, Albert M., assignor to G. Johnston, Detroit, Mich. Facial measure.....	505,496	Sept. 26	1942	501	64	1676
Ward, Alfred R., Toronto, Canada. Photographic fixing and washing tank.....	491,619	Feb. 14	921	232	62	948
Ward, Artemas H., Wichita, Kans. Book-support.....	490,379	Jan. 24	2236	582	62	498
Ward, Barton B., New York, N. Y. Duplex electric-arc lamp.....	492,124	Feb. 21	1690	421	62	1116
Ward, Barton B., New York, N. Y. Electric registering device.....	498,372	May 30	3214	799	63	1255
Ward, Barton B., New York, N. Y. Electric-arc lamp.....	509,188	Nov. 21	1982	482	65	1163
Ward, Charles, Toronto, Canada. Reversing-gear.....	510,218	Dec. 5	636	150	65	1530
Ward, Edwin L. (See Elliott, Bemis, and Ward.)						
Ward, Frank D., assignor of three-fourths to L. Welch, J. H. Fink, and W. Warner, Kan- sas City, Mo. Mail-pouch.....	497,257	May 9	1377	349	63	885
Ward, Frank O., Philadelphia, Pa. Neckscarf.....	490,933	Jan. 31	3138	805	62	689
Ward, Frederick G., Allegheny, Pa. Dry-closet system.....	493,320	Mar. 14	876	{ 223 224 }	62	1544
Ward, Frederick G., Allegheny, Pa. Hot-air furnace.....	498,701	May 30	3763	928	63	1352
Ward, George H., Brooklyn, N. Y. Engine-governor.....	489,171	Jan. 3	285	79	62	65
Ward, George J., St. Clair, Mich. Label or card holder.....	505,997	Oct. 3	305	79	65	60
Ward, George S., <i>et al.</i> (See Sumner, William A., assignor.)						
Ward, Henry H., San Francisco, Cal. Steam-engine valve.....	506,141	Oct. 3	539	139	65	104
Ward, James A., Greenwood, Ind. Lathing-harness.....	497,363	May 16	1590	402	63	937
Ward, James A., Muncie, Ind. Knife polisher and sharpener.....	511,181	Dec. 19	2315	567	65	1868
Ward, John C., <i>et al.</i> (See Sumner, William A., assignor.)						
Ward, John H., Whitewater, Wis. Power transmitting and stopping device.....	493,457	Mar. 14	1084	278	62	1586
Ward, John W. (See Hunter, Andrew, assignor.)						
Ward, Joseph T., Philadelphia, Pa. Joint for fences.....	502,840	Aug. 8	1017	248	64	768
Ward, Julius A., <i>et al.</i> (See Hardy, Lewis W., assignor.)						
Ward, Maria E. G. M., New York, N. Y. Bodkin.....	510,943	Dec. 19	1927	470	65	1795
Ward, Marzy J., Unadilla, N. Y. Melon-carrier.....	510,456	Dec. 12	1021	244	65	177

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Ward, Pleasant. (See Ryan and Ward.)						
Ward, Randolph G., Charleston, S. C. Automatic supply-tank for locomotives	502,152	July 25	2585	650	64	516
Ward, Randolph G., Charleston, S. C. Rail-joint	502,153	July 25	2588	651	64	517
Ward, Randolph G., Charleston, S. C., and H. B. Potter, Hillburn, N. Y. Switch-stand	502,154	July 25	2589	651	64	517
Ward, Thomas, Newark, Ohio. Clothes-drier	490,380	Jan. 24	2237	582	62	499
Ward, W. L., et al. (See James, Will S., assignor.)						
Ward, Wiley, assignor to H. J. Hopkins, Pleasantville, and J. A. Nixon, Titusville, Pa. Combined cane and camp-stool	497,617	May 16	1989	498	63	1008
Ward, William B., Los Angeles, Cal. Stone molding and surfacing machine	496,022	Apr. 25	2389	604	63	490
Ward, William J., Brooklyn, N. Y. Railway switch mechanism	498,337	May 30	3150	786	63	1245
Ward, William M., London, England. Safety-purse	509,341	Nov. 21	2251	544	65	1212
Ward, William S., Philadelphia, Pa. Railway-rail and metallic cross-tie	497,562	May 16	1909	481	63	994
Wardell, Joshua M., Cadillac, Mich. Syringe	494,048	Mar. 21	2071	529	62	1791
Warden, Henry, Philadelphia, Pa. Valve mechanism for gas-engines	499,865	June 20	1876	456	63	1745
Warder, Bushnell & Glessner Company. (See Kane, Maurice, assignor.)						
Warder, Bushnell & Glessner Company. (See Stark, Andrew, assignor.)						
Warder, Bushnell & Glessner Company et al. (See Lowry, George A., assignor.)						
Warder, Edward, Gypsum, Kans. Corn-harvester	503,757	Aug. 22	2526	628	64	1072
Wardroper, Frank L., et al. (See King, William S., assignor.)						
Wardwell, Robert D., et al. (See Ludwig, Oscar, assignor.)						
Wardwell, Theodore E., Stamford, Conn. Knob attachment	499,900	June 20	1935	469	63	1756
Wardwell, Simon W., Jr., Boston, assignor to J. R. Leeson, Newton, Mass. Machine for winding cops	506,959	Oct. 17	1963	486 487	65	397
Wardwell, Simon W., Jr., Boston, assignor to J. R. Leeson, Newton, Mass. Regulator for thread-winding devices	509,413	Nov. 28	2395	580	65	1250
Wardwell, Victor P., et al. (See Blackshaw, Wilfrid W., assignor.)						
Ware, Charles P., San Rafael, Cal. Collar and necktie fastener	498,592	May 30	3564	883	63	1319
Ware, Frank H., et al. (See Whalley, Nathan, assignor.)						
Ware, George T. (See Clawson and Wheeler, assignors.)						
Ware, George T., Pleasant Hill, Mo. Fire communicator or display device	492,595	Feb. 28	2450	609	62	1246
Ware, Walter F., Camden, N. J. Syringe	504,764	Sept. 12	749	186	64	1425
Ware, William P., Hillsborough, Tex. Clothes-pounder	501,634	July 18	1754	437	64	351
Warenskjold, Axel, and J. G. Burgess, San Diego, Cal. Running-gear	496,712	May 2	505	135	63	711
Warenskjold, Axel, and J. G. Burgess, San Diego, Cal. Running-gear						
Warfield, George W., et al. (See Black, William S., assignor.)						
Warfield, Louis. (See Thomas, William M., assignor.)						
Warfield, Louis, Detroit, Mich. Device for communicating motion	494,182	Mar. 28	2306	584	62	1849
Waring Electric Company. (See Waring, John, assignor.)						
Waring Hat Manufacturing Company. (See Segschneider, Gustav, assignor.)						
Waring, John, Manchester, assignor to Waring Electric Company, Hartford, Conn. Electric lamp	497,038	May 9	1044	267	63	825
Waring, Thomas, Camden, N. J. Paper-file	501,751	July 18	1946	482	64	384
Warmoth, J. H. (See Roosevelt, James A., assignor.)						
Warner, Alfred E., Bennett's Corners, Ohio. Evaporating-pan	506,752	Oct. 17	1625	408	65	334
Warner, Charles F., Clear Water, Minn. Pneumatic tire	500,639	July 4	163	43	64	33
Warner, Daniel. (See Warner, William A., assignor.)						
Warner, De Ver H., Bridgeport, Conn. Safety-pin	493,372	Mar. 14	953	245	62	1561
Warner, De Ver H., Bridgeport, Conn. Dress-stay	495,618	Apr. 18	1764	445	63	362
Warner, De Ver H., Bridgeport, Conn. Garment-supporter	500,637	July 4	161	42	64	32
Warner, De Ver H., Bridgeport, Conn. Corset-stiffener	500,638	July 4	163	42	64	32
Warner Elevator Manufacturing Company. (See Brown, Alfred T., assignor.)						
Warner, Ernest P. (See Scribner and Warner.)						
Warner, Ernest P., Chicago, Ill., assignor to Western Electric Company, of Illinois. Conduit railway-trolley	500,306	June 27	2609	636 637	63	1886
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Coupling-rod connection	502,794	Aug. 8	941	220 229	64	754
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Electric switch	503,180	Aug. 15	1582	339	64	885
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Commutator for dynamo-electric machines	504,379	Sept. 5	107	27	64	1290
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Controller-roller for electric cars	505,686	Sept. 26	2317	588	64	1745
Warner, George B., assignor to N. Allen, Woodbury, Conn. Rope-holder	497,900	May 23	2447	611	63	1106
Warner, George W., Freeport, Ill. Handle for stove-lid lifters, &c	496,587	May 2	304	82	63	675
Warner, Herbert B. (See Olmsted, Warner, and Giddings.)						
Warner, Ira D., Bridgeport, Conn. Machine for making dress-stiffeners	500,636	July 4	160	42	64	32
Warner, Isaac M., Bronson, assignor of one-half to J. D. and C. Hagerman, Oxford, Mich. Fence-machine	504,642	Sept. 5	525	135	64	1369
Warner, James F., Essex, Vt. Sap-spout	509,980	Dec. 5	231	54	65	1453
Warner, Jasper P., Decatur, Mich. Metal tie and nut-lock	508,664	Nov. 14	1118	275	65	983
Warner, John P., assignor of five-eighths to A. F. Navarre, Washington, D. C. Weather-guard attachment for lanterns	490,003	Jan. 17	1592	416	62	357
Warner, Judson W., Oneida, N. Y. Boiler-furnace	508,790	Nov. 14	1293	322 323	65	1018
Warner, Judson W., Oneida, and R. Galbraith, Lansingburg, N. Y. Grate	507,949	Oct. 31	3664	907	65	739
Warner, Philip A. (See Turner and Warner.)						
Warner, Samuel C., New York Mills, N. Y. Fruit-washing machine	496,023	Apr. 25	2390	604 605	63	490
Warner, Samuel C., New York Mills, N. Y. Fruit-picking basket	496,024	Apr. 25	2391	605	63	491
Warner, Westford, Philadelphia, Pa. Metal fence	491,826	Feb. 14	1233	308	62	1011
Warner, William, et al. (See Ward, Frank D., assignor.)						
Warner, William A., Bethel, assignor to D. Warner, Bronson, Mich. Axle-nut	490,694	Jan. 31	2753	709	62	613
Warnken, Frederick. (See Storm and Warnken.)						
Warnock, Charles W., Geneva, N. Y. Boiler for heating apparatus	511,569	Dec. 26	2970	723	65	2001
Warnock, John W. (See Bruce and Warnock.)						
Warnstorff, Paul, Buslar, Germany. Device for casting bilateral artificial honeycomb	495,572	Apr. 18	1690	426	63	350
Warr, George C. (See Jones and Warr.)						
Warren, Albert K. (See Warren, John and A. K.)						
Warren, C. C. (See Berry, John W., assignor.)						
Warren, Charles, assignor of one-half to G. Whight, London, England. Musical instrument	499,767	June 20	1710	410	63	1716
Warren, Edward B. (See Mueller, John, assignor.)						
Warren, Edward B., assignor of one-half to O. Ferguson, Hot Springs, S. D. Awning	493,954	Mar. 21	1914	488	62	1761
Warren, Edwin W., Tyngham, Mass. Mechanical telephone	501,388	July 11	1380	345	64	264
Warren, George E. (See Fowler and Warren.)						
Warren, James L., Goshen, Tex. Trunk	510,743	Dec. 12	1528	379 380	65	1711

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Warren, John, Boston, Mass., assignor to Globe Treering Machine Company, Boston, Mass., and Nashua, N. H. Boot-treering machine.....	504,765	Sept. 12	750	186	64	1425
Warren, John and A. K., Evansville, Ind. Thill-coupling.....	500,171	June 27	2393	581	63	1848
Warren, John D., Burlington, Iowa. Hardware-drawer.....	510,744	Dec. 12	1531	380	65	1712
Warren, John D., South Framingham, assignor of one-half to E. G. Stevens, Clinton, Mass. Spectacle eye-shield.....	492,125	Feb. 21	1692	422	62	1117
Warren, John K., <i>et al.</i> (See Hartley, Charles J., assignor.)						
Warren Manufacturing Company. (See Harned, Frank P., assignor.)						
Warren, Marion, New York, N. Y. Method of and apparatus for making certain fermented beverages.....	510,209	Dec. 5	637	150 151	65	1530
Warren, Melvin F. (See Warren, Willard A., assignor.)						
Warren, Rolan N., and W. H. Wike, Wooster, Ohio. Vehicle-cover.....	495,859	Apr. 18	2148	539	63	429
Warren, Willard A., Buffalo, N. Y. Pneumatic tire.....	491,620	Feb. 14	923	232	62	948
Warren, Willard A., assignor of one-half to M. F. Warren, Buffalo, N. Y. Pneumatic tire.....	509,107	Nov. 21	1856	454	65	1138
Warrick, John, Reading, England. Carrier-cycle.....	499,810	June 20	1780	431	63	1729
Warring, Franklin B. (See Caton and Warring.)						
Warwick Cycle Manufacturing Company. (See Chamberlain, George D., assignor.)						
Warwick Cycle Manufacturing Company. (See Hendrick, Joel H., assignor.)						
Warwick Cycle Manufacturing Company. (See Hendrick and Kelly, assignors.)						
Warwick Cycle Manufacturing Company. (See Kelly, Jarvis P., assignor.)						
Warwick Cycle Manufacturing Company. (See Shultz, Edward L., assignor.)						
Warwick Cycle Manufacturing Company. (See Taintor, Myron F., assignor.)						
Warwick, Edward, Birmingham, England. Making hollow wheel-rims.....	506,753	Oct. 17	1628	409	65	335
Warwick, Edward, Birmingham, England. Bicycle.....	507,513	Oct. 24	2925	718 719	65	587
Warwick, Edward, Birmingham, England. Saddle for velocipedes.....	507,514	Oct. 24	2928	719	65	587
Warwick, William. (See Swift and Warwick.)						
Wasciuski, Alexander von, West Hoboken, N. J. Stand and stool for zithers.....	504,071	Aug. 29	3003	750	64	1179
Washburn, Archibald S., Germantown, N. Y. Ice-scraper.....	497,463	May 16	1746	440	63	964
Washburn, F. E., <i>et al.</i> (See Washburn, William E., assignor.)						
Washburn, F. S., <i>et al.</i> (See Washburn, William E., assignor.)						
Washburn, George W., West New Brighton, N. Y. Pencil-holder.....	508,791	Nov. 14	1297	323	65	1018
Washburn, Helum J. and J. F., Ransomville, N. Y. Plow-standard.....	491,621	Feb. 14	924	232	62	948
Washburn, John F. (See Washburn, Helum J. and J. F.)						
Washburn & Moen Manufacturing Company. (See Snedeker, Charles T., assignor.)						
Washburn, William E., assignor of two-thirds to F. S. and F. E. Washburn, Cedar Rapids, Iowa. Electrotherapeutic device.....	500,172	June 27	2394	581	63	1848
Washburne, James V., Morrison, Ill. Adjustable collar-fastener.....	500,640	July 4	164	43	64	33
Washington Carbon Company. (See Marks, Louis B., assignor.)						
Washington, Dixon E., Lumber, assignor of one-half to W. T. Whiteman, Jefferson, Tex. Grip for cable cars.....	496,499	May 2	166	47	63	649
Wass, William, Philadelphia, Pa. Boot or shoe.....	499,616	June 13	1463	350	63	1661
Wassenich, Joseph E., Chicago, Ill. Tablet for recording sound-vibrations.....	505,910	Oct. 3	174	44	65	34
Wasson, Dell E., Versailles, Ky. Fastening attachment for dress-waists.....	492,701	Feb. 28	2614	647	62	1312
Wasson, George W., Crawfordsville, Ind. Desk.....	506,351	Oct. 10	959	239	65	194
Wastall, Arthur, Chicago, Ill., assignor of one-half to H. and E. Densmore, New York, N. Y. Aerial cradle-cot.....	505,797	Sept. 26	2498	631	64	1779
Watel, Etienne, assignor to Société Anonyme des Parfums Naturels de Cannes, Paris, France. Extracting perfume essences.....	498,830	June 6	137	33	63	1416
Watel, Etienne, Paris, France, assignor to Société Anonyme des Parfums Naturels de Cannes. Purifying fatty matters.....	509,589	Nov. 28	2702	653	65	1310
Waterbury Brass Company. (See Wheeler, Edward H., assignor.)						
Waterbury Farrel Foundry and Machine Company. (See Lamb, George B., assignor.)						
Waterbury, James M., <i>et al.</i> (See Hetzel, Peter, assignor.)						
Waterbury Manufacturing Company. (See Chase, Frederick S., assignor.)						
Waterbury Manufacturing Company. (See Chase, Henry S., assignor.)						
Waterhouse, Addison G., Hartford, Conn. Electric-arc lamp.....	495,077	Apr. 11	857	219	63	179
Waterhouse, Addison G., Hartford, Conn. Electric-lighting system.....	505,241	Sept. 19	1527	399	64	1584
Waterman, Stephen, and C. H. Luther, Jr., Providence, R. I., assignors to themselves, and K. Lee, New York, N. Y. Velocipede.....	492,754	Feb. 28	2695	609	62	1334
Waterman, William B., Providence, R. I. Valve-gear.....	508,588	Nov. 14	1003	246 247	65	960
Waterous, Charles H., Jr., Brantford, Canada. Clutch-pulley.....	499,617	June 13	1465	350	63	1661
Waterous, Charles H., Brantford, Canada. Clutch-pulley.....	499,618	June 13	1466	351	63	1661
Waterous, Frederick L., South St. Paul, Minn. Upright tubular boiler.....	489,051	Jan. 3	103	30	62	27
Waterous, Frederick L., South St. Paul, Minn. Friction-clutch.....	501,976	July 25	2300	575	64	462
Waters, Clarence F., Grand Rapids, Mich. Combined sideboard and extension-table.....	504,072	Aug. 29	3004	751	64	1180
Waters, Frank M. (See Way and Waters.)						
Waters, Nellie D. (See Chandler, John A., assignor.)						
Waters, Samuel A. L., assignor of one-half to O. R. Miles, New York, N. Y. Device for reeling halyards.....	505,782	Sept. 26	2476	624	64	1775
Waters, Sidney. (See Clowes and Redwood, assignors.)						
Waterson, Alfred H. (See Gleason, Robert M., assignor.)						
Watkin, John G., St. John's, Mich. Bottling-machine.....	496,461	May 2	116	31	63	610
Watkins, Gardner A., Gardner, Mass. Wheel-lock for baby-carriages.....	495,211	Apr. 11	1109	277	63	224
Watkins, James T., and W. C. Bayless, Mossy Creek, Tenn. Implement for lifting pans.....	491,393	Feb. 7	552	140	62	854
Watkins, Maurice, and E. T. Rugg, Alexandria, Ohio. Gate-hinge.....	507,191	Oct. 24	2379	587	65	484
Watkins, Robert C., Nashville, Tenn. Water-motor.....	510,826	Dec. 12	1674	416	65	1738
Watkins, Samuel C. G., Montclair, N. J. Head-rest.....	490,090	Jan. 17	1745	455	62	380
Watkins, William, Chicago, Ill. Steam-pump.....	492,950	Mar. 7	279	71	62	1414
Watrous, Charles, <i>et al.</i> (See Prosser, Joseph W., assignor.)						
Watrous, Earl G., Hoosick Falls, N. Y. Bundle-carrier for harvesting-machines.....	507,604	Oct. 31	3101	737	65	633
Watrous, Earl G., Smith's Mills, assignor to Walter A. Wood Mowing and Reaping Machine Company, Hoosick Falls, N. Y. Grain-binder.....	509,008	Nov. 21	1680	414 415	65	1105
Watrous, Earl G., and H. A. Riley, Hoosick Falls, N. Y. Pipe or gutter forming machine.....	494,936	Apr. 4	640	164	63	124
Watrous, Edwin H., Pawlet, Vt. Antirattler for thill-couplings.....	490,934	Jan. 31	3139	805	62	689
Watrous, George W., and C. B. Snow, Norwich, Conn. Tongs for use in hardening cutlery.....	490,778	Jan. 31	2892	741	62	640
Watson, Abram P., Lake City, Minn. Hitching-weight.....	506,649	Oct. 10	1444	362	65	289
Watson, Algeraus C., London, Ohio. Coat.....	511,667	Dec. 26	3127	764	65	2030
Watson, Anne M., Southampton, England. Game.....	498,702	May 30	3764	928	63	1353
Watson, Christopher H., Riverside, Cal. Water-gate.....	496,239	Apr. 25	2732	682	63	552
Watson, Edward, Grand Rapids, Mich. Fumigation.....	499,407	June 13	1118		63	1600
Watson, Edwin J., Worcester, Mass. Making metal shoe-shank stiffeners.....	494,609	Apr. 4	136	31	63	29
Watson, George A., Toronto, Canada, assignor of sixty-one one-hundredths to W. H. Laird, New York, N. Y. Apparatus for producing and utilizing gas for heating purposes.....	503,817	Aug. 22	2605	650 651	64	1088

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Watson, George C., and J. S. Williams, Chestnut, Ala. Muzzle	490,795	Jan. 31	2915	749	62	644
Watson, George H., St. Louis, Mo. Steam-boiler furnace	502,795	Aug. 8	944	230	64	754
Watson, George H., St. Louis, Mo. Variable exhaust-nozzle for locomotives	502,796	Aug. 8	946	230	64	755
Watson, Henry B., Glen Cove, N. Y. Indicator-tunnel for cans	494,403	Mar. 28	2667	669	62	1916
Watson, James, London, England. Baling cotton	505,580	Sept. 26	2136	541	64	1712
Watson, James, London, England. Baling-press	505,581	Sept. 26	2139	542	64	1712
Watson, James A., Washington, D. C. Justifying mechanism for matrix-making machines	510,305	Dec. 5	774	188	65	1556
Watson, Jeremiah M., Boston, Mass. Machine for cutting leather-board	506,573	Oct. 10	1335	335	65	268
Watson, John H., et al. (See Fishburn, John, assignor.)						
Watson, John H., Worcester, Mass. Dough-mixer	496,925	May 9	881	231	63	796
Watson, John R., Smithfield, Pa. Dental plate	493,800	Mar. 21	1670	426	62	1715
Watson, John T., Polo, Ill. Truss	492,504	Feb. 28	2312	573	62	1256
Watson, Joseph. (See Smith, James G., assignor.)						
Watson, Leonard. (See Thurston, Edwin L., assignor.)						
Watson, Oneal, Crawfordsville, Ind. Collar-fastener	503,510	Aug. 15	2106	527	64	979
Watson, Stuart S. (See Odom, Pleasant W., assignor.)						
Watson, Thomas A. (See Fuller, Henry C., assignor.)						
Watson, Walter, Fayetteville, N. C. Turpentine-tool	498,593	May 30	3565	884	63	1319
Watson, William, assignor of one-half to H. J. Harding, Norwich, England. Stopping wine-bottles	507,662	Oct. 31	3527	867	65	713
Watson, William C., Paterson, N. J. Car-coupling	507,296	Oct. 24	2556	630	65	516
Watson, William C., Paterson, N. J. Car-coupling	509,108	Nov. 21	1857	454	65	1138
Watson, William C., Paterson, N. J. Car-coupling	510,660	Dec. 12	1399	344	65	1686
Watson, William J. (See Comstock, Harry, assignor.)						
Watson, William L. (See Longmore and Watson.)						
Watson, William P. (See Fitch, Charles L., assignor.)						
Watson, William R., Glasgow, Scotland. Machine for cutting or slicing sugar-cane, &c.	494,946	Apr. 4	654	167 168	63	126
Watt, Alexander. (See Easton, Watt, and Buchanan.)						
Watt, Arthur K., Flatbush, N. Y. Thrust-bearing	503,260	Aug. 15	1707	420	64	907
Watt, James H., Barnesville, Ohio. Combined flue-base and thimble	496,626	May 2	370	100	63	687
Watt, James H., Barnesville, Ohio. Flue-thimble	503,818	Aug. 22	2606	651	64	1088
Watt, James H., assignor to Watt Mining Car Wheel Company, Barnesville, Ohio. Self-oiling car-wheel	494,661	Apr. 4	211	53	63	44
Watt, James H., assignor to Watt Mining Car Wheel Company, Barnesville, Ohio. Car-axle mounting	501,389	July 11	1381	345	64	265
Watt Mining Car Wheel Company. (See Watt, James H., assignor.)						
Watt, William, Boston, and E. C. Peterson, East Lexington, Mass. Expansible form for box-making	497,901	May 23	2448	611 612	63	1106
Watt, William R., Somerville, Tenn. Milk-pail	489,352	Jan. 3	567	153	62	122
Watterson, S. W., et al. (See Murrey, Jasper, assignor.)						
Wattie, William, assignor to Knowles Loom Works, Worcester, Mass. Pattern-reversing mechanism for looms	490,890	Jan. 31	3059	785 786	62	674
Wattie, William, assignor to Knowles Loom Works, Worcester, Mass. Pattern mechanism for looms	501,700	July 18	1859	462 463	64	369
Wattles, Cyra B., Elizabeth, N. J. Gas-motor engine	509,981	Dec. 5	232	54 55	65	1453
Wattles, Hiram J., Syracuse, N. Y. Heating apparatus	493,537	Mar. 14	1214	311	62	1609
Wattles, Hiram J., Syracuse, N. Y. Sad-iron	511,225	Dec. 19	2384	581	65	1881
Wattles, Joseph W., Canton, Mass. Spindle and bearing therefor	509,982	Dec. 5	238	55	65	1454
Watts, Alfred E., Duluth, Minn. Automatic passenger-train annunciator and alarm	505,687	Sept. 26	2319	589	64	1745
Watts, John A., New York, N. Y. Refrigerator	492,909	Mar. 7	222	55	62	1402
Watts, Joseph E., Lawrence, Mass. Apparatus for regulating temperature	498,052	Jan. 3	110	30	62	28
Watts, Julius R., Springfield, Ill. Bracket for miners' lamps	493,137	Mar. 7	568	143	62	1471
Watts, Robert N., Uintah, Utah Ter. Concave for thrashing-machines	489,724	Jan. 10	1135	293	62	250
Watts, William H., Jr., assignor of one-half to W. E. Mays, Swoope, Va. Tongue-support	509,060	Nov. 21	1755	433	65	1119
Watson, William G. (See Stewart and Watton.)						
Watzlawik, Fritz, assignor to J. C. Koch, Berlin, Germany. Toy	497,081	May 9	1111	285 282 283	63	837
Watzlawik, Fritz, Reichenberg, Austria-Hungary. Loom for weaving chenille strips	502,920	Aug. 8	1154	284 285 286	64	794
Way, Frank K., Dayton, Ohio. Device for storing and delivering filtered water	504,007	Aug. 29	2912	730 731	64	1163
Way, Frank K., assignor to Pasteur-Chamberland Filter Company, Dayton, Ohio. Air-valve	492,597	Feb. 28	2453	610	62	1286
Way, Frank K., assignor to Pasteur-Chamberland Filter Company, Dayton, Ohio. Filter	497,481	May 16	1774	417	63	969
Way, Frank K., assignor to Boston Filter Company, Boston, Mass. Non-pressure filter	499,268	June 13	859	206	63	1553
Way, Frank K., and F. M. Waters, assignors to Pasteur-Chamberland Filter Company, Dayton, Ohio. Air-valve	507,770	Oct. 31	3367	824	65	683
Way, John H., Philadelphia, Pa. Shuttle for sewing-machines	507,698	Oct. 31	3256	797	65	663
Wayland, Columbus A., Middlesborough, Ky. Picture-frame clamp	490,519	Jan. 24	2455	633	62	540
Wayland, James, Newark, N. J. Railway appliance	492,599	Feb. 28	2455	610 611	62	1287
Wayland, James, Newark, N. J. Railway-signal	501,307	July 11	1222	309 310	64	237
Wayland, James, Newark, N. J. Railway-signal	503,299	Aug. 15	1773	438	64	919
Wayman, Marcus D., et al. (See Green, Ira L., assignor.)						
Wayne, Alfred, assignor of one-half to H. C. Hipkiss, Philadelphia, Pa. Crank-power for machinery	503,394	Aug. 15	1929	479	64	947
Wayne Works. (See Land, Harry, assignor.)						
Weakly, Thomas L., Kenney, Ill. Tire-tongs	497,227	May 9	1329	338	63	876
Wear, George W., Elkhart, Ind. Air-vent for oil-cans	502,334	Aug. 1	133	32	64	591
Weare, Enoch W., assignor of two-thirds to E. H. Tucker, Selma, and S. C. Bolling, Alabama, Cal. Fruit-pitter	495,860	Apr. 18	2149	540	63	430
Weare, Thomas, Kumeo Junction, New Zealand. Roof	502,940	Aug. 8	1190	293	64	799
Warn, Walter R., assignor of one-half to G. N. Miller, Brooklyn, N. Y. Shade-holder for candles	493,198	Mar. 7	658	167	62	1487
Weart, E. A. (See Brame, Robert, assignor.)						
Weatherby, Aaron, New Haven, Conn. Lath-chuck	498,998	June 6	448	105	63	1470
Weathered's Sons, Thomas W. (See Coulson, William H., assignor.)						
Weatherhead, Edward H., Cleveland, Ohio. Hydraulic air-pump	503,819	Aug. 22	2608	651 652	64	1088
Weatherhead, Edward H., Cleveland, Ohio. Hydraulic air-pump	504,097	Aug. 29	3051	763	64	1189
Weathers, David N., Leavenworth, Ind. Vegetable-cutter	491,622	Feb. 14	925	232	62	949

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Weathers, Murdock A., Manchester, N. H. Automatic railway-switch	501,263	July 11	1161	{ 294 295 }	64	226
Weatherwax, Leon J., Aberdeen, Wash., assignor of one-half to N. D. Edmonds, Chicago, Ill. Attachment for rubbers	506,142	Oct. 3	539	139	65	105
Weaver, Anthony, Earlville, N. Y. Meat-block	503,511	Aug. 15	2107	528	64	979
Weaver, George M., J. Adams, and J. A. Hamilton, Neepawa, Canada. Thill-coupling for vehicles	510,220	Dec. 5	641	151	65	1531
Weaver, Henry M., Mansfield, Ohio. Cash-carrier apparatus	490,695	Jan. 31	2754	709	62	613
Weaver, Henry M., Mansfield, Ohio. Cash-carrier	500,307	June 27	2610	637	63	1886
Weaver, Henry M., Mansfield, Ohio. Package-carrier	500,308	June 27	2611	{ 637 638 }	63	1886
Weaver, Henry M., Mansfield, Ohio, assignor to Barr Cash and Package Carrier Company. Store-service apparatus	500,641	July 4	166	43	64	33
Weaver, Henry M., Mansfield, Ohio, assignor to Barr Cash and Package Carrier Company. Cash-carrier apparatus	500,642	July 4	168	43, 44	64	33
Weaver, John A., Pequea, assignor of one-half to D. W. Harner, New Holland, Pa. Heater	502,335	Aug. 1	140	32	64	591
Weaver, Leland S., Fremont, Mich. Preparing surgical sutures	505,148	Sept. 19	1387	355	64	1558
Weaver, Oscar, Mauch Chunk, assignor of one-half to J. Miller, Weatherly, Pa. Rack for hanging stove utensils	491,502	Feb. 7	718	181	62	887
Weaver, R. M., <i>et al.</i> (See Bryant, William H., assignor.)						
Weaver, Samuel J., <i>et al.</i> (See Pickles, Charles K., assignor.)						
Weaver, William, assignor of two-thirds to C. Lapham and F. T. Hyatt, Norwalk, Conn. Envelope	491,030	Jan. 31	3307	843	62	722
Weaver, William, Westport, assignor of one-half to E. O. Keeler and C. Lapham, Norwalk, Conn. Automatic reversing device for railway-trains	504,766	Sept. 12	752	{ 187 188 }	64	1425
Weaver, William, assignor to himself, D. Hitchcock, W. A. Curtis, A. C. Wheeler, and C. Lapham, Norwalk, Conn. Car-starter	501,595	July 18	1685	420	64	339
Weaver, William J., Reynoldsville, Pa. Blackboard-eraser	503,020	Aug. 8	1313	321	64	821
Webb, Albert, Worcester, England. Woven pile fabric	491,933	Feb. 14	1029	260	62	971
Webb, Arthur P., Hoboken, N. J. Hoisting mechanism for elevators	495,078	Apr. 11	859	220	63	179
Webb, Edward, Reading, Mass. Pressure-regulator	504,507	Sept. 5	327	84	64	1331
Webb, Frederick, Battersea, England. Method of and apparatus for extracting precious metals from their ores	495,385	Apr. 11	1388	346	63	274
Webb, George, Jr., and G. H. Rayner, London, England. Making oxygen	500,697	July 4	263		64	49
Webb, George B., New York, N. Y., assignor, by mesne assignments, to Wyckoff, Seamans & Benedict, of New York. Type-writing machine	489,514	Jan. 10	836	219	62	190
Webb, George B., New York, N. Y., assignor, by mesne assignments, to Wyckoff, Seamans & Benedict, of New York. Type-writing machine	489,701	Jan. 10	1094	284	62	243
Webb, George B., New York, N. Y., assignor, by mesne assignments, to Wyckoff, Seamans & Benedict, of New York. Type-writing machine	501,977	July 25	2301	575	64	463
Webb, George B., New York, N. Y., assignor, by mesne assignments, to Wyckoff, Seamans & Benedict, of New York. Type-writing machine	506,352	Oct. 10	960	239	65	194
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine	490,329	Jan. 24	2153	562	62	481
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine	490,330	Jan. 24	2157	{ 562 563 }	62	482
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine	492,599	Feb. 28	2459	{ 611 612 }	62	1288
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine and card-holder therefor	496,984	May 9	962	252	63	810
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-levelling contrivance for type-writing machines	496,985	May 9	964	{ 252 253 }	63	811
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine	504,897	Sept. 12	966	249	64	1466
Webb, George D. (See Maher, John J., assignor.)						
Webb, George F., Cleveland, Ohio. Electric belt	495,861	Apr. 18	2151	540	63	430
Webb, George H., Pawtucket, R. I. Machine for forging bolts	506,836	Oct. 17	1763	444	65	360
Webb, George W., assignor of one-half to W. Gaston, Wilkes-Barré, Pa. Electric switch	494,610	Apr. 4	137	31, 32	63	29
Webb, Herbert L., New York, N. Y. Connector	503,181	Aug. 15	1584	389	64	885
Webb, John B., Millburn, N. J. Dynamometer	490,381	Jan. 24	2238	583	62	499
Webb, Richard W., <i>et al.</i> (See Carstarphen, William P., Jr., assignor.)						
Webb, Nicholas W., Brooklyn, N. Y. Combined envelope and letter-sheet	503,628	Aug. 22	2322	579	64	1032
Webber, Charles C., Springfield, Mass. Steam pumping-engine	493,668	Mar. 21	1442	368	62	1670
Webber, Edward B., Colliersville, Tenn. Clothes-pin	498,892	June 6	254	60	63	1437
Webber, George H. (See Pomeroy and Webber.)						
Webber, John T., assignor of one-half to C. W. Harding, Red Lodge, Mont. Envelope	493,847	Mar. 21	1734	441	62	1728
Webber, Josiah A., Brooklyn, N. Y. Car-wheel	498,038	May 23	2661	665	63	1143
Webber, Louisa E. (See Webber, William M. and L. E.)						
Webber, Oakmand A., assignor of one-half to G. B. Randlette, Richmond, Me. Seam-turning machine	509,983	Dec. 5	240	56	65	1454
Webber, William H. (See Solt, Harrison, assignor.)						
Webber, William M. and L. E., Buckhannon, W. Va. Hemming attachment for sewing-machines	494,971	Apr. 4	695	178	63	133
Weber, Adolph, assignor of two-thirds to T. S. Christie and B. Noble, Detroit, Mich. Union-joint	494,801	Apr. 4	443	109	63	86
Weber, Anton. (See Roth and Schmidt, assignors.)						
Weber, August, Schenectady, N. Y. Arc-lamp frame	502,687	Aug. 1	751	181	64	704
Weber, Charles. (See Dénorus, Emile, assignor.)						
Weber, Charles S., San José, Cal. Stringing pianos	509,274	Nov. 21	2127	511	65	1189
Weber, Charles S., San José, Cal. Stringing musical instruments	509,414	Nov. 28	2397	581	65	1250
Weber, Charles S., San José, Cal. Stringing pianos	510,944	Dec. 19	1928	471	65	1795
Weber, Edward J. (See Shipman, John W., assignor.)						
Weber, Ernst, Riehen, Switzerland. Combined cane and umbrella	506,289	Oct. 10	854	210	65	174
Weber, Frank, Louisville, Ky. Dumping-wagon	501,390	July 11	1382	346	64	265
Weber, George. (See Weber, William and G.)						
Weber, Jacob S., Kinsey, Mo. Cotton-chopper	497,106	May 9	1148	294	63	843
Weber, James, and H. Hampel, assignors of one-half to J. Davidsohn, Berlin, Germany. Dental boring apparatus	493,846	Mar. 21	1732	441	62	1727
Weber, Peter. (See Gardner, John M., Jr., assignor.)						
Weber, Peter, Schenectady, N. Y. Friction clutch	505,970	Oct. 3	260	69, 70	65	51
Weber, William and G., Philadelphia, Pa. Speaking attachment for telephones	509,061	Nov. 21	1756	433	65	1119
Webster, Adelbert A. (See Nicholson, William, assignor.)						
Webster, Augustus D., assignor of one-third to J. S. Condell, Jr., Springfield, Ill. Extension-ladder	504,008	Aug. 29	2914	731	64	1163

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Webster, Edwin S. (See Stone and Webster.)						
Webster, Frank H., <i>et al.</i> (See Crosby, Frank P., assignor.)						
Webster, Harold A., Haverhill, Mass. Machine for breasting heels of boots or shoes.....	504,854	Sept. 12	902	{ 232 233 325 326 327 }	{ 64 }	1454
Webster, Harold A., Haverhill, Mass. Heel-attaching machine.....	505,074	Sept. 12	1268	{ 326 327 }	{ 64 }	1523
Webster, Harold A., Haverhill, assignor to G. H. P. Flagg, Boston, Mass. Buffing-machine.....	490,419	Jan. 24	2293	595	62	508
Webster, Harold A., Haverhill, assignor to G. H. P. Flagg, Boston, Mass. Buffing-roll.....	493,001	Mar. 7	363	91	62	1430
Webster, Harold A., Haverhill, assignor to G. H. P. Flagg, Boston, Mass. Buffing-wheel.....	493,002	Mar. 7	364	91, 92	62	1431
Webster, Harold A., Haverhill, assignor to G. H. P. Flagg, Boston, Mass. Buffing-pad.....	505,644	Sept. 26	2251	570	64	1734
Webster, Jerome J., assignor to Boston Cash Register Company, Northampton, Mass. Cash-registering machine.....	502,645	Aug. 1	662	161	64	688
Webster, John B. (See Sweet, Orange M., assignor.)						
Webster, Joseph F., New Bedford, Mass. Shackle for suspenders.....	489,443	Jan. 3	710	190	62	152
Webster, Pillsbury A. (See Hannum, Henry A., assignor.) (Reissue.)						
Webster, Thomas H., and T. Dobson, Taftville, Conn. Lug connection for picker-sticks.....	502,108	July 25	2515	631	64	502
Webster, Walter R., and J. Hamilton, Pine Grove, Cal. Oven or other door.....	503,820	Aug. 22	2610	652	64	1089
Webster, Warren, Carneiro, Kans. Attachment for grain-drills.....	489,353	Jan. 3	568	153	62	122
Webster, Warren, Philadelphia, Pa. Extractor for grease, grit, &c., from exhaust-steam.....	490,461	Jan. 24	2355	610	62	520
Webster, William, Leeds, England. Machine for centering, preparing, and countersinking bars, studs, &c.....	505,013	Sept. 12	1161	298	64	1503
Webster, William M., Chicago, Ill. Closet-seat hinge.....	506,023	Oct. 3	343	91	65	67
Wecker, Hermann, Offenbach-on-the-Main, Germany. Hub-attaching device for vehicle-axles.....	509,009	Nov. 21	1684	415	65	1105
Weckman, John S., Canton, Ohio. Field-roller.....	503,629	Aug. 22	2323	579	64	1033
Weddle, Ethelbert S., Traver, Cal. Wagon-reach coupling.....	510,056	Dec. 5	366	81	65	1478
Wedmore, Henry S., Guilford, Conn. Hook and eye.....	489,053	Jan. 3	112	30	62	28
Weed, Alfred, Tarrytown, N. Y. Rasp.....	499,619	June 13	1468	351	63	1661
Weed, Alfred, Tarrytown, N. Y. Machine for making rasps.....	499,620	June 13	1469	{ 351 352 }	{ 63 }	1661
Weed, Alfred, Tarrytown, N. Y. Cutter-head for rasp-punching machines.....	499,621	June 13	1471	352	63	1662
Weed, Clinton A., Racine, Wis. Revolving head for sandpapering-machines.....	492,077	Feb. 21	1618	401	62	1102
Weed, Gustavus R., Orange, N. J. Stopper attachment for ink-bottles.....	500,982	July 4	708	186	64	129
Weed, Harrison, New Haven, Conn. Whip-hanger.....	498,999	June 6	451	106	63	1470
Weed, Howard L., Spokane, Wash. Perpetual calendar.....	508,454	Nov. 14	771	190	65	915
Weed, Smith M., <i>et al.</i> (See Wise, Morris, assignor.)						
Weedermann, Erich J., Flensburg, Germany. Ice-breaking apparatus.....	506,260	Nov. 7	468	113	65	844
Week, Nelson A., and H. J. Moen, Stevens Point, Wis. Hand-truck.....	506,290	Oct. 10	855	210	65	174
Weeks, Albert W., Palmer, Mass. Trestle.....	494,358	Mar. 28	2595	652	62	1903
Weeks, Albertus A. (See Keep, James M., assignor.)						
Weeks & Campbell Company. (See Byron, Henry, assignor.)						
Weeks Colley Manufacturing Company. (See Colley, George H., assignor.)						
Weeks, Eugene J., <i>et al.</i> (See Parrish, Homer A., assignor.)						
Weeks, Henry A., and G. W. Lewis, Chicago, Ill. Gas-engine.....	511,478	Dec. 26	2830	{ 684 685 }	{ 65 }	1975
Weeks, John W., Providence, R. I. Gas heating apparatus.....	507,699	Oct. 31	3257	797	65	663
Weenink, Albert. (See Lewis and Weenink.)						
Weerd, Henry de, Chicago, Ill. Washing-machine.....	503,779	Aug. 22	2556	636	64	1078
Weese, Tolbert, assignor of one-half to D. S. Hencks & Son, Larkin, Kans. Wire-stretcher.....	492,078	Feb. 21	1619	402	62	1102
Wegener, Carl, assignor of one-half to P. Baumert, Berlin, Germany. Firing apparatus, for use with coal-dust.....	511,004	Dec. 19	2030	{ 501 502 }	{ 65 }	1813
Weger, Charles T., <i>et al.</i> (See Houghton, Thomas J., assignor.)						
Weger, Frank L., <i>et al.</i> (See Houghton, Thomas J., assignor.)						
Wegmann, Conrad, Brooklyn, N. Y. Fruit-press.....	504,545	Sept. 5	390	99	64	1342
Wegner, Frederick A. (See Kepler and Wegner.)						
Wegner, Georg, Berlin, Germany. Composition for soldering aluminum.....	490,840	Jan. 31	2978	.....	62	658
Wegner, Georg, Berlin, Germany. Electroplating aluminum.....	490,841	Jan. 31	2979	.....	62	658
Wegner, Georg, and P. Gührs, Berlin, Germany. Electroplating aluminium and its alloys.....	496,176	Apr. 25	2621	.....	63	534
Wegner, Georg, and P. Gührs, Berlin, Germany. Coating aluminium and aluminium alloys.....	505,864	Oct. 3	98	.....	65	20
Wegner, Gustavus A. (See Behn and Wegner.)						
Wehrlin, Jacques, Vevay, Switzerland. Soldering-machine.....	489,618	Jan. 10	982	256	62	219
Weicher, John J., assignor to American Fiber Extracting Company, Chicago, Ill. Machine for extracting fiber from fibrous plants.....	506,866	Oct. 17	1809	454	65	367
Weickel, Henry, Darien, assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Girder for traveling cranes.....	499,622	June 13	1472	{ 352 353 }	{ 63 }	1662
Weidaw, Frank T., assignor to W. S. Purington and J. B. Casterlin, Syracuse, N. Y. Hose-clamp.....	492,855	Mar. 7	125	32	62	1382
Weidig, Henry P., Newark, N. J. Method of and apparatus for extinguishing fires.....	504,898	Sept. 12	970	249	64	1467
Weidig, Henry P., assignor to J. B. Stobaueus and J. Kleinhans, Newark, N. J. Disinfectant.....	497,082	May 9	1111	.....	63	837
Weidman, Henry. (See Renz and Weidman.)						
Weidner, Ernst A., <i>et al.</i> (See Moehn, John N., assignor.)						
Weidner, Phillip, Saylor Springs, Ill. Pole or thill coupling.....	489,579	Jan. 10	928	240	62	208
Weienneft, Peter W., Saline, Mich. Fence.....	497,996	May 23	2592	648	63	1131
Weigand, Richard, Remscheid, Germany. Skate.....	506,574	Oct. 10	1338	336	65	269
Weigant, Casper, Portland, Oreg. Blacksmith's hammer.....	503,630	Aug. 22	2325	579	64	1033
Weil, Isaac, Williamsport, Pa. Oil-can.....	502,336	Aug. 1	141	32	64	591
Weil, Moe C. (See Strauss, Joseph B., assignor.)						
Weillert, George W., Rochester, N. Y. Shoe.....	505,258	Sept. 19	1551	405	64	1589
Weiller, Eugene. (See Roberts, Thomas, assignor.)						
Weinandy, August. (See Schalk and Weinandy.)						
Weinberger, Konrad, Nuremberg, Germany. Spittoon for railway-cars.....	501,635	July 18	1755	437	64	352
Weinidel, Charles, assignor of one-third to O. E. Mueller, Louisville, Ky. Watchman's time-detector.....	510,745	Dec. 12	1531	{ 380 381 }	{ 65 }	1712
Weingartner, Joseph, Manistique, Mich. Gang-saw attachment.....	498,594	May 30	3566	884	63	1319
Weinmann, Samuel. (See Boas and Weinmann.)						
Weinrich, Moriz, St. Louis, Mo. Revivifying bone-black.....	509,460	Nov. 28	2501	.....	65	1272
Weir, Frederic C. (See Fehrenbach, John, assignor.)						
Weir, Frederic C. (See Harden, Edward W., assignor.)						
Weir, Frederic C. (See Ramsey and Harden, assignors.)						
Weir, Frederic C., Cincinnati, Ohio. Railway-chair.....	499,154	June 6	689	165	63	1510
Weir, Frederic C., Cincinnati, Ohio. Clamp for railway-frogs.....	507,863	Oct. 31	3528	867	65	713

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Weir, Frederic C., and E. W. Harden, Cincinnati, Ohio; said Harden assignor to said Weir. Valve-gear.	490,331	Jan. 24	2159	{ 563 564 }	62	483
Weir, Frederic C., and E. W. Harden, Cincinnati, Ohio, assignors to Weir Frog Company, of Ohio. Rail-curving machine.	494,450	Mar. 28	2734	685	62	1928
Weir, Frederic C., and E. W. Harden, Cincinnati, Ohio; said Harden assignor to said Weir. Electrical switch-lock.	494,451	Mar. 28	2736	686	62	1927
Weir Frog Company. (See Weir and Harden, assignors.)						
Weir Plow Company. (See Roadhouse, Levi, assignor.)						
Weir, Robert, Montclair, N. J. Closed-conduit electric railway.	507,339	Oct. 24	2634	648	65	532
Weis, John B., Toledo, Ohio. Ventilator.	493,321	Mar. 14	878	224	62	1545
Weis, Joseph B. (See Hoskins and Weis.)						
Weis, Nick, Paducah, Ky. Draft device for cars.	490,935	Jan. 31	3139	805	62	689
Weisenfeld, Robert S., et al. (See Hudson, Tobias, assignor.)						
Weiskittel, Anton, Baltimore, Md. Burner for gas-stoves.	499,069	June 6	563	134	63	1489
Weiskittel, Anton, Baltimore, Md. Gas-stove.	499,623	June 13	1474	354	63	1662
Weiss, Carl W., Brooklyn, N. Y. Ignitor for gas-engines.	492,126	Feb. 21	1693	492	62	1117
Weiss, Carl W., Brooklyn, N. Y. Governor for gas-engines.	494,762	Apr. 4	212	53	63	44
Weiss, Carl W., Brooklyn, N. Y., assignor, by mesne assignments, to National Cash Register Company, of Ohio. Cash register and recorder.	495,764	Apr. 18	1996	{ 505 506 507 }	63	402
Weiss, Carl W., Brooklyn, N. Y., assignor, by mesne assignments, to National Cash Register Company, of Ohio. Cash register and indicator.	496,240	Apr. 25	2724	682	63	553
Weiss, Franz J., Basle, Switzerland, assignor to Sangerhäuser Aktien-Maschinenfabrik und Eisengiesserei, vormals Hornung & Rabe, Sangerhausen, Germany. Condenser.	496,761	May 2	586	157	63	724
Weiss, George W., Brooklyn, N. Y. Combination-tool.	503,182	Aug. 15	1585	390	64	886
Weiss, Julius, Hamburg, Germany. Element for building bridges.	509,781	Nov. 28	3008	{ 727 728 }	65	1369
Weiss, Karl W., Yonkers, N. Y. Pile-wire for looms.	505,583	Sept. 26	2144	542	64	1713
Weiss, Louis F., Worcester, Mass. Apparatus for spinning or twisting.	506,754	Oct. 17	1699	409	65	335
Weiss, Louis T., Brooklyn, N. Y. Speed-measure.	505,582	Sept. 26	2142	542	64	1713
Weissensthanner, Achille. (See Weissensthanner, Alfred L., assignor.)						
Weissensthanner, Achille, Paris, France. Means for hermetically sealing bottles, jars, &c.	500,698	July 4	264	72	64	50
Weissensthanner, Alfred L., assignor to A. Weissensthanner, Paris, France. Hermetically sealing vessels.	509,634	Nov. 28	3094	747	65	1385
Weisz, Albert R., Brooklyn, N. Y. Corkscrew.	495,326	Apr. 11	1389	347	63	275
Welch, Abraham T., Washington, D. C. Valve-operating device for gas-heaters.	500,643	July 4	171	44	64	34
Welch, Allie E., assignor of one-half to F. P. Gazier, Chelsea, Mich. Oil-stove.	509,189	Nov. 21	1984	482	65	1163
Welch, Alonzo T. (See Lawson, Samuel, assignor.)						
Welch, Benjamin H., et al. (See Steck, Charles C., assignor.)						
Welch, Charles K., Coventry, England, assignor to Pneumatic Tyre and Booth's Cycle Agency, Limited, Dublin, Ireland. Pneumatic tire.	494,611	Apr. 4	139	32	63	29
Welch, Charles K., Coventry, England, assignor to Pneumatic Tyre and Booth's Cycle Agency, Limited, Dublin, Ireland. Apparatus for manufacturing pneumatic tires.	497,464	May 16	1747	440	63	964
Welch, Charles K., Coventry, England, assignor to Pneumatic Tyre and Booth's Cycle Agency, Limited, Dublin, Ireland. Valve for pneumatic tires.	503,300	Aug. 15	1776	{ 438 439 }	64	919
Welch, Charles M., Springfield, Mo. Device for detaching horses.	509,010	Nov. 21	1685	415	65	1105
Welch, E. B. (See Robinson, Edward W., assignor.)						
Welch, George A., H. R. Travers, and C. Petersen, Baltimore, Md.; said Travers and Petersen assignors to said Welch. Vending apparatus.	495,536	Apr. 18	1632	410	63	339
Welch, Henry J., Carthage, N. Y. Combined copy-holder and folio-indicator for typewriters.	492,546	Feb. 28	2377	590	62	1271
Welch, Henry J., Carthage, assignor of one-half to C. V. Graves, Natural Bridge, N. Y. Trolling apparatus.	489,110	Jan. 3	199	53	62	46
Welch, Henry J., Carthage, assignor of one-half to C. V. Graves, Natural Bridge, N. Y. Combined lock and check-clasp.	497,972	May 23	2556	638	63	1124
Welch, Joseph, Delphos, Ohio. Drying attachment for corn-cribs.	504,258	Aug. 29	3320	830	64	1239
Welch, Joseph H. (See Duncan, James E., assignor.)						
Welch, Luther, et al. (See Ward, Frank D., assignor.)						
Welch, Michael I., assignor to American Safety Car Coupling Company, Cordele, Ga. Car-coupling.	496,025	Apr. 25	2393	605	63	491
Welch, Michael I., assignor to American Safety Car Coupling Company, Cordele, Ga. Car-coupling.	496,026	Apr. 25	2394	{ 605 606 }	63	491
Welch, Robert, Keokuk, Iowa. Barrel-hoopening machinery.	503,021	Aug. 8	1314	322	64	822
Welch, Rosia W., assignor of thirteen-sixteenths to W. H. Kellum, and W. H. Kellum, trustee, Baltimore, Md. Grain-couring machine.	491,623	Feb. 14	926	233	62	949
Welch, Samuel B. and S., Millville, Iowa. Hay-fork.	502,155	July 25	2391	{ 651 652 }	64	517
Welch, Stephen. (See Welch, Samuel B. and S.)						
Welchans, George R., et al. (See Cogley, Andrew J., assignor.)						
Welcher, Maoly B., et al. (See Gard and Wing, assignors.)						
Welcome, Jonas F., Richmond, Va. Harness.	489,440	Jan. 3	705	189	62	151
Weld, Allen P. (See Thayer and Weld.)						
Weld, George A., Winchester, Mass. Shank-stiffener.	501,978	July 25	2304	576	64	473
Weld, George A., Winchester, Mass. Shoe-fastening.	505,865	Oct. 3	98	26	65	21
Weld, George A., Winchester, Mass. Shoe-fastening.	507,249	Oct. 24	2477	610	65	502
Weldon, James G., Pittsburg, Pa. Apparatus for broiling meats.	493,801	Mar. 21	1671	426	62	1716
Weldon, Leonard, assignor to Klander-Weldon Dyeing Machine Company, Amsterdam, N. Y. Apparatus for dyeing.	501,856	July 18	2104	520	64	412
Weldon, Leonard, assignor to Klander-Weldon Dyeing Machine Company, Amsterdam, N. Y. Centrifugal dyeing-machine.	505,497	Sept. 26	1943	501	64	1676
Weldon, Leonard, assignor to Klander-Weldon Dyeing Machine Company, Amsterdam, N. Y. Apparatus for dyeing.	508,261	Nov. 7	469	{ 113 114 }	65	844
Weldon, William R. H. (See Snell and Weldon.)						
Welds, Benjamin A., Jackson, Mich. Slat-and-wire-fence machine.	501,636	July 18	1736	437	64	352
Welin, Axel, London, England. Breech mechanism for guns.	497,695	May 16	2116	{ 528 529 }	63	1031
Welker, George M., Bryan, Ohio. Combined shelf and table.	498,893	June 6	255	60	63	1437
Welker, Henry H., assignor to himself and J. Grile, Attica, N. Y. Radiator-case.	499,686	June 13	1561	377	63	1677
Welker, Chester A., Sing Sing, N. Y. Torpedo-placing machine.	489,054	Jan. 3	113	81	62	28
Weller, Chester A., Sing Sing, N. Y. Torpedo signaling machine.	501,175	July 11	1032	261	64	202
Weller, Chester A., Sing Sing, N. Y. Block-signal system.	505,802	Sept. 26	2507	633	64	1781
Weller, Chester A., Sing Sing, N. Y., assignor to United States Cotton Picking Company, of New Jersey. Cotton-picking finger.	508,358	Nov. 7	618	152	65	873
Weller, Franklin A., Boston, Mass. Rheostat.	511,259	Dec. 19	2441	595	65	1891

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Weller, John H., assignor to Time Stock Feeder Company, Louisville, Ky. Time stock-feeder	505,180	Sept. 19	1436	370	64	1566
Weller, William L., Jr., assignor to Time Stock Feeder Company, Louisville, Ky. Time releasing device for gravity doors	505,415	Sept. 19	1816	469	64	1638
Welling, John E., Cynthiana, Ky. Water-filter	489,354	Jan. 3	569	154	62	122
Wellman, Harold R., Duluth, Minn. Ball-bearing	506,409	Oct. 10	1065	265	65	215
Wellman Sole Cutting Machine Company. (See Stickney, Allison M., assignor.)						
Wells, Arthur C. (See Wallwork and Wells.)						
Wells, C. S., et al. (See Thorp, Thomas J., assignor.)						
Wells, Charles R., assignor of two-thirds to C. W. Bardeen, Syracuse, N. Y. Device for teaching penmanship	507,950	Oct. 31	3665	907	65	739
Wells, Charles R., assignor of two-thirds to C. W. Bardeen, Syracuse, N. Y. Device for teaching penmanship	510,372	Dec. 5	871	210	65	1576
Wells, Charles S., Herrickville, Pa. Whiffletree	504,822	Sept. 12	840	218	64	1443
Wells, Chester F., Binghamton, N. Y. Leach-sprinkler	492,647	Feb. 28	2538	629	62	1303
Wells, Edward F., Chicago, Ill. Construction of buildings	508,455	Nov. 14	774	191	65	916
Wells, Elmer J., Nashua, Iowa. Brake for baby-carriages	494,910	Apr. 4	609	154	63	118
Wells, Frank A., New York, N. Y. Water-closet	502,452	Aug. 1	341	82	64	629
Wells, Frederick B., Montreal, Canada. Wrench	497,618	May 16	1991	498	63	1008
Wells, George F., and M. J. Sparks, Philadelphia, Pa.; said Wells assignor to said Sparks. Sewing-machine attachment	509,062	Nov. 21	1757	434	65	1119
Wells, George W. (See De Celles and Wells.)						
Wells, Harlan P. (See Morrill and Wells.)						
Wells, Harlan P., assignor of one-half to O. Morrill, Amesbury, Mass. Carriage	499,768	June 20	1711	410	63	1717
Wells, James A., Liberty, assignor of one-half to J. H. Rump, Quincy, Ill. Sawing-machine	490,696	Jan. 31	2756	710	62	614
Wells, John C., assignor to Bevin Brothers Manufacturing Company, East Hampton, Conn. Gong-bell	498,908	June 6	286	66	63	1443
Wells, John H., Fall River, Mass. Comb-making machine	498,831	June 6	139	34	63	1416
Wells, Lionel D., London, England. Personal-equation chronograph	493,346	Mar. 14	907	232 233	62	1551
Wells, Nelson D., Dayton, Ohio. Pneumatic dispatch-tube	497,845	May 23	2349	589	63	1088
Wells, Philip F., Milford, Mich. Bean-harvester	500,069	June 20	2216	540	63	1805
Wells, Samuel S. (See Quigg, Lewis R., assignor.)						
Wells, W. A. (See Holcomb, George C., assignor.)						
Wells, William H., Jr., et al. (See Forslund, Hugo W., assignor.)						
Wells, William W., and H. E. Tidmarsh, Sandy Hill, N. Y. Friction-clutch	493,608	Mar. 14	1348	343	62	1637
Welsh, Albertus. (See Welsh, Artemus and A.)						
Welsh, Artemus and A., assignors of one-half to J. M. Jones and J. R. Greenless, Lawrence, Kans. Locomotive ash-pan	490,332	Jan. 24	2162	564	62	483
Welsh, Edward F. (See Grabler, Peter, assignor.)						
Welsh, Pierre V. W., assignor of one-half to W. F. Freeman, New York, N. Y. Coin-operated photograph-machine	490,180	Jan. 17	1888	491 492 493	62	417
Welsh, Samuel. (See Lewis, William T., assignor.)						
Welsh, Samuel. (See Stevens, Frank, assignor.)						
Welsh, Samuel, et al. (See Shaffer, Richard M., assignor.)						
Welsh, T. W. (See Smith, William J., assignor.)						
Welsh, William S., assignor to Mast, Foos & Company, Springfield, Ohio. Check-valve	491,957	Feb. 14	1437	358	62	1051
Welterau, Daniel, et al. (See Winckler, Fredrick W., assignor.)						
Wemple, Fred B., et al. (See Trout, Emerson W., assignor.)						
Wendell, Adelbert C., Minneapolis, Minn. Mail tie-sack	505,688	Sept. 26	2321	589	64	1746
Wendell, Ferdinand J., Fort Wayne, Ind. Stereotype-casting apparatus	492,448	Feb. 28	2201	550	62	1234
Wendt, Henry W., et al. (See De Laney, John, assignor.)						
Wendt, William F., et al. (See De Laney, John, assignor.)						
Wenger, Benjamin F., South English, Iowa. Hay-rake	490,697	Jan. 31	2757	710	62	614
Wenger, Jacob E., Burton City, Ohio. Device for treating sheep	489,055	Jan. 3	114	31	62	29
Wenger, Jacob E., Burton City, Ohio. Feed-trough	494,236	Mar. 28	2397	605	62	1866
Wenig, Emil, Berlin, Germany. Flash or signal lamp	500,440	June 27	2824	696	63	1925
Wenman, Joseph E., East Liverpool, Ohio. Lamp-chimney attachment for medical vaporizing and heating purposes	491,827	Feb. 14	1233	308	62	1011
Wennberg, John, and O. Liudstrom, Fertile, Minn. Automatic wagon-brake	509,063	Nov. 21	1758	434	65	1119
Wensing, John, assignor of one-third to A. V. Klefish, Milwaukee, Wis. Combined pipe-wrench, monkey-wrench, and flange-holder	494,310	Mar. 28	2507	633	62	1867
Wenz, Philip P., Meadville, Pa. Type-writing machine	491,730	Feb. 14	1084	274 275	62	961
Wenzel, Karl, New York, N. Y. Lounge	497,696	May 16	2119	529	63	1031
Werden, James D. (See Newman, Werden, and Stempel.)						
Werden, Rudolphus D., Cincinnati, Ohio. Steam-engine	500,749	July 4	345	91	64	64
Werline, Henry E., assignor of three-fourths to F. S. Barr, Lancaster, E. L. Reinhold, and H. B. Cassel, Marietta, Pa. Electric double-pole fixture cut-out	509,500	Nov. 28	2562	620	65	1283
Werline, Henry E., Lancaster, assignor of three-fourths to E. L. Reinhold and H. B. Cassel, Marietta, and F. S. Barr, Lancaster, Pa. Electric pendant cut-out	509,501	Nov. 28	2565	620	65	1284
Werline, Henry E., assignor of three-fourths to F. S. Barr, Lancaster, E. L. Reinhold, and H. B. Cassel, Marietta, Pa. Shade-holder	509,502	Nov. 28	2567	620	65	1284
Wern, Erik G. P., Brooklyn, N. Y. Friction-clutch	505,338	Sept. 19	1684	434	64	1613
Wern, Gustave P., Brooklyn, N. Y. Cable-support	492,648	Feb. 28	2539	629	62	1303
Wernberg, Louis. (See Sutton, Harry C., assignor.)						
Werner, Andrew. (See Decker, Winkler, Friess, and Werner.)						
Werner, August, Brooklyn, N. Y. Filter	490,520	Jan. 24	2456	633	62	541
Werner, August, Brooklyn, N. Y. Froth and liquid separator	490,521	Jan. 24	2457	633	62	541
Werner, August, Brooklyn, N. Y. Method of and apparatus for charging liquids	490,522	Jan. 24	2459	634	62	541
Werner, August, Brooklyn, N. Y. Steaming liquids	490,523	Jan. 24	2461	634	62	542
Werner, August, Brooklyn, N. Y. Method of and apparatus for the manufacture and filling of liquids	490,524	Jan. 24	2462	634 635	62	542
Werner, August, Brooklyn, N. Y. Mixing apparatus	490,525	Jan. 24	2465	635	62	542
Werner, August, Brooklyn, N. Y. Tobacco-pipe	507,951	Oct. 31	3667	908	65	739
Werner, Charles J. (See Schmidt, Merunka, and Werner.)						
Werner, Hermann. (See Pfeiderer and Werner.)						
Werner, John, Rochester, N. Y. Machine for beating and mixing sirup	506,384	Oct. 10	1022	255	65	207
Werner, John, and F. E. Williams; said Williams assignor to said Werner; said Werner assignor of one-half to F. Hedges, Rochester, N. Y. Sirup-cooling tank	491,031	Jan. 31	3308	844	62	722
Werner, John V., and W. Falker, Joliet, Ill. Grass-receptacle for lawn-mowers	498,039	May 23	2662	665	63	1143
Werner, Louis. (See Hedbavny, Anton, assignor.)						
Werner, Louis. (See Knowles, Edward R., assignor.)						
Werner, Louis G., assignor to J. Newburn, Des Moines, Iowa. Animal-shears	506,755	Oct. 17	1635	409	65	336

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Werner, Paul F., Vailsburg, N. J., assignor to J. Duncan & Co., Boston, Mass. Overhead tramway	491,151	Feb. 7	138	37	62	775
Wertz, Charles W., and W. R. Womach, St. Joseph, Mo. Sanding device for street-cars	497,902	May 23	2449	612	63	1106
Wertheimer, Emanuel, New York, N. Y. Jewelry-tray	507,864	Oct. 31	3528	868	65	713
Wertsbaugher, Judson S., and G. H. McCune, Fort Wayne, Ind. Rotary air-brush	506,450	Oct. 10	1141	{ 283 284 }	65	230
Wertz, Lewis, Oregon, Ill. Compound water-wheel	501,123	July 11	951	243	64	187
Weser, John A., New York, N. Y. Musical-instrument case	504,463	Sept. 5	242	64	64	1315
Wesel, Ferdinand, New York, N. Y. Lock-up for printers' chases	493,848	Mar. 21	1735	442	62	1728
Wessel, Ferdinand A., Boston, Mass. Alternating-current electric motor	503,183	Aug. 15	1587	390	64	886
Wessell, Charles B., Denver, Colo., assignor of one-third to A. McDonald, Boyd, Wis. Double-edging machine	511,312	Dec. 19	2532	616	65	1907
Wesselowski, Julius. (See Green and Wesselowski.)						
Wessling, George W., et al. (See Kammerer, Karl L., assignor.)						
Wesson, Daniel B., Springfield, Mass. Projectile	499,487	June 13	1249	298	63	1823
Wesson, Miley B., Fort Worth, Tex. Head rest	497,697	May 16	2119	529	63	1032
West, Augustine C., Cambridge, assignor of one-half to Page Brothers & Co., Boston, Mass. Oil-stove	506,143	Oct. 3	540	140	65	105
West, Edward B., assignor of one-half to T. J. Nelson, Simpsonville, Tex. Combination harrow and cultivator	502,059	July 25	2437	613	64	487
West, Ira B., Gainesville, Ga. Railway-frog	501,633	July 4	784	205	64	143
West, John E., assignor to himself and M. J. Horr, Centralia, Wash. Mechanical motor	505,339	Sept. 19	1685	434	64	1613
West, John S., assignor of one-half to C. F. Pelsue, J. E. Murphy, and H. R. Herring, Paris, Mo. Hame-tug	509,562	Nov. 28	2663	645	65	1303
West, Joseph, Cincinnati, Ohio. Boiler-tube expander	489,278	Jan. 3	457	{ 126 127 }	62	101
West, Josiah E. (See Laraway, George W., assignor.)						
West, Josiah E., and C. O. Whipple, assignors to St. Cloud Vulcanized Fibreware Company, St. Cloud, Minn. Manufacturing articles of hollow ware	507,700	Oct. 31	3259	797	65	663
West, Josiah E., and C. O. Whipple, assignors to St. Cloud Vulcanized Fibreware Company, St. Cloud, Minn. Manufacturing articles of plastic material	508,494	Nov. 14	815	209	65	930
West, Leonard, St. Helens, England. Apparatus for the manufacture of glass	499,624	June 13	1475	354	63	1662
West, Simeon L., Washington, D. C. Apparatus for purifying, sterilizing, and filtering drinking-water or other potable liquids	491,828	Feb. 14	1234	309	62	1011
West, Stillman A., assignor of one-half to F. L. Clark, St. Louis, Mo. Sole-hammering machine	493,199	Mar. 7	659	168	62	1488
West, Stillman A., and F. L. Clark, St. Louis, Mo. Sole-leveling machine	489,771	Jan. 10	1213	318	62	266
West, Theodore E., South Norwalk, Conn., assignor to J. Auerbach, New York, N. Y. Cigarette-box	503,512	Aug. 15	2107	528	64	979
West, William, Leeds, England. Machine for molding flower-pots, &c	507,053	Oct. 17	2118	{ 525 526 }	65	425
West, William A. (See Boone, Samuel H., assignor.)						
West, William F., assignor to C. Gould, New York, N. Y. Electric ignitor	500,644	July 4	173	44	64	34
West, William F., assignor to C. Gould, New York, N. Y. Automatic relief-valve	500,645	July 4	174	45	64	34
Westacott, George, Leon, Kans. Cigar-case	492,127	Feb. 21	1694	422	62	1117
Westbrook, Milton, Kalamazoo, Mich. Bicycle	511,479	Dec. 26	2832	685	65	1975
Westbrook, T. N. (See Ellington, Alvey M., assignor.)						
Westburg, Nell O., Sanborn, Iowa. Band-cutter and feeder	508,855	Nov. 14	1398	348	65	1046
Westcott, Charles M. (See Small, George D. B., assignor.)						
Westcott, John T. (See Merrifield, Westcott, and Pearson.)						
Westcott, Nathaniel W., assignor to himself and J. M. Goff, Providence, R. I. Circular-knitting machine	502,688	Aug. 1	752	181	64	704
Westerdahl, Anton R. (See Keil and Westerdahl.)						
Westerfield, Charles F. (See Ford and Westerfield.)						
Westerman, Theodore, Newark, N. J. Fastening device	495,537	Apr. 18	1635	410	63	340
Westerman, Theodore, Newark, N. J. Hat	496,462	May 2	117	32	63	640
Westermann, Franz, Herne, Germany. Regenerative coke-oven	500,684	July 4	243	65	64	46
Western Clock Advertising Company. (See Peterson, Lewis, assignor.)						
Western Electric Company. (See Allison, William D., assignor.)						
Western Electric Company. (See Badt, Francis B., assignor.)						
Western Electric Company. (See Bell, Oro A., assignor.)						
Western Electric Company. (See Brady, Charles G., assignor.)						
Western Electric Company. (See Carty, John J., assignor.)						
Western Electric Company. (See Goodridge, William M., assignor.)						
Western Electric Company. (See Gray, Albert C., assignor.)						
Western Electric Company. (See Haskins, Charles D., assignor.)						
Western Electric Company. (See McBerty, Frank R., assignor.)						
Western Electric Company. (See Oehring, Augustus J., assignor.)						
Western Electric Company. (See Patterson, William R., assignor.)						
Western Electric Company. (See Rudd, Charles H., assignor.)						
Western Electric Company. (See Scribner, Charles E., assignor.)						
Western Electric Company. (See Scribner, Charles E., assignor.) (Reissue.)						
Western Electric Company. (See Scribner and Patterson, assignors.)						
Western Electric Company. (See Scribner and Warner, assignors.)						
Western Electric Company. (See Seely, John A., assignor.)						
Western Electric Company. (See Steiner, Josef, assignor.)						
Western Electric Company. (See Warner, Ernest P., assignor.)						
Western Electric Company. (See Young, John, assignor.)						
Western Electrical Company. (See Wilson, Charles H., assignor.)						
Western Engravers' Supply Company. (See Schraubstadter and Schilling, assignors.)						
Western Paving and Supply Company. (See Perkins, Amos H., assignor.)						
Western Union Telegraph Company. (See Eckert and Bergmann, assignors.)						
Western Union Telegraph Company. (See Eckert and Scott, assignors.)						
Western Union Telegraph Company. (See Edison, Thomas A., assignor.)						
Western Union Telegraph Company. (See Freir, Samuel P., assignor.)						
Western Union Telegraph Company. (See Wicks, Pierson J., assignor.)						
Western Wheeled Scraper Company. (See Kimball, James F., assignor.)						
Westervelt, Bertha, Newark, N. J. Curling-tool	495,765	Apr. 18	2002	507	63	403
Westervelt, Edmund C., South Bend, Ind. Plow-point	489,401	Jan. 3	637	173	62	137
Westfall, Joseph, et al. (See Veon, Andrew E., assignor.)						
Westfield Plate Company. (See St. Cyr, Theodore Z. H., assignor.)						
Westgarth, John, Lily Lake, Ill. Cow-milker	492,449	Feb. 28	2203	551	62	1234
Westheimer, Ferdinand A. M., San Francisco, Cal. Toasting iron or tongs	489,056	Jan. 3	116	31	62	29

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Westinghouse Air Brake Company. (See Bayley, Richard W., assignor.)						
Westinghouse Air Brake Company. (See Clark, Francis L., assignor.)						
Westinghouse Air Brake Company. (See Higham, Charles C., assignor.)						
Westinghouse Air Brake Company. (See Hogan, Thomas J., assignor.)						
Westinghouse Air Brake Company. (See Jackson, Amariah W., assignor.)						
Westinghouse Air Brake Company. (See Parke, Clark, and Hogan, assignors.)						
Westinghouse Air Brake Company. (See Westinghouse, Henry H., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Davis, Harry P., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Diehl, Philip, assignor.)						
Westinghouse Electric and Manufacturing Company. (See Lange, Philip, assignor.)						
Westinghouse Electric and Manufacturing Company. (See Lodyguine, Alexandre de, assignor.)						
Westinghouse Electric and Manufacturing Company. (See Schmid, Albert, assignor.)						
Westinghouse Electric and Manufacturing Company. (See Scott, Charles F., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Stanley, William, Jr., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Wurts, Alexander, assignor.)						
Westinghouse Electric and Manufacturing Company. (See Wurts and Scott, assignors.)						
Westinghouse Electric Company. (See Shallenberger, Oliver B., assignor.)						
Westinghouse, George, Jr. (See Belfield, Reginald, assignor.)						
Westinghouse, George, Jr., Pittsburg, Pa. Conduit electric railway.....	497,394	May 16	1634	{ 413 414	63	945
Westinghouse, George, Jr., Pittsburg, Pa. Sectional contact-conductor for electric rail- ways.....	497,436	May 16	1704	{ 430 431	63	957
Westinghouse, George, Jr., Pittsburg, Pa. Buffing mechanism for cars.....	499,335	June 13	972	{ 234 235	63	1573
Westinghouse, George, Jr., Pittsburg, Pa. Draw-gear apparatus for cars.....	499,336	June 13	975	{ 235 236 237	63	1574
Westinghouse, George, Jr., and E. Rund, assignors to Fuel Gas and Manufacturing Com- pany, Pittsburg, Pa. Rotary water-meter.....	493,881	Mar. 21	1782	{ 454 455	62	1737
Westinghouse, Henry H., Pittsburg, Pa. Valve mechanism for steam-pumps.....	494,612	Apr. 4	140	32, 33	63	29
Westinghouse, Henry H., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Quick-acting triple valve.....	489,441	Jan. 3	706	189	62	151
Westinghouse, Henry H., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Quick-acting triple valve.....	506,612	Oct. 10	1386	348	65	278
Westinghouse, Henry H., and W. A. Bole, Pittsburg, Pa. Shaft-coupling.....	492,898	Mar. 7	202	49	62	1398
Westlake, Adelaide C. (See Schultz and Westlake.)						
Westlake, Charles E., Cincinnati, and A. Waggoner, Columbus, Ohio; said Waggoner as- signor to said Westlake. Coin-controlled liquid-vending apparatus.....	497,107	May 9	1150	294	63	844
Westlake, Charles T., St. Louis, Mo. Car-booster.....	500,983	July 4	708	186	64	129
Westlake, William B., Swansea, England. Machinery for the manufacture of artificial fuel.....	489,136	Jan. 3	233	63, 64	62	54
Westmeyer, Adolf, Pacific, Mo. Wire stretcher and holder.....	496,713	May 2	507	135	63	711
Weston, Alfred, Kansas City, Kans. Beef-stuffing machine.....	505,498	Sept. 26	1944	501	61	1676
Weston, Charles W. (See Carlson, Gustav H., assignor.)						
Weston, Clinton H., La Crosse, Wis. Device for dressing saw-teeth.....	499,625	June 13	1476	354	63	1663
Weston, Edward, Newark, N. J. Electrical time-indicating apparatus.....	490,698	Jan. 31	2758	710	62	615
Weston, Edward, Newark, N. J. Recording-ammeter.....	490,699	Jan. 31	2761	{ 710 711	62	615
Weston, Edward, Newark, N. J. Electrical measuring-instrument.....	490,700	Jan. 31	2764	711	62	616
Weston, Edward, Newark, N. J. Electrical measuring-instrument.....	490,760	Jan. 31	2857	733	62	632
Weston, Edward, Newark, N. J. Voltaic cell.....	494,827	Apr. 4	485	122	63	93
Weston, Edward, Newark, N. J. Electrical measuring-instrument.....	494,828	Apr. 4	487	123	63	94
Weston, Edward, Newark, N. J. Recording-voltmeter.....	494,829	Apr. 4	489	123	63	94
Weston, Edward, Newark, N. J. Ground-detector for electric circuits.....	494,830	Apr. 4	491	{ 123 124	63	95
Weston, Edward, Newark, N. J. Electrical measuring-instrument.....	496,500	May 2	167	47	63	649
Weston, Edward, Newark, N. J. Shunt for electrical measuring-instruments.....	496,501	May 2	169	48	63	650
Weston, Edward, Newark, N. J. Shunt for electric light and power stations.....	497,482	May 16	1776	447	63	969
Weston, Edward, Newark, N. J. Electrical measuring-instrument.....	499,313	June 13	934	227	63	1567
Weston, Edward, Newark, N. J. Resistance-box.....	500,362	June 27	2697	662	63	1902
Weston, Edward, Newark, N. J. Telegraphic relay.....	511,005	Dec. 19	2031	502	65	1813
Weston, Edward, Newark, N. J. Dial-thermometer.....	511,006	Dec. 19	2033	502	65	1813
Weston, Edward B., Dayton, Ohio. Roll-paper holder and cutter.....	492,856	Mar. 7	126	32	62	1382
Weston, Edward B., Dayton, Ohio. Roll-paper holder and cutter.....	506,451	Oct. 10	1143	284	65	231
Weston Engine Company. (See Longenecker, Charles K., assignor.)						
Weston, Eugene, Clinton, Iowa. Can-opener.....	497,698	May 16	2121	529	63	1032
Weston, Frank C., Bangor, Me. Brake for bicycles.....	509,636	Nov. 28	2774	667	65	1324
Weston, Milton T., assignor of one-half to M. Thomson, Kenton, Ohio. Carousel.....	510,746	Dec. 12	1535	381	65	1712
Weston, Milton T., assignor of one-half to M. Thomson, Kenton, Ohio. Carousel.....	510,747	Dec. 12	1537	381	65	1713
Westphal, Henry, Chicago, Ill. Hat and coat rack.....	506,756	Oct. 17	1636	410	65	336
Westwood, John T., assignor of one-half to D. H. Taylor, Wheeling, W. Va. Dumb-waiter.....	490,462	Jan. 24	2356	610	62	520
Wetherbee, Emery G., Painesville, Ohio. Sprinze.....	507,573	Oct. 31	3048	745	65	623
Wetherill & Co., Robert. (See Roeske, Henry, assignor.)						
Wetherwax, Charles, Albany, N. Y. Apparatus for treating vegetable fibers.....	501,124	July 11	952	243	64	188
Wetmore, Earl P. (See Roehl, Mitchell, and Wetmore.)						
Wetmore, Earl P., Helena, Mont. Trolley wire and hanger.....	502,088	July 25	2483	624	64	497
Wetmore, Earl P., Helena, Mont., assignor of one-half to S. Z. Mitchell, Portland, Oreg. Electric heater.....	500,520	June 27	2937	721	63	1945
Wetmore, Jerome W., Erie, Pa. Fuel-feeding device for furnaces.....	501,979	July 25	2304	576	64	463
Wetmore, Jerome W., Erie, Pa., assignor to Van Wagoner & Williams Company, Jersey City, N. J. Pneumatic door-check.....	502,841	Aug. 8	1017	248	64	769
Wetmore, William C., assignor of one-half to J. M. Cullis, Buffalo, N. Y. Truss.....	509,637	Nov. 28	2775	667	65	1324
Wettengel, Charles A. (See Niedringhaus and Wettengel.)						
Wetter, Frances M. (See Schaeffer, Levi R., assignor.)						
Wetter, Jasper, et al. (See Teague, Francis, assignor.)						
Wetter, Joseph. (See Wicht, Frank W., assignor.)						
Wettervik, Axel, Chicago, Ill. Combined washstand and dressing-case.....	499,408	June 13	1120	269	63	1600
Wetzel, Lewis C., Bellefonte, Pa. Die-plate.....	498,595	May 30	3569	884	63	1320
Wetzer, Hermann, Pfronten, Germany. Signaling apparatus.....	496,076	Apr. 25	2476	626	63	506
Wever, Milledge B., San Antonio, Fla. Preserving fruits or vegetables.....	500,450	June 27	2825	63	63	1925
Wexler, George, Brooklyn, N. Y. Ash-sifter.....	509,984	Dec. 5	241	56	65	1455
Weyl, Maximilian, Berlin, Germany. Telescopic stand for mathematical and optical instru- ments, &c.....	505,149	Sept. 19	1388	{ 355 356	64	1558

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Weyler, John F., <i>et al.</i> (See Hudson, Tobias, assignor.)						
Weymouth, William J., assignor of one-half to F. W. Sheild, Hampton, Va. Door-opening device	511,668	Dec. 26	3129	765	65	2030
Weyrich, Otto, assignor to I. Cahn, Elberfeld, Germany. Thermometric alarm	509,985	Dec. 5	242	56	65	1455
Whalen, Ellen, Cumberland, Md. Garment-supporter	489,619	Jan. 10	984	257	62	230
Whalley, Nathan, Fort Payne, Ala., assignor to himself, S. H. Congdon, Shelter Island, N. Y., J. Critchley, Portsmouth, N. H., G. E. Russell, Holyoke, and F. H. Ware, Melrose, Mass. Saw cotton-gin	506,452	Oct. 10	1144	{ 284 285 }	65	231
Wharton, William, Jr., assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Railway-switch	505,075	Sept. 12	1273	{ 327 328 }	64	1524
Wharton, William, Jr., assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Derailing-switch	505,076	Sept. 12	1275	328	64	1524
Wayne, Robert C., Louisville, Ky. Ash-chute	500,173	June 27	2395	581	63	1849
Wheat, David, Kent, Ind. Incubator	492,079	Feb. 21	1620	402	62	1103
Wheat, Henry A. (See Reid, Hanna, Holroyd, and Wheat.)						
Wheat, James M., St. Louis, Mo. Blacking-box	493,955	Mar. 21	1914	489	62	1761
Wheat, John J., Indianapolis, Ind., assignor of two-thirds to F. H. Kilbourne and H. H. Hitchcock, Chicago, Ill. Trace-holder	489,057	Jan. 3	117	31, 32	62	29
Wheatcroft, Charles H., <i>et al.</i> (See Horstman, Frank J., assignor.)						
Wheater, James. (See Roberts and Wheeler.)						
Wheatley, Thomas W., Wilkes-Barré, Pa. Lightning-arrester	492,649	Feb. 28	2541	629	62	1303
Wheaton, Milton A., San Francisco, Cal. Can-heading machine	499,949	June 20	2001	486	63	1769
Wheaton, Orson E., Grundy Centre, Iowa. Seal-lock	504,643	Sept. 5	526	135	61	1369
Wheelan, Fairfax H., Santa Barbara, Cal. Separator	498,597	May 30	3571	885	63	1320
Wheelan, Fairfax H., Santa Barbara, and R. W. Jessup, Los Angeles, Cal. Separator	508,792	Nov. 14	1293	323	65	1018
Wheeler, Arthur C., <i>et al.</i> (See Weaver, William, assignor.)						
Wheeler, Benjamin F., assignor to J. Barrett, trustee, Boston, Mass. Screw-making machine	499,070	June 6	564	135	63	1459
Wheeler, Charles C., Marysville, Kans. Window-screen	511,106	Dec. 19	2189	538	65	1845
Wheeler, Clara H., administratrix. (See Wheeler, Norman W.)						
Wheeler, Claude C., Fairmont, W. Va. Fence	493,458	Mar. 14	1085	278	62	1586
Wheeler, Claude J., Wolcott, N. Y. Fruit-bleacher	493,570	Mar. 14	1278	327	62	1692
Wheeler, Clifton H. (See Wheeler, Frederick M. and C. H.)						
Wheeler Condenser and Engineering Company. (See Wheeler, Frederick M. and C. H., assignors.)						
Wheeler Condenser and Engineering Company. (See Wheeler and Lyon, assignors.)						
Wheeler, Cyrenus, Jr., Auburn, N. Y. Clothes-wringer	500,984	July 4	709	{ 186 187 }	64	129
Wheeler, Cyrenus, Jr., Auburn, N. Y. Clothes-wringer	502,646	Aug. 1	663	161	64	689
Wheeler, Cyrenus, Jr., Auburn, N. Y. Clothes-wringer	502,647	Aug. 1	664	162	64	689
Wheeler, Earl A., Sharon, Pa. Boiler and boiler-furnace	489,725	Jan. 10	1136	294	62	251
Wheeler, Earl A., Sharon, Pa. Boiler and boiler-furnace	489,726	Jan. 10	1137	294	62	251
Wheeler, Earl G. (See Totman and Wheeler.)						
Wheeler, Edward G. (See Clawson and Wheeler.)						
Wheeler, Edward H., assignor to Waterbury Brass Company, Waterbury, Conn. Machine for cutting scrap metal	490,054	Jan. 17	1686	439	62	376
Wheeler, Enoch S., Sauk Centre, Minn. Latch	511,669	Dec. 26	3130	765	65	2030
Wheeler, Frederick M., Montclair, N. J. Condensing apparatus	510,107	Dec. 5	447	100	65	1494
Wheeler, Frederick M., Montclair, N. J., and G. W. Lyon, Norwich, Conn., assignors to Wheeler Condenser and Engineering Company, Cartaret, N. J. Combined condensing and feed-water apparatus	506,292	Oct. 10	858	{ 211 212 }	65	175
Wheeler, Frederick M., Montclair, N. J., and C. H. Wheeler, Flatbush, N. Y., assignors to Wheeler Condenser and Engineering Company, Montclair, N. J. Surface condenser	510,373	Dec. 5	873	210	65	1576
Wheeler, George M., Washington, D. C. Exhibition structure	506,291	Oct. 10	856	211	65	175
Wheeler, Harris A. (See Aze and Gilfillan, assignors.)						
Wheeler, Isaac C., Carthage, Mo. Brick-kiln furnace	501,980	July 25	2305	576	64	463
Wheeler, John H., Macy, Tex. Vine-cutter	493,332	Mar. 14	880	225	62	1545
Wheeler, John P., Quincy, Ill. Straw-stacker	497,149	May 9	1216	310	63	855
Wheeler, Marshal, Oakland, Cal. Gas-burner attachment	501,391	July 11	1383	346	64	265
Wheeler, Norman W., deceased; C. H. Wheeler, administratrix, New York, N. Y. Air or gas compressor	490,526	Jan. 24	2466	635	62	543
Wheeler, Phillip, Branchport, N. Y. Railway-rail tie and chair	503,184	Aug. 15	1590	390	64	886
Wheeler, Roscoe B. (See Collins, George, assignor.)						
Wheeler, Schuyler S. (See Crocker and Wheeler.)						
Wheeler, Schuyler S., New York, N. Y., assignor to Crocker-Wheeler Electric Company, of New Jersey. Armature for dynamo-electric machines and motors	503,106	Aug. 8	1449	357	64	817
Wheeler, Schuyler S., assignor to Crocker-Wheeler Electric Company, New York, N. Y. Apparatus for controlling electric motors	503,690	Aug. 22	2414	{ 601 602 }	64	1050
Wheeler, Seth, Albany, N. Y. Ornamented paper	496,964	May 9	932	245	63	806
Wheeler, Seth, Albany, N. Y. Ornamenting paper	497,421	May 16	1676	423	63	953
Wheeler, Seth, Albany, N. Y. Ornamenting paper	502,337	Aug. 1	141	32	64	591
Wheeler, Seth, Albany, N. Y. Mechanism for ornamenting paper	504,767	Sept. 12	755	188	64	1426
Wheeler, Seth, Albany, N. Y. Ornamenting paper	505,259	Sept. 19	1532	405	64	1589
Wheeler, Seth, Albany, N. Y. Roll-paper bracket	505,499	Sept. 26	1947	502	64	1676
Wheeling Corrugating Company. (See Glass and Grafton, assignors.)						
Wheeling Corrugating Company. (See Grafton, William S., assignor.)						
Wheeling Corrugating Company. (See Grafton, Ewing, and Glass, assignors.)						
Wheelock, Bloomfield J., New York, N. Y. Electric-battery cell	506,353	Oct. 10	963	240	65	195
Whelan, Charles C., Washington, D. C. Table attachment for chairs	506,985	Oct. 3	442	116	65	86
Whelpley, James A., assignor to Keen Manufacturing Company, Keene, N. H. Skate	498,200	May 23	2915	725	63	1188
Wherry, William B., Overton, Tex. Plow	498,095	May 23	2744	685	63	1158
Whetter, Thomas, Petersham, near Sydney, New South Wales. Sash-balance	489,442	Jan. 3	707	{ 189 190 }	62	152
Whiffen, Edward, Hammononton, and D. and V. F. Lake, Pleasantville, N. J. Lasting-nippers	502,507	Aug. 1	437	105	64	647
Whiffen, Edward, Hammononton, and D. and V. F. Lake, assignors to Whiffen-Lake Lasting Machine Company, Pleasantville, N. J. Lasting-machine	502,506	Aug. 1	432	{ 103 104 105 }	64	646
Whiffen-Lake Lasting Machine Company. (See Lake, Leon, assignor.)						
Whiffen-Lake Lasting Machine Company. (See Whiffen and Lake, assignors.)						
Whight, George. (See Warren, Charles, assignor.)						
White, Charles, Barrow-in-Furness, England. Means for manufacturing chains	510,748	Dec. 12	1539	382	65	1713
Whipple, Alice A., Providence, R. I. Portable foot-warmer, &c	490,091	Jan. 17	1747	455	62	389
Whipple, Carlos O. (See West and Whipple.)						
Whipple, Clayton J., Waterloo, Iowa. Safety-bicycle stand	498,598	May 30	3573	885	63	1321

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Whipple, Edson, and A. Gudmunson, Lehi City, Utah Ter. Lighting attachment for lamps, &c.	509,563	Nov. 28	2665	645	65	1303
Whipple, Effinger E., St. John's, Mich. Harrow.	490,130	Jan. 17	1816	474	62	404
Whipple, Effinger E., St. John's, Mich. Harrow.	492,315	Feb. 21	1989	495	62	1180
Whipple, Eugene D. (See Scurr and Whipple.)						
Whipple, Frank A. (See Shea, Woodbury, and Whipple.)						
Whipple, George E. (See Reed, Thomas W., assignor.)						
Whipple, Henry J. P., New Haven, Conn. Knob attachment.	508,195	Nov. 7	357	87	65	824
Whipple, Leander E., New York, N. Y. Fastening for railway-rails.	511,226	Dec. 19	2385	581	65	1881
Whipple, Leander E., New York, N. Y. Railway-tie.	511,227	Dec. 19	2386	582	65	1881
Whitacre, John B., Shelbyville, Ill. Fence.	503,631	Aug. 22	2326	580	64	1033
Whitacre, William C., assignor of two-thirds to S. Knapp and J. F. Baumgartner, St. Louis, Mo. Engineer's valve.	494,502	Mar. 28	2818	706 707	62	1944
Whitacre, William C., assignor of two-thirds to S. Knapp and J. F. Baumgartner, St. Louis, Mo. Car-brake.	494,503	Mar. 28	2820	707	62	1945
Whitacre, William C., assignor of two-thirds to J. F. Baumgartner and S. Knapp, St. Louis, Mo. Air-pump.	508,495	Nov. 14	847	209	65	930
Whitaker, Channing. (See Hildreth, Stephens, and Whitaker.)						
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	498,338	May 30	3151	786 787 788	63	1245
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	498,339	May 30	3160	788	63	1247
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	498,340	May 30	3163	788 789	63	1247
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	498,341	May 30	3167	789	63	1247
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	498,342	May 30	3170	790	63	1248
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	505,500	Sept. 26	1949	502 503 504	64	1677
Whitaker, Channing, Tyngsborough, assignor to Lowell Machine Shop, Lowell, Mass. Separator mechanism for ring-spinning frames.	505,501	Sept. 26	1959	505 506	64	1678
Whitaker, David J. (See Brown, Imel, and Whitaker.)						
Whitaker, David W., assignor of one-half to S. R. Carrington, Durham, N. C. Fountain marking-brush.	491,000	Jan. 31	3244	828	62	709
Whitaker, Emil P. (See Whittaker, Whitaker, and Whitman.)						
Whitaker, John H., Davenport, Iowa. Automatic device for opening or closing doors.	496,027	Apr. 25	2396	606	63	491
Whitaker, John H., Davenport, Iowa. Harness.	496,028	Apr. 25	2398	607	63	492
Whitaker, John H., Davenport, Iowa. Device for opening or closing doors.	505,376	Sept. 19	1747	453	64	1625
Whitaker, Joseph F., Hartford, Conn. Velocipede.	489,645	Jan. 10	1015	264	62	227
Whitaker, William W., Gloversville, N. Y. Railway-tie.	499,071	June 6	567	135	63	1490
Whitall, Samuel R., Salt Lake City, Utah Ter. Lixiviating ores.	495,715	Apr. 18	1923		63	358
Whitall, Tatum & Co. (See Underhill, Francis M., assignor.)						
Whitburn, Daniel, London, England. Game apparatus.	503,032	Aug. 8	1315	322	64	822
Whitcher, Frank W., Boston, Mass. Shoe-holder.	497,150	May 9	1217	311	63	855
Whitcomb, Alonzo L., assignor of one-half to H. E. Dean, Great Bend, Kans. Grain-car.	492,128	Feb. 21	1695	422	62	1117
Whitcomb, Truman H., et al. (See June, Marcus M., assignor.)						
Whitcomb, William W., Boston, Mass. Brake-shoe.	490,701	Jan. 31	2766	711	62	616
Whitcomb, William W., Boston, Mass. Brake-shoe.	490,702	Jan. 31	2768	711	62	617
White, Albert, assignor to F. Taylor, Lowell, Mass. Coat and hat hook.	496,375	Apr. 25	2964	740	63	599
White, Albert, assignor to F. Taylor, Lowell, Mass. Coat-hook.	501,452	July 11	1467	368	64	252
White, Albert, assignor to F. Taylor, Lowell, Mass. Hat and coat hook.	501,453	July 11	1467	368	64	252
White, Albert, assignor to F. Taylor, Lowell, Mass. Coat and hat hook.	505,209	Sept. 19	1484	384	64	1576
White, Albert M., Waterbury, Conn. Clutch.	489,280	Jan. 3	461	128	62	101
White, Albion. (See Beck, Jacob P., assignor.)						
White, Archibald W., San José, Cal. Spray-nozzle.	498,599	May 30	3574	825	63	1321
White, Bruce C., Chicago, Ill. Chasing-mill.	511,380	Dec. 26	2666	646 647	65	1946
White, Bruce C., Chicago, Ill. Chasing-mill.	511,382	Dec. 26	2672	648	65	1947
White, Charles A., assignor to C. F. Turner and M. L. White, Olean, N. Y. Penholder.	498,201	May 23	2916	725	63	1188
White, Charles B., Revere, Mass. Shutter-fastener.	496,077	Apr. 25	2478	626	63	506
White, Charles E., assignor of seven-twentieths to J. C. Sterling, Kansas City, Mo., and H. W. Sterling, Chetopa, Kans. Apparatus for the manufacture of gas.	496,927	May 9	884	232	63	797
White, Charles J. (See Jones, Arthur E., assignor.)						
White, Charles J., New Britain, Conn. Button-loop.	497,847	May 23	2353	589	63	1059
White, Clarence O., assignor of one-half to M. B. Lloyd, Minneapolis, Minn. Wire fabric.	507,865	Oct. 31	3529	868	65	713
White, Clarence O., assignor of one-half to M. B. Lloyd, Minneapolis, Minn. Wire mat.	507,952	Oct. 31	3667	908	65	740
White & Co., William. (See Grimes, Charles L., assignor.) (Reissue.)						
White, Cornelius, Oakland, Cal. Steam-engine.	507,468	Oct. 24	2839	694	65	572
White, David S., Northfield, assignor to J. B. Maling, Minneapolis, Minn. Hoisting-machine.	508,155	Nov. 7	289	72	65	811
White, Eben, T. (See Fitzgerald and White.)						
White, Edward F., Weymouth, assignor of one-half to H. L. Williams, Dedham, and H. F. Kneelad, Braintree, Mass. Channelling and edge-trimming machine.	500,174	June 27	2396	581 582	63	1249
White, Francis W., Norwich, Conn. Piano-hammer.	491,749	Feb. 14	1113	281	62	987
White, Franklin R., Waterbury, Conn. Clutch.	489,279	Jan. 3	459	127	62	101
White, Frederick, assignor to E. S. Beach, trustee, Boston, Mass. Bicycle-tire.	508,456	Nov. 14	775	191	65	916
White, Frederick L., Milwaukee, Wis. Machine for separating chain-links.	499,901	June 20	1936	470	63	1756
White, George, Rock Island, Ill. Seat-back for vehicles.	496,467	May 2	122	33	63	641
White, George A. (See Stone, Henrie D., assignor.)						
White, Harry, Syracuse, N. Y. Corner-brace.	493,882	Mar. 21	1786	456	62	1737
White, Harry H. (See Anderson, Frederick G., assignor.)						
White, Henry, Chicago, Ill. Automatic car-coupling.	500,309	June 27	2613	638	63	1887
White, Henry P., Kalamazoo, Mich. Rotary electro-magnetic engine.	511,370	Dec. 26	2971	724	65	2002
White, Hiram W., Yankton, S. D. Rotary engine.	506,758	Oct. 17	1641	411	65	337
White, J. F., et al. (See Connor, John R., assignor.)						
White, James. (See White, William E., assignor.)						
White, James, London, England. Process of and apparatus for popping or bursting barley, &c.	508,125	Nov. 7	241	61	65	803
White, James, Brooklyn, N. Y. Sheet-metal beam.	511,383	Dec. 26	2676	648	65	1948
White, James, Brooklyn, N. Y. Expansion-joint for roofing-sheets.	511,384	Dec. 26	2678	649	65	1948

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White, James, Brooklyn, N. Y. Roofing	511,385	Dec. 26	2679	649	65	1948
White, James, Brooklyn, N. Y. Sheet-metal bulbous roofing-tile	511,387	Dec. 26	2683	650	65	1948
White, James, Brooklyn, N. Y. Strainer for roof-leaders	511,388	Dec. 26	2684	650	65	1949
White, James, Brooklyn, N. Y. Embossing sheet metal	511,392	Dec. 26	2690	651	65	1950
White, James, Brooklyn, assignor to Twist Pipe Company, New York, N. Y. Jointing roofing-sheets	511,386	Dec. 26	2681	649	65	1948
White, James, and A. O. Kittredge, Brooklyn, assignors to Twist Pipe Company, New York, N. Y. Drop-hammer	511,381	Dec. 26	2671	647	65	1947
White, James E., Mansfield, Mass. Water-heating attachment for hot-air furnaces	498,946	June 6	345	82, 83	63	1452
White, John, Edinburgh, Scotland. Apparatus for straining paper-pulp	498,041	May 23	2665	666	63	1143
White, John H., Washington, D. C. Phonograph	504,380	Sept. 5	108	667	64	1291
White, John N. (See Davies and White.)						
White, Mary A. (See White, Winslow F. and M. A.)						
White, Mary L., et al. (See White, Charles A., assignor.)						
White, Miles W., Brooklyn, N. Y. Lubricator	500,451	June 27	2826	696	63	1925
White, Nicholas, Cummings, Iowa. Hand garden-weeder	499,058	Jan. 3	119	32	62	29
White, Oliver H., Fremont, Nebr. Portable desk	492,316	Feb. 21	1991	496	62	1180
White, Otis C., Worcester, Mass. Compound swiveling and clamping joint mechanism	505,584	Sept. 26	2144	543	64	1714
White, Otis C., assignor of one-half to G. E. Francis, Worcester, Mass. Adjustable supporter for electric or other lamps	505,585	Sept. 26	2147	543	64	1714
White, Patrick, Perth Amboy, N. J. Driving-gear for hoisting-drums	489,355	Jan. 3	570	154	62	192
White, Peter, St. Louis, Mo. Automatic supply-valve for tanks	491,694	Feb. 14	1031	261	62	972
White, Peter, St. Louis, Mo. Water-closet cistern	506,757	Oct. 17	1639	410	65	337
White, Robert, Buffalo, N. Y. Voting-ballot	496,965	May 9	933	245	63	806
White, Robert H., Kingston, N. Y. Locomotive stand-pipe	489,245	Jan. 3	409	114	62	91
White, Samuel A., Harrisburg, assignor of one-half to T. K. Richards, Reading, Pa. Bicycle	505,738	Sept. 26	2404	608	64	1760
White, Samuel K., Chicago, Ill., and D. H. Bacon, New York, N. Y. Cutter-head for wood-turning machines	503,632	Aug. 23	2327	580	64	1033
White, Samuel T. (See Gardner, Fulton, assignor.)						
White Sewing Machine Company. (See Baker, George W., assignor.)						
White, T. Stewart, et al. (See Raymond, Silas H., assignor.)						
White, Thomas C. (See Nelson, Jay, assignor.)						
White, Timothy S., Beaver Falls, Pa. Structural iron form	496,463	May 2	118	32	63	640
White, Timothy S., Beaver Falls, Pa. Structural iron form	496,464	May 2	119	32	63	640
White, Timothy S., New Brighton, Pa. Structural iron form	496,465	May 2	120	32	63	640
White, Timothy S., New Brighton, Pa. Structural iron form	496,466	May 2	121	33	63	641
White, W. B., et al. (See Dahill, Thomas H., assignor.)						
White, W. O., et al. (See Scates, George R., assignor.)						
White, W. W. (See Scheckelhoff, Henry, assignor.)						
White, Wendell P., assignor to W. B. Cross, Brockton, Mass., W. J. Jenks and L. Stieringer, New York, N. Y., and R. N. Dyer, East Orange, N. J. Machine for making staples	498,040	May 23	2663	666	63	1143
White, William. (See Houghton and White.)						
White, William, and R. T. Smith, Nashua, N. H. Speed-regulating mechanism for card-feeding machines	506,960	Oct. 17	1967	487	65	398
White, William E., assignor of one-half to J. White, Bottineau, N. D. Straw-carrier	489,425	Jan. 3	676	488	62	145
White, William L. (See Searle, James W., assignor.)						
White, William R., Bloomington, Ill. Gate	493,538	Mar. 14	1214	311	62	1610
White, William R., Bloomington, Ill. Gate	493,539	Mar. 14	1216	311	62	1610
White, William R., Bloomington, Ill. Gate-hinge	496,926	May 9	882	231	63	797
White, William R., Bloomington, Ill. Swinging gate	503,887	Aug. 22	2699	677	64	1106
White, William R., Seattle, Wash. Water-motor	499,269	June 13	861	206	63	1554
White, Winslow F. and M. A., Allen, Kans. Flat-iron heater	497,364	May 16	1590	402	63	937
Whiteaker, George W., et al. (See Gillet, Alexis F., assignor.)						
Whiteaker, James D., et al. (See Gillet, Alexis F., assignor.)						
Whitehall, Euphrates W. (See Whitehall, Samuel and E. W.)						
Whitehall, Samuel, South Bend, and E. W. Whitehall, Attica, Ind. Electric-call system	510,457	Dec. 12	1023	244	65	1618
Whitehead, Benjamin S., Newark, N. J. Badge	493,003	Mar. 7	365	92	62	1431
Whitehead, Cabell. (See Tuttle and Whitehead.)						
Whitehead, William A. (See Brady, Whitehead, and Shea.)						
Whitehead, William T., Magog, Canada, assignor of one-half to H. D. Dupee, Boston, Mass. Resist-mordant	499,687	June 13	1563		63	1677
Whitehead, William T., Magog, Canada, assignor of one-half to H. D. Dupee, Boston, Mass. Aniline-black discharge	499,688	June 13	1564		63	1677
Whitehead, William T., Magog, Canada, assignor of one-half to H. D. Dupee, Boston, Mass. Aniline-black resist	499,689	June 13	1565		63	1677
Whitehead, William T., Magog, Canada, assignor of one-half to H. D. Dupee, Boston, Mass. Zinc resist-mordant	499,690	June 13	1566		63	1678
Whitehead, William T., Magog, Canada, assignor of one-half to H. D. Dupee, Boston, Mass. Aniline-black discharge	499,691	June 13	1567		63	1678
Whitehead, William T., Magog, Canada, assignor of one-half to H. D. Dupee, Boston, Mass. Aniline-black resist	499,692	June 13	1568		63	1678
Whitehill, David B., North Clarendon, Pa. Ventilated boot	490,703	Jan. 31	2769	712	62	617
Whiteley, Albert M., assignor of one-half to R. Allen and E. Peters, Aurora, Ark. Automatic gate	493,669	Mar. 21	1446	369	62	1671
Whiteley, Amos. (See Broome, Henry, assignor.)						
Whiteley, Fassler & Kelly. (See Whiteley and Bayley, assignors.)						
Whiteley, William M., Webb City, Mo. Rotary steam-engine	509,708	Nov. 28	2888	699	65	1345
Whiteley, William N., assignor to William N. Whiteley Company, Springfield, Ohio. Harvesting-machine	497,151	May 9	1218	311	63	856
Whiteley, William N., and O. E. Perrigo, Springfield, Ohio; said Perrigo assignor to said Whiteley. Harvester-reel	495,862	Apr. 18	2153	540	63	430
Whiteley, William N., and S. Dyer, Springfield, Ohio; said Dyer assignor to said Whiteley. Knotting mechanism for harvesting-machines	497,848	May 23	2353	590	63	1089
Whiteley, William N., and W. Bayley, assignors to Whiteley, Fassler & Kelly, Springfield, Ohio. Harvester and binder	500,175	June 27	2397	582	63	1849
Whitelow, Edward T. (See Fielden, Eli, assignor.)				583		
Whiteman, Abram V., Port Chester, N. Y. Sulky	496,627	May 2	370	584		
Whiteman, Warren T. (See Washington, Dixon E., assignor.)						
Whitesell, William, Fort Recovery, Ohio. Apparatus for burning tiles and brick	510,458	Dec. 12	1024	244	65	1618
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Whitfield, Charles, Kettering, England. Grate	510,623	Dec. 12	1332	325	65	1674
Whitfield, William L., Ocala, Fla. Track-lifter	504,259	Aug. 29	3321	830	64	1240
Whitford, Albert P. (See Staren, Joseph, assignor.)						
Whitin Machine Works. (See Owen, Oscar L., assignor.)						
Whitin Machine Works. (See Prest, John E., assignor.)						
Whitin Machine Works. (See Taft, Cyrus A., assignor.)						
Whiting, Allen H., New York, N. Y. Polarity-switch for secondary-battery systems	508,069	Nov. 7	138	39	65	784
Whiting, Edward A., assignor of one-half to J. Tobin, Ithaca, N. Y. Laundry-bench	494,092	Mar. 21	2148	548	62	1805
Whiting, Frank, Whiting, Iowa. Lantern	508,496	Nov. 14	848	210	65	931
Whiting, George F., Boston, Mass. Hand-hold for reins	501,308	July 11	1226	310	64	238
Whiting, John H., Detroit, Mich. Tumbling-barrel	502,797	Aug. 8	947	231	64	755
Whiting Manufacturing Company. (See Osborne, Charles, assignor.)						
Whiting & Son, John L. (See Wolcott, Arthur H., assignor.)						
Whiting, William F., assignor, by mesne assignments, to Howard & Son Company, Providence, R. I. Grip-button	501,981	July 25	2306	577	64	463
Whitley, Alfred A., Bury, England. Chain-clip for cloth-stretching machines	503,301	Aug. 15	1779	439 440	64	920
Whitlock, Alma, San Bernardino, assignor to C. E. Blake, San Francisco, Cal. Dental forceps	491,932	Feb. 14	1401	349	62	1044
Whitlock, Philip, Richmond, Va., assignor to American Tobacco Company, New York, N. Y. Binder-clip for cigar-bunching machines	499,488	June 13	1251	298	63	1623
Whitlock, William, New York, N. Y. Drill-chuck	506,024	Oct. 3	344	91	65	67
Whitman, Walter C. (See Whittaker, Whitaker, and Whitman.)						
Whitman, William E., Auburn, Me. Planter	495,144	Apr. 11	1006	251	63	205
Whitmore, C. E. (See Faunce, Albert B., assignor.)						
Whitmore, George F., West Union, Iowa. Rotary plow and pulverizer	502,214	July 25	2685	678	64	536
Whitner, Hiram K., Chicago, Ill. Safety-support for trolley-wires	499,270	June 13	862	206 207	63	1554
Whitney, Albert E., Muncie, Ind. Bracket for coffins	504,009	Aug. 29	2916	731	64	1164
Whitney, Annie L. <i>et al.</i> (See Kimball, Freddie C., assignor.)						
Whitney, Arthur E., Winchester, Mass. Hide-working cylinder	494,183	Mar. 28	2307	585	62	1850
Whitney, Arthur E., Winchester, Mass. Hide-fleshing machine	509,503	Nov. 28	2568	620 621	65	1285
Whitney, Baxter D., Winchendon, Mass. Stave-sawing machine	489,772	Jan. 10	1214	318	62	266
Whitney, Charles W., New York, N. Y. Boiler-tube protector	508,793	Nov. 14	1299	324	65	1019
Whitney, Christopher F., Newton, Mass. Aluminium alloy	501,553	July 18	1627		64	329
Whitney, Edward H., Cambridge, Mass. Sifting-scoop	500,542	June 27	2969	729	63	1951
Whitney, Edwin H., East Providence, assignor to American Ship Windlass Company, Incorporated, Providence, R. I. Winch	506,144	Oct. 3	543	140 141	65	105
Whitney, Edwin H., East Providence, assignor to American Ship Windlass Company, Providence, R. I. Brake for capstans	507,953	Oct. 31	3669	908	65	740
Whitney Electrical Instrument Company. (See Hoyt, Adrian H., assignor.)						
Whitney, Frank E. (See Stanley, Robert L., assignor.)						
Whitney Glass Works. (See Jones, William H., assignor.)						
Whitney, H. O. (See Thomas, Albert D., assignor.)						
Whitney, Henry H. (See Phinney and Whitney.)						
Whitney, James E., Rochester, N. Y. Weight-holder for cabinet-gymnasiums	491,326	Feb. 7	442	114	62	832
Whitney, James H., Brooklyn, N. Y. Treadle-cushion	503,633	Aug. 22	2328	580	64	1033
Whitney, Leroy C., Jr., Milwaukee, Wis. Incandescent-electric-lamp holder	495,951	Apr. 18	2281	575	63	455
Whitney, O. B. (See Snowman, Herman, assignor.)						
Whitney, Willie D., Clarendon, N. Y. Wire-fence machine	505,890	Oct. 3	144	37, 38	65	28
Whiton, David E. and L. E., assignors to D. E. Whiton Machine Company, New London, Conn. Multiple drilling machine	500,646	July 4	175	45	64	35
Whiton, Lucius E. (See Whiton, David E. and L. E.)						
Whiton, Lucius E., New London, Conn. Work-holder	509,275	Nov. 21	1299	512	65	1189
Whiton, Lucius E., assignor to A. C. Taylor, New London, Conn. Drilling-machine	506,867	Oct. 17	1813	454 455	65	368
Whittaker, John. (See Hauser and Whittaker.)						
Whittaker, John, McCook, Nebr. Implement for tightening fence-wire strands	492,617	Feb. 28	2489	617	62	1293
Whittaker, John J., Accrington, England. Brick-machine	510,493	Dec. 12	1076	258 259 260	65	1628
Whittaker, Joseph F., E. P. Whitaker, and W. C. Whitman, Rockford, Ill. Gas and air valve	496,805	May 2	665	176	63	737
Whittemore, Arthur L., Boston, Mass. Can-holder	502,897	Aug. 8	1110	273	64	786
Whittemore, James W., <i>et al.</i> (See Susemihl, Francis G., assignor.)						
Whitten, Burrell F., and J. F. Porcher, Patroon, Tex. Gun-magazine	502,389	Aug. 1	236	56	64	609
Whittier, Charles R., New York, N. Y. Electric pump-governor	497,563	May 16	1910	481	63	994
Whittier, Herbert F., Lawrence, Mass. Disk water-meter	501,237	July 11	1118	284	64	219
Whittier, Joseph G., Attica, Ind. Door-check	497,395	May 16	1636	414	63	946
Whittingham, George H., Baltimore, Md. Regulator for electric motors	499,769	June 20	1712	411	63	1717
Whittington, George W., Newmarket, Ind. Knotter for binders	503,634	Aug. 22	2329	580 581	64	1033
Whittington, Thomas F., and W. A. Fishing, Xenia, Ohio. Reversing-gear for engines	500,985	July 4	711	187	64	129
Whittles, Jeremiah C., Kearney, N. J. Salvage-guide for cloth-tentering machines	499,072	June 6	569	136	63	1490
Whittlesey, Elbert A. <i>et al.</i> (See Appleton, Charles J., assignor.)						
Whiton, George A., Bogard, assignor of one-half to J. H. Williams, McFall, Mo. Clothes-line	491,032	Jan. 31	3309	844	62	723
Whittum, Edward, Fall River, Mass. Separator mechanism for spinning-frames	491,276	Feb. 7	340	86	62	814
Whittum, Edward M., Fall River, Mass. Separator mechanism for spinning-machines	504,954	Sept. 12	1059	271	64	1484
Whitworth, John S., Berkeley, Va. Stake-holder	506,325	Oct. 10	1023	255	65	207
Whitzel, Russel B., assignor to himself, W. Felton, T. E. Knauss, C. G. Lord, and T. A. Beaton, Columbus, Ohio. Sporting-ball	495,863	Apr. 18	2155	540	63	430
Whomes, Joseph, and F. J. Gilmore, Los Angeles, Cal. Roof-block	501,637	July 18	1758	438	64	352
Whyte, Alexander, St. Paul, Minn. Apparatus for cleaning air-pumps of locomotives	493,670	Mar. 21	1447	369	62	1671
Wiberg, Knut E., Stockholm, Sweden, assignor of one-half to G. F. Berndes. Hand-stamp	504,546	Sept. 5	391	99	64	1343
Wiberg, Peter, New York, N. Y. Hose-nozzle	501,125	July 11	953	243	64	188
Wiborgh, Johan G., Stockholm, Sweden. Pyrometer	489,884	Jan. 10	1366	355	62	298
Wichelmann, Johannes, Bremen, Germany. Ring-measure	492,566	Feb. 28	2404	599	62	1277
Wichmann, Charles J., <i>et al.</i> (See Butler, Magulyn, assignor.)						
Wicht, Frank W., assignor to J. Wetter, Brooklyn, N. Y. Attachment for cylinder-presses	501,752	July 18	1947	482	64	384
Wickers, George O., Lawrence, assignor to Davis & Furber Machine Company, North Andover, Mass. Feed-apron	500,521	June 27	2938	721	63	1945
Wickersham, William, Boston, Mass. Printer's quoin	496,547	May 2	244	64	63	663

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Wickes Brothers. (See Heyde, Edward, assignor.)						
Wickes, William J., <i>et al.</i> (See Drake, George H., assignor.)						
Wickey, Andrew, <i>et al.</i> (See Bitner, Harry, assignor.)						
Wickey, Andrew, Quincy, Ill. Binding attachment for baling-presses	496,628	May 2	371	101	63	687
Wickey, Andrew, Chicago, Ill. Baling-press	497,039	May 9	1045	267	63	825
Wickey, Edward W., <i>et al.</i> (See Bitner, Harry, assignor.)						
Wickham, Amos C., Carthage, Mo. Cultivator	506,575	Oct. 10	1338	336	65	269
Wickham, Charles H. (See Adsit and Wickham.)						
Wickliffe, Mary F., Louisville, Ky. Spectacles	508,457	Nov. 14	776	191	65	917
Wicks, Pierson J., Brooklyn, assignor to Western Union Telegraph Company, New York, N. Y. Telegraphy	499,811	June 20	1781	432 433	63	1729
Wicks, William J., <i>et al.</i> (See Drake, George H., assignor.)						
Widener, William M. (See Kenner, Charles A., assignor.)						
Wider, Andreas, Stuttgart, Germany. Note-indicator	498,922	June 6	309	71, 72	63	1447
Widerborg, Olof, and A. G. Garfield, Chicago, Ill., assignors, by mesne assignments, to said Garfield. Bicycle	509,986	Dec. 5	243	57	65	1455
Widmer, Charles C., assignor of one-half to J. McCann, Danbury, Conn. Expansive hat-block	493,200	Mar. 7	660	168	62	1488
Widmer, Louis J., Abilene, Tex. Wire-rope fastener	490,796	Jan. 31	2917	750	62	645
Widmeyer, Lemuel S., and J. F. Fields, Hancock, Md.; said Fields assignor to said Widmeyer. Railway	490,868	Jan. 31	3018	776	62	667
Widness, Lawrence J., Brooklyn, N. Y. Measuring-funnel	489,620	Jan. 10	985	257	62	220
Wiebach, Carl. (See Stauth and Wiebach.)						
Wiebe, John, San Francisco, Cal. Traveling baling-press	506,892	Oct. 17	1861	463 464	65	377
Wieber, Charles. (See Rauser, Wieber, and Sokoloff.)						
Wiebush, Charles, assignor of one-half to R. W. Penman, Waco, Tex. Combined mop and window-cleaner	503,888	Aug. 22	2700	677	64	1106
Wiecek, Joseph N., Boston, Mass. Car-fender	499,812	June 20	1784	433	63	1730
Wiedenmann, Herman C., Philadelphia, Pa. Holder for bouquets, &c.	501,392	July 11	1385	347	64	265
Wiedrich, Charles L., assignor to Pratt & Letchworth, Buffalo, N. Y. Vehicle-wheel	499,813	June 20	1786	433	63	1730
Wiegand, S. Lloyd, Philadelphia, Pa., assignor to R. S. Pettet, Atlantic City, N. J. Flexible metallic tubing	494,972	Apr. 4	696	178	63	133
Wieland, Louis A., assignor of one-third to P. C. Dean, Pittsburg, Pa. Step-ladder	489,059	Jan. 3	119	32	62	30
Wiemann, William P., Allegheny, Pa. Electric-arc lamp	492,650	Feb. 28	2542	630	62	1304
Wiencke, August, Brooklyn, N. Y. Gas-burner	506,759	Oct. 17	1642	411	65	337
Wiens, Gustav. (See Dalke and Wiens.)						
Wientge, Charles C., assignor to Howard Sterling Company, Providence, R. I. Case	489,426	Jan. 3	678	183	62	146
Wierenga, Arie C., Zeeland, Mich. Attachment for beds	492,249	Feb. 21	1891	472	62	1158
Wierman, Isaac W. G., Little Rock, Ark. Machine for flattening tobacco-stems	497,437	May 16	1706	431	63	958
Wiesbrock, Frederick W. A., New York, N. Y. Manufacture of beer	510,827	Dec. 12	1676		65	1733
Wiesbrock, Max T. F., Chicago, Ill. Grain-press	504,098	Aug. 29	3054	763	64	1190
Wiesbrock, Max T. F., Chicago, Ill. Drier for brewers' grains	504,099	Aug. 29	3056	764	64	1190
Wiesenfeld, Robert S., Baltimore, Md. Packing vessel or jar	489,773	Jan. 10	1215	319	62	267
Wiesenfeld, Robert S., Baltimore, Md. Bottle and stopper	490,729	Jan. 31	2208	720	62	624
Wiesenfeld, Robert S., Baltimore, Md. Tool for making bottles	511,033	Dec. 19	2066	512	65	1820
Wiesenfeld, Robert S., assignor to F. Bernei, Baltimore, Md. Waistband-fastener	509,709	Nov. 28	2889	699	65	1345
Wiester, William H., San Francisco, Cal. Oven	504,184	Aug. 29	3200	798	64	1217
Wieting, Frank, Cobleskill, N. Y. Wagon-shaft holder	505,891	Oct. 3	145	38	65	29
Wiggins, John, assignor of one-half to Saxon Worsted Company, Franklin, Mass. Bobbin-builder	496,548	May 2	245	65	63	663
Wiggins, Susan, Stewartville, Ind. Mangle	491,455	Feb. 7	653	164	62	872
Wiggins, Thomas H., Pocatonia, Ill. Tailor's measure	507,054	Oct. 17	2120	527	65	425
Wiggins, William H., Brooklyn, N. Y. Billiard-table	511,571	Dec. 26	2973	724	65	2002
Wightman, Merle J. (See Lemp and Wightman.)						
Wightman, Merle J., and H. Lemp, Hartford, Conn., assignors to Schuyler Electric Company, of Connecticut. Regulating dynamo-electric machines	501,309	July 11	1227	310	64	238
Wightman, William H., Baltimore, Md. Combined sponge and chamois show-case	498,042	May 23	2666	667	63	1144
Wigtel, Carl. (See Stillman and Wigtel.)						
Wike, William H. (See Warren and Wike.)						
Wilber, Samuel G., Lake Hill, N. Y. Car-coupling	490,004	Jan. 17	1593	416	62	357
Wilber, Samuel G., Lake Hill, N. Y. Car-coupling	507,666	Oct. 31	3531	868	65	714
Wilbrant, Henri, Brussels, Belgium, assignor to H. Chapman and L. Sterne, London, England. Electric-arc lamp	507,867	Oct. 31	3533	869	65	715
Wilbur, Henry A., Somerville, assignor to G. H. P. Flagg, Boston, Mass. Cutter-grinder	506,613	Oct. 10	1388	348	65	278
Wilbur, Samuel J., Penn Yan, N. Y. Driving-belt	502,798	Aug. 8	948	231	64	755
Wilbur, William R., Cleveland, Ohio. Machine for providing bolts or screws with threaded or gimlet points	509,638	Nov. 28	2776	668	65	1324
Wilburn, Robert L., Mexico, Mo. Door-check	504,142	Aug. 29	3125	781	64	1203
Wilby, Richard, Huddersfield, England. Let-off motion for looms	495,766	Apr. 18	2003	507 508	63	403
Wilck, Hermann. (See Dixon, John G., assignor.)						
Wilcock, John. (See Haynes and Wilcock.)						
Wilcox, Albert E. (See Link and Wilcox.)						
Wilcox, Cornelius, Sunbury, Ohio. Whiffletree-coupling	491,790	Feb. 14	1181	296	62	999
Wilcox, Curtis N., Brooklyn, N. Y. Lamp-support	489,172	Jan. 3	247	80	62	66
Wilcox, Curtis N., Brooklyn, N. Y. Cover for milk-jars	501,176	July 11	1033	261	64	203
Wilcox, Elbert, Jr., New Haven, assignor of one-half to W. R. Hartigan, Burlington, Conn. Thill-coupling	505,502	Sept. 26	1973	507	64	1680
Wilcox, Eliza, Ashley, Mich. Carpet-stretcher	492,857	Mar. 7	127	32	62	1382
Wilcox, Henry R., trustee, <i>et al.</i> (See Winsor, George H.)						
Wilcox, Margaret A., Chicago, Ill. Bake-pan	496,078	Apr. 25	2479	626	63	506
Wilcox, Margaret A., Chicago, Ill. Dough-mixer	509,987	Dec. 5	246	57	65	1456
Wilcox, Margaret A., assignor to Wilcox Water Heater Company, Chicago, Ill. Radiator	495,584	Apr. 11	1237	309	63	246
Wilcox, Margaret A., assignor to Wilcox Water Heater Company, Chicago, Ill. Car-heater	509,415	Nov. 28	2398	581	65	1250
Wilcox, Olive A., St. Louis, Mo. Bake-oven sliding drawer	500,522	June 27	2939	721	63	1946
Wilcox Silver Plate Company. (See Babitt, Seth W., assignor.)						
Wilcox Silver Plate Company. (See Miller, Charles A., assignor.)						
Wilcox, Thomas H., Brooklyn, N. Y. Vehicle	510,624	Dec. 12	1333	325 326 327	65	1674
Wilcox Water Heater Company. (See Wilcox, Margaret A., assignor.)						
Wilcox, William R., Ridgway, Colo. Lever-swing	495,922	Apr. 18	2243	565	63	447

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Wilcox, William R., Ridgway, Colo. Swing	495,923	Apr. 18	2243	565	63	447
Wilcox, William R., Ridgway, Colo. Double lever-swing	497,258	May 9	1380	350	63	885
Wilcox, William R., Ridgway, Colo. Swing	497,259	May 9	1381	350	63	885
Wild & Devereux. (See Frey, Andrew, assignor.)						
Wild, Fred, Denver, Colo. Automatic furnace	492,175	Feb. 21	1776	444	62	1135
Wild, Samuel E. (See Gaunt and Wild.)						
Wilde, Daniel, Washington, Iowa. Grain-meter	495,145	Apr. 11	1008	251	63	205
Wilde, Daniel, Washington, Iowa. Grain-elevator	504,070	Nov. 7	140	39, 40	65	785
Wilde, Franklin N., and E. F. Campbell, L'Anse, Mich. Sled	510,221	Dec. 5	643	151	65	1531
Wilder, Charles M., Cincinnati, Ohio. Electric controlling and locking mechanism for railway switches and signals	501,701	July 18	1861	463	64	370
Wilder, Edmund R., Kansas City, Mo. Electric-annunciator system	495,127	Apr. 11	978	245	63	200
Wilder, John. (See Gray, Gorham, assignor.)						
Wilder, Joseph L., Mexia, Tex. Device for cooling milk or butter	490,005	Jan. 17	1595	417	62	358
Wilder, Lyman F., Rochester, N. Y. Oil-stove	493,740	Mar. 21	1571	399	62	1696
Wilder, Lyman F., Rochester, N. Y. Headlight	500,176	June 27	2403	584	63	1850
Wilder, William H., Florence, Mass. Wick-raiser	511,572	Dec. 26	2974	724	65	2002
Wilder, William H., Northampton, Mass., assignor to Central Oilgas Stove Company, of Maine. Oil-stove. (Reissue)	11,337	May 16	2216	555	63	1050
Wildman, Frank B. (See McMichael and Wildman.)						
Wiles, Thomas S., Albany, and A. G. Goldthwait, Troy, N. Y. Mailing apparatus	497,152	May 9	1220	311	63	856
Wiley, Frederick, Avoca, Iowa. Churn	490,730	Jan. 31	2809	720	62	624
Wiley, George, assignor of two-thirds to F. Graham, Chicago, Ill., and R. L. Moorhead, New York, N. Y. Steamer	493,849	Mar. 21	1736	442	62	1728
Wiley, William S. C., Catskill, N. Y. Shirt	493,956	Mar. 21	1916	489	62	1762
Wilhelm, John A., et al. (See Horstman, Frank J., assignor.)						
Wilhelm, John H., Chicago, Ill. Indicator	489,060	Jan. 3	120	33	62	30
Wilhelmi, Valentin, Paterson, N. J. Range-boiler	495,236	Apr. 11	1151	289	63	231
Wilhite, Edmund S., West Salem, Ill. Band-cutter and feeder. (Reissue)	11,349	July 4	808	210	64	147
Wilisch, Hugo, Homberg-on-the-Rhine, Germany. Apparatus for hardening steel	501,293	July 11	1366	347	64	266
Wilkins, Carl, Frankfurt-on-the-Main, assignor to Hartmann & Braun, Bockenheim, Germany. Ampere-meter or voltmeter	509,342	Nov. 21	2252	545	65	1213
Wilkinson, Basil M., New York, N. Y., assignor of one-half to S. Brashears, Washington, D. C. Telephone handle or holder	498,869	June 6	209	50	63	1430
Wilkes, Eugene J., North Branch, Minn. Shingling-bracket	489,402	Jan. 3	638	173	62	137
Wilkes, Gilbert, assignor to H. McMillan, Detroit, Mich. Armature-coil for dynamos	507,297	Oct. 24	2556	630	65	516
Wilkes, James, South St. Paul, Minn. Globe-valve	498,496	May 30	3412	847	63	1292
Wilkes, Moses, Trenton, N. J. Cut-off for slide-valves	501,394	July 11	1388	347	64	266
Wilkie, Fredrick, New York, N. Y. Index dividing attachment for lathes	498,497	May 30	3413	847	63	1292
Wilkin, John T., Connorsville, Ind. Machine for planing cycloidal surfaces	497,997	May 23	2593	649	63	1131
Wilkin, John T., Connorsville, Ind. Machine for forming cycloidal surfaces	497,998	May 23	2597	649	63	1132
Wilkin Manufacturing Company. (See James, William A., assignor.)						
Wilkin, Theodore S., Milwaukee, Wis. Sawmill-networks	490,463	Jan. 24	2357	611	62	521
Wilkins, Albert T., assignor of one-half to D. Dever, Philadelphia, Pa. Liquid measuring and delivering apparatus	493,138	Mar. 7	570	142	62	1471
Wilkins, Sarah, Red Jacket, Mich. Splasher-holder	496,928	May 9	885	232	63	797
Wilkinson, Alfred, Bridgeport, Pa., assignor to Wilkinson Manufacturing Company, of Pennsylvania. Furnace-grate	494,831	Apr. 4	493	124	63	95
Wilkinson, Asbby S., Richmond, Va. Tunk	510,459	Dec. 12	1026	245	65	1612
Wilkinson, Benjamin M., Grape Vine, Tex. Hog-pen	500,699	July 4	265	72	64	50
Wilkinson, Charles E., New Haven, Conn. Sewing-machine shuttle	492,930	Mar. 7	251	64	62	1408
Wilkinson, Charles E., Westville, Conn. Bobbin for sewing-machines	493,417	Mar. 14	1008	260	62	1572
Wilkinson, E. T. (See Boynton, Edward S., assignor.)						
Wilkinson, Frank, Beeston, England. Apparatus for reading and punching Jacquard cards from patterns	507,954	Oct. 31	3670	908 909 910 911 912	65	740
Wilkinson, James R., Addington, New Zealand. Kettle	497,935	May 23	2502	624	63	1115
Wilkinson, John. (See Hamer, Samuel, assignor.)						
Wilkinson, Joseph W., assignor to R. Dempster, Des Moines, Iowa. Furnace	496,806	May 2	666	176	63	737
Wilkinson Manufacturing Company. (See Wilkinson, Alfred, assignor.)						
Wilkinson, Walter. (See Wood and Wilkinson.)						
Wilkinson, William. (See Hadley and McDonald, assignors.)						
Wilkinson, William A., assignor to A. Richardson and H. H. Smith, Minneapolis, Minn. Log-roller	495,716	Apr. 18	1924	483 484	63	388
Wilkinson, William A., assignor to Smith & Richardson, Minneapolis, Minn. Sawmill-set-works	511,573	Dec. 26	2975	724 725	65	2002
Wilkinson, William H. (See Putnam, Waldo D., assignor.)						
Wilkinson, William H., Boston, Mass. Breast-drill	491,624	Feb. 14	927	233	62	949
Will & Fink. (See Doble, William A., assignor.)						
Will, Frederick, Rochester, N. Y. Stove-grate	508,458	Nov. 14	778	191	65	917
Willame, Paul, Clichy, France. Machine for hermetically closing cans	489,356	Jan. 3	571	154 155	62	123
Willard, Herman, et al. (See Hoff, Herman, assignor.)						
Willard, John B., Allendale, N. J. Mirror	500,310	June 27	2615	638	63	1887
Willard, Norman P., trustee. (See Fletcher, Wendell C., assignor.)						
Willard, Rodney S., Boston, Mass. Garment-supporter	498,527	May 30	3459	857	63	1300
Willard, Theodore A., Norwalk, Ohio, assignor to United States Wind Engine and Pump Company, Batavia, Ill. Electric-lighting system	508,559	Nov. 14	953	234	65	951
Willcox, Charles H. (See Borton and Willcox.)						
Willcox, Charles H., assignor to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Seam for articles of manufacture	498,600	May 30	3575	886	63	1321
Willcox & Gibbs Sewing Machine Company. (See Borton, Stockton, assignor.)						
Willcox & Gibbs Sewing Machine Company. (See Borton and Willcox, assignors.)						
Willcox & Gibbs Sewing Machine Company. (See Willcox, Charles H., assignor.)						
Willcox, Oliver. (See Brown, Cammann, and Willcox.)						
Wille, Christian F., Edwardsville, Ill. Automatic dropper for harvesters and binders	505,739	Sept. 26	2405	609	64	1760
Willer, Henry E., Milwaukee, Wis. Storm-window or screen fastening	495,645	Apr. 18	1811	454	63	370
Willer, Henry E., Milwaukee, Wis. Sash-holder	495,646	Apr. 18	1812	454	63	370

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Willeringhaus, William, London, England. Application of electricity to pianos or other keyed instruments for hygienic purposes	507,298	Oct. 24	2558	{ 630 631	{ 65 62	516 288
Willets, Abner A., McKeesport, Pa. Broom-head	489,841	Jan. 10	1312	342	62	288
Willets Manufacturing Company. (See Smith, William, assignor.)						
Willett, Dallas C., Uniontown, Ky. Equalizing device for vehicle-springs	497,396	May 16	1637	414	63	946
Willett, George B. (See Moore and Willett.)						
Willey, Charles E. (See Carter and Willey.)						
Willey, Charles E. (See Jenne and Willey.)						
William Cramp & Sons Ship and Engine Building Company. (See McEvoy, Edward J., assignor.)						
William Cramp & Sons Ship and Engine Building Company. (See Smith, Morris F., assignor.)						
William Deering & Company. (See Geraldine, Dion, assignor.)						
William Deering & Company. (See Hanson, Paul, assignor.)						
William Deering & Company. (See Storle, Ole O., assignor.)						
William J. Matheson & Company. (See Austen, Peter T., assignor.)						
William N. Whiteley Company. (See Whiteley, William N., assignor.)						
William Sellers & Company. (See Bancroft, John S., assignor.)						
William Sellers & Company. (See Kneass, Strickland L., assignor.)						
William Sellers & Company. (See Lewis, Wilfred, assignor.)						
William Wharton, Jr., & Company. (See Angerer, Victor, assignor.)						
William Wharton, Jr., & Company. (See Angerer and Psilander, assignors.)						
William Wharton, Jr., & Company. (See Samuel, Edward, assignor.)						
William Wharton, Jr., & Company. (See Samuel and Angerer, assignors.)						
William Wharton, Jr., & Company. (See Wharton, William, Jr., assignor.)						
Williams, Napoleon W., Philadelphia, Pa. Heating apparatus for railways	492,129	Feb. 21	1696	423	62	1117
Williams, Abram E., Nelsonville, Ohio. Car-dumping apparatus	508,071	Nov. 7	141	40, 41	65	785
Williams, Alfred, assignor of one-half to T. W. Gordon, Seattle, Wash. Filter	499,815	June 20	1778	434	63	1730
Williams, Andrew P., Jeffersonville, Ind. Car-vestibule	506,293	Oct. 10	859	212	65	176
Williams, Benjamin A. (See Williams, George N., Jr., assignor.)						
Williams & Co., J. H. (See Booth and Redfield, assignors.)						
Williams, E. Victor. (See Tower, George A., assignor.)						
Williams, Eben B., Thorndike, Mass., assignor to J. H. Higgins, Woonsocket, R. I. Cotton-bale-band cutter	508,156	Nov. 7	291	72	65	812
Williams, Edgar L., Peoria, Ill. Game apparatus	499,073	June 6	570	136	63	1490
Williams, Edward, Dubuque, Iowa. Windmill	504,185	Aug. 29	3202	{ 298 790	{ 64 64	1218
Williams, Edward B., Newark, N. J. Can-opener	504,381	Sept. 5	109	28	64	1291
Williams, Elkanah G., Harpster, Ohio, assignor of one-half to W. R. Rowse. Fence	508,359	Nov. 7	620	152	65	873
Williams, Emma F., Richmond, Ind. Fastening for dress-shields	494,613	Apr. 4	143	33	63	30
Williams, Francis C., Philadelphia, Pa. Street-sweeper	492,469	Feb. 28	2284	568	62	1250
Williams, Frank E. (See Latham and Williams.)						
Williams, Frank E. (See Werner and Williams.)						
Williams, Frank E., Alhambra, Cal. Buttoner	511,481	Dec. 26	2835	685	65	1976
Williams, Frank E., Alhambra, Cal. Button-fastener	511,482	Dec. 26	2836	686	65	1976
Williams, Frank E., Alhambra, Cal., assignor of one-half to J. E. Hills, Brooklyn, N. Y. Whirling toy	495,079	Apr. 11	860	220	63	179
Williams, Frank F., et al. (See Williams, John G., assignor.)						
Williams, Frank T., assignor to Edward Miller & Company, Meriden, Conn. Argand lamp	499,273	June 13	867	210	63	1555
Williams, Frank T., assignor to Edward Miller & Company, Meriden, Conn. Indicator-float	505,619	Sept. 26	2195	555	64	1723
Williams, Frederick C., Yonkers, N. Y. Tap-wrench	506,961	Oct. 17	1970	488	65	398
Williams, George H., New York, N. Y. Electric tool	508,262	Nov. 7	470	114	65	844
Williams, George H., Newton, Mass., and L. W. Palmer, Providence, R. I. Fog-signal	497,153	May 9	1226	312	63	857
Williams, George L., assignor of one-half to A. Hume, Galt, Canada. Boot or shoe	503,302	Aug. 15	1781	440	64	920
Williams, George M., Santa Rosa, Cal. Printer's cabinet	489,665	Jan. 10	1041	271	62	232
Williams, George N., Jr., assignor of one-half to B. A. Williams, New York, N. Y. Operating diamond stone-sawing machines	490,464	Jan. 24	2359	611	62	521
Williams, George R., Brooklyn, N. Y. Vehicle-wheel	498,373	May 30	3126	800	63	1256
Williams, George W., et al. (See Davis, George A., assignor.)						
Williams, George W., Chicago, Ill. Floor	498,344	May 30	3176	791	63	1248
Williams, George W., Eddyville, Ky. Platform-scale	505,503	Sept. 26	1973	507	64	1680
Williams, H. L., et al. (See White, Edward F., assignor.)						
Williams, Harry. (See Naylor and Williams.)						
Williams, Harry, et al. (See Ménégat, Napoléon D., assignor.)						
Williams, Harry R., assignor to W. D. Hubbard, Hartford, Conn. Machine for rolling horseshoe-blanks	489,061	Jan. 3	121	33	62	30
Williams, Henry A., Taunton, Mass. Wire-rolling mill	500,108	June 20	2248	547	63	1810
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Car-spring	496,144	Apr. 25	2574	647	63	525
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Car-truck	496,145	Apr. 25	2575	648	63	525
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Street-car fender	496,146	Apr. 25	2577	648	63	525
Williams, Henry S., Madeira, Cal. Bicycle	503,513	Aug. 15	2108	528	64	979
Williams, Hubbard D. B., Mansfield, Ohio. Cuff-fastener	497,040	May 9	1046	267	63	827
Williams, Hugh, Stockport, England. Gas or similar motor engine	490,006	Jan. 17	1596	417	62	358
Williams, Irvin, Nelson, Mo. Watch-key	502,060	July 25	2438	613	64	488
Williams, Isaac T., Clearmont, Mo. Draft-equalizer	493,323	Mar. 14	881	225	62	1545
Williams, J. Hunter. (See Whitton, George A., assignor.)						
Williams, James, and G. A. Cummer; said Williams assignor to R. J. Cummer, Cleveland, Ohio. Gasoline-burner	493,540	Mar. 14	1219	312	62	1611
Williams, James B., Glastonbury, Conn. Seeding-machine	503,274	Aug. 15	1728	426	64	911
Williams, James G., assignor of one-half to A. J. Christmas, Glasgow, Ky. Combined feeder and band-cutter for thrashing-machines	502,689	Aug. 1	753	182	64	704
Williams, James P. (See Bradford and Williams.)						
Williams, James S. (See Watson and Williams.)						
Williams, James S., et al. (See Smith, John D., assignor.)						
Williams, John, Sterling, Ill. Locomotive ash-pan	499,866	June 20	1878	456	63	1745
Williams, John A., Bath Beach, assignor to Adams & Sons Company, Brooklyn, N. Y. Vending-machine	498,832	June 6	144	35	63	1418
Williams, John G. (See Irish and Williams.)						
Williams, John G., assignor of one-half to M. M. and F. F. Williams, Chicago, Ill. Car-coupling	498,343	May 30	3175	790	63	1248
Williams, John H., St. Vincent, Ky. Road-gate	498,596	May 30	3570	885	63	1320
Williams, John J., Montpelier, Vt. Repairing pneumatic tires	503,636	Aug. 22	2334	{ 581 582	{ 64 64	1034

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Williams, John N., Brooklyn, N. Y. Type-writing machine	501,753	July 18	1948	{ 482 483 484 }	64	384
Williams, John N., Brooklyn, N. Y. Machine for punching checks	511,313	Dec. 19	2533	{ 616 45 }	65	1907
Williams, John R., Newark, N. J. Tobacco stripping and booking machine	500,647	July 4	176	{ 46 47 189 }	64	35
Williams, John R., New York, N. Y. Cigarette-making machine	504,768	Sept. 12	755	{ 190 191 192 }	64	1426
Williams, John T. (See Williams, William A., assignor.)						
Williams, Joseph A., Canal Dover, Ohio. Electric-motor regulator	491,829	Feb. 14	1237	309	62	1011
Williams, Joseph A., Cleveland, Ohio. Commutator for dynamos or motors	492,176	Feb. 21	1779	444	62	1136
Williams, Louis N. D. (See Scott, Robert W., assignor.)						
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Extra-thread-feeding device for knitting machines	491,327	Feb. 7	443	{ 114 115 }	62	832
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Dial-cam-operating device for knitting machines	491,911	Feb. 14	1366	340	62	1037
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Manufacture of stockings	502,941	Aug. 8	1191	293	64	800
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Knitting-machine	503,920	Aug. 22	2751	690	64	1117
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Knitting-machine	503,921	Aug. 22	2753	690	64	1117
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Knitting-machine	503,922	Aug. 22	2754	691	64	1117
Williams, Malcolm B., assignor to Williams Manufacturing Company, Kalamazoo, Mich. Wind-wheel	489,885	Jan. 10	1368	355	62	298
Williams, Malcolm B., and W. H. Athey, assignors to Williams Manufacturing Company, Kalamazoo, Mich. Windmill	503,635	Aug. 22	2333	581	64	1034
Williams Manufacturing Company. (See Williams, Malcolm B., assignor.)						
Williams Manufacturing Company. (See Williams and Athey, assignors.)						
Williams, Mary M., et al. (See Williams, John G., assignor.)						
Williams, Miles, Bootle, England. Railway-signal	501,126	July 11	954	243	64	188
Williams, Morgan, Aspen, Colo. Wrench	499,814	June 20	1787	433	63	1730
Williams, Mowry S., assignor of one-half to S. Worden, Syracuse, N. Y. Trolley-wire-insulator	507,299	Oct. 24	2559	631	65	517
Williams, Nathan G., Bellows Falls, Vt. Centrifugal milk-tester	500,312	June 27	2618	639	63	1888
Williams, Nathan G., Bellows Falls, Vt. Centrifugal creamer	500,787	July 4	405	107	64	75
Williams of Thos., Samuel T., Baltimore, Md. Sewer-guard	492,450	Feb. 28	2206	551	62	1235
Williams, Otis H., assignor of one-third to J. M. Ray, Hamilton, Ohio. Cabinet-album	501,857	July 18	2104	520	64	412
Williams, Percy G., and A. W. Roovers, Brooklyn, N. Y.; said Roovers assignor to said Williams. Coin-controlled dice-throwing machine	491,971	Feb. 14	1460	364	62	1056
Williams, Robert E., Hot Springs, Ark., assignor of one-half to C. W. Israel, Paris, Ill. Electric brush	494,319	Mar. 28	2597	652	62	1904
Williams, Robert S., Merchantville, N. J. Slot gaming-machine	495,285	Apr. 11	1233	309	63	246
Williams, Samuel, Bowie, Tex. Machine for driving horses	500,311	June 27	2616	639	63	1887
Williams, Samuel, New York, assignor to himself, W. H. Crump and T. Martin, Brooklyn, N. Y. Gas-meter	492,600	Feb. 28	2461	612	62	1289
Williams, Samuel B., Martin's Ferry, Ohio. Elevator	511,718	Dec. 26	3211	787	65	2044
Williams, Samuel G., and J. C. Barges, Cincinnati, Ohio. Punching and shearing machine	490,007	Jan. 17	1593	417	62	359
Williams, Sylvester M., San Francisco, Cal. Combined charger, reflector, and smoke-arrester for flash-light burners	504,955	Sept. 12	1060	272	64	1484
Williams, Sylvester M., San Francisco, Cal. Flash-light burner	505,014	Sept. 12	1162	298	64	1503
Williams, Sylvester M., assignor of one-half to J. A. Shepard, San Francisco, Cal. Flash-light burner	504,956	Sept. 12	1063	272	64	1485
Williams, Thomas, Brooklyn, N. Y. Support for non-conducting coverings	494,312	Mar. 28	2510	633	62	1888
Williams, Thomas, Brooklyn, N. Y. Removable fastening for non-conducting coverings	494,313	Mar. 28	2512	633	62	1888
Williams, Thomas C., Randolph, Wis. Ladder-scaffold	510,057	Dec. 5	367	81, 82	65	1479
Williams, Thomas J., assignor to S. Lee, London, England. Pneumatic tire	504,144	Aug. 29	3127	782	61	1203
Williams, Thomas P., et al. (See Darby, Robert J., assignor.)						
Williams, Thomas W., and G. Z. Edwards, Granite, Mont. Pick	509,147	Nov. 21	1915	468	65	1149
Williams, Warren. (See Munz, Charles W., assignor.)						
Williams, Watkin H., Indianapolis, Ind. Yielding shackle	497,936	May 23	2503	624	63	1115
Williams, White & Company. (See Ainsworth, Henry A., assignor.)						
Williams, William, assignor of one-half to Hall & Garrison, Philadelphia, Pa. Corn or potato planter	490,092	Jan. 17	1748	455	62	389
Williams, William, assignor of one-half to Hall & Garrison, Philadelphia, Pa. Harrow	495,924	Apr. 18	2244	565	63	447
Williams, William A. (See Ferguson, Robert G., assignor.)						
Williams, William A., assignor of one-half to J. T. Williams, New Harmony, Ind. Gate	489,621	Jan. 10	985	257	62	220
Williams, William E., Chicago, Ill. Railway-rail brace	491,152	Feb. 7	140	32	62	776
Williams, William E., Chicago, Ill. Machine for crimping metal plates or sheets	510,559	Dec. 12	1217	295	65	1653
Williams, William E., Booneville, Mo. Car-coupling	494,663	Apr. 4	215	54	63	44
Williams, William H., Long Island City, N. Y. Veneer-machine	501,395	July 11	1389	348	64	266
Williams, William J., Pittsburg, Pa. Railway-rail splice	493,802	Mar. 21	1672	426	62	1716
Williams, William S., Whitesville, Mo. Sulky wire-stretcher	496,762	May 2	588	157	63	725
Williamson, Charles I. and E., Union City, Ind. Land-roller	511,389	Dec. 26	2685	651	65	1949
Williamson, Daniel, Sunbury, Pa. Shuttle and shuttle-actuating mechanism for sewing-machines	507,192	Oct. 24	2380	{ 587 588 }	65	485
Williamson, Edwin R., Chain of Rocks, Mo. Horse-collar	502,543	Aug. 1	503	120	64	659
Williamson, Edwin R., Chain of Rocks, Mo. Tongue-support	504,143	Aug. 29	3126	782	64	1203
Williamson, Elwood. (See Williamson, Charles I. and E.)						
Williamson, George H. (See Creteau, Stephen M., assignor.)						
Williamson, Jesse H., Muncie, Ind. Grain scouring and polishing machine	503,889	Aug. 22	2702	{ 677 678 }	64	1107
Williamson, John B., Louisville, Ky. Leaf-turner	509,988	Dec. 5	248	58	65	1456
Williamson, John R., and I. W. Buzby, Seattle, Wash. Heating gas-burner	509,710	Nov. 28	2890	699	65	1345
Williamson, Samuel. (See Cranford, Charles E., assignor.)						
Williamson, Samuel S., Bridgeport, Conn. Apparatus for shaping dress-shields	499,271	June 13	864	{ 207 208 209 }	63	1554
Williamson, Samuel S., Bridgeport, Conn. Apparatus for manufacturing dress-shields	499,272	June 13	866	{ 209 210 }	63	1555

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Williamson, William B. (See Powell, Williamson, and Havner.)						
Williard, Frank J. (See Grimm and Williard.)						
Williard, Thomas, Woodville, Pa. Rock or coal drill	507,091	Oct. 17	2178	539	65	435
Willie, Isaac M., Freeport, Ill. Bushing	501,982	July 25	2307	577	64	464
Willmantic Linen Company. (See Hubbard, Eber, assignor.)						
Willmantic Linen Company. (See Scott, John, assignor.)						
Willingale, Samuel L., <i>et al.</i> , administrators. (See Bradford, Hezekiah.)						
Willingham, Edward J., Macon, Ga. Mosquito-net frame	508,072	Nov. 7	144	41	65	785
Willings, Henry C., London, England. Stove	511,483	Dec. 26	2837	686	65	1976
Willis, David J., New York, N. Y. Desk-switch	499,770	June 20	1716	411	63	1717
Williston, Belvin T. (See Park and Williston.)						
Willits, Warren J., Three Rivers, Mich. Car-wheel	491,456	Feb. 7	654	164	62	873
Willmann, Joseph, assignor of one-half to L. Henne, New Braunfels, Tex. Sulky-plow	500,090	June 20	2218	541	63	1805
Willoughby, Annie, Philadelphia, Pa. Flat-iron holder	497,365	May 16	1591	402	63	937
Willoughby, Charles, San Francisco, Cal. Telegraph-transmitter	506,294	Oct. 10	860	212 213	65	176
Willoughby, John. (See Ackroyd and Willoughby.)						
Wills, Joseph, Newark, N. J. Machine for pointing and punching shoe-laces	494,311	Mar. 28	2508	633	62	1888
Willie, Charles F., Ogden, Utah Ter. Ore-separator	503,023	Aug. 8	1316	322	64	822
Willson, Frederick W. (See Stuart and Willson.)						
Willson, Thomas A., Reading, and H. Bilgram, Philadelphia, Pa.; said Bilgram assignor to said Willson. Machine for grinding the edges of spectacle or eyeglass lenses	508,196	Nov. 7	359	88	65	825
Willson, Thomas L., Brooklyn, N. Y. Electrically reducing aluminium and forming alloys thereof	491,394	Feb. 7	553	140 410 411	62	854
Willson, Thomas L., Brooklyn, N. Y. Dynamo-electric machine	495,538	Apr. 18	1636	411	63	340
Willson, Thomas L., Leaksville, N. C. Electric reduction of refractory metallic compounds	492,377	Feb. 21	2066	521	62	1198
Willyoung, Elmer G., assignor to S. L. and E. B. Fox, Philadelphia, Pa. Electrical measuring-instrument	491,457	Feb. 7	655	164	62	873
Wilmington Dental Manufacturing Company. (See Brooks, Stephen H., assignor.)						
Wilmot, Frank A. (See Wilmot, Samuel R. and F. A.)						
Wilmot & Hobbs Manufacturing Company. (See Wilmot, Samuel R., assignor.)						
Wilmot & Hobbs Manufacturing Company. (See Wilmot, Samuel R. and F. A., assignors.)						
Wilmot, John F., Chicago, Ill. File	496,214	Apr. 25	2683	673	63	545
Wilmot, Samuel R., assignor to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Frying-pan	489,173	Jan. 3	268	80	62	66
Wilmot, Samuel R. and F. A., assignors to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Sheave-stand for switch-operating mechanisms	489,174	Jan. 3	290	80	62	66
Wilmoth, William D., <i>et al.</i> (See Horstman, Frank J., assignor.)						
Wilmshurst, Arthur J., London, England. Device for stretching banjo-heads	498,345	May 30	3177	791	63	1248
Wilson, Adoniram J., Port Chester, N. Y., and W. W. Salmon, Chicago, Ill., assignors to Hall Signal Company, of Maine. Electric signaling system	490,761	Jan. 31	2858	733	62	633
Wilson, Albert C. (See Manning and Wilson.)						
Wilson, Albert G., Wolfe City, Tex. Hay-press	507,250	Oct. 24	2479	611	65	502
Wilson, Alfred. (See Boles and Wilson.)						
Wilson, Alfred E., assignor to J. S. Ticknor, Rockford, Ill. Attachment for street-rail brooms	503,024	Aug. 8	1318	323	64	822
Wilson, Alexander, <i>et al.</i> (See Seaman, George Q., assignor.)						
Wilson, Amos. (See Seamon and Wilson.)						
Wilson, Amos R., Martin's Ferry, Ohio, assignor of one-half to A. D. Seamon, Wheeling, W. Va. Machine for grinding glassware	507,701	Oct. 31	3260	797	65	663
Wilson, Benjamin F., Pittsburgh, Pa. Coal-mining machine	502,426	Aug. 1	299	71	64	620
Wilson, Carlos G., Milledgeville, Ga. Baling-press	494,267	Mar. 28	2444	616 617	62	1875
Wilson, Charles, Newcastle-on-Tyne, England. Meat-slicing machine	501,554	July 18	1627	407	64	329
Wilson, Charles H., Chicago, Ill., assignor to Western Electrical Company, of Illinois. System of wiring multiple switchboards	499,693	June 13	1570	378	63	1678
Wilson & Co., John C. (See Gerrard, George, assignor.)						
Wilson, Darius, Boston, Mass. Gas-pressure regulator	499,489	June 13	1252	298	63	1624
Wilson, David. (See Keane and Wilson.)						
Wilson, David, Dayton, Ohio. Key-seat rule	510,494	Dec. 12	1079	260	65	1629
Wilson, David H., Chicago, Ill. Dynamo-electric machine	510,460	Dec. 12	1027	245 246	65	1618
Wilson, David Y., Gum Tree, assignor of one-half to E. P. and S. T. Moore, Parkersburg, Pa. Safety snap-hook	495,237	Apr. 11	1152	289	63	232
Wilson, Edward E. (See Hinsey, Frederick W., assignor.)						
Wilson, Edward L., Washington, D. C. Sound-recording instrument	489,666	Jan. 10	1043	271 272	62	232
Wilson, Edward O., Jersey City, N. J. Filter-faucet	505,340	Sept. 19	1688	435	64	1614
Wilson, Exilda, Detroit, Mich. Corset-steel	505,150	Sept. 19	1389	356	64	1558
Wilson, F. Cortez, Chicago, Ill. Crimping-tool	502,339	Aug. 1	143	33	64	592
Wilson, Frank, <i>et al.</i> (See Blair, John, assignor.)						
Wilson, Frank K., and J. F. Fetzler, Thurlow, Pa. Car-brake	507,469	Oct. 24	2840	694 695	65	572
Wilson, Frederick M., administrator. (See Huggins, John C.)						
Wilson, George B. (See Fellow, John, assignor.)						
Wilson, George B., Grand Rapids, Mich. Sling for jars, cans, &c	495,080	Apr. 11	862	220	63	179
Wilson, George D., St. Louis, Mo. Device for removing debris from cisterns	493,139	Mar. 7	571	143	62	1471
Wilson, George E., assignor of one-half to H. C. Fogle, Stillwater, Minn. House letter-box	511,480	Dec. 26	2833	685	65	1975
Wilson, Harry L., Erie, Pa. Steam-generator	499,816	June 20	1789	434 435	63	1731
Wilson, Henry C., Edwardsville, Kans. Potato-harvester	504,186	Aug. 29	3204	799	64	1218
Wilson, Homer T., Louisville, Ky. Roller-tablet	499,448	June 13	1191	284	63	1613
Wilson, James, <i>et al.</i> (See Cookson, Thomas, assignor.)						
Wilson, James, Somerville, Mass. Saddle or seat for bicycles	505,620	Sept. 26	2196	555	64	1723
Wilson, James, Columbia, Mo. Heating-stove	508,794	Nov. 14	1301	324	65	1019
Wilson, James E. (See Sterling and Wilson.)						
Wilson, James E., Easton, Pa. Machine for cutting bones	489,774	Jan. 10	1216	319	62	267
Wilson, James E., Easton, Pa. Machine for cutting bones	500,986	July 4	713	187	64	129
Wilson, James E., assignor to Liberty Manufacturing Company, New York, N. Y. Type-writing machine	510,222	Dec. 5	644	151 152	65	1532
Wilson, James N., assignor to Pioneer Thresher Company, Minneapolis, Minn. Thrashing-machine	507,771	Oct. 31	3368	824 825	65	683

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Wilson, James R., Buffalo, N. Y. Flue-cleaner	491,791	Feb. 14	1182	296	62	999
Wilson, James S., <i>et al.</i> (See Anderson and Winston, assignors.)						
Wilson, James T., Tyrone, Pa. Electric locomotive	507,396	Oct. 24	2729	669	65	551
Wilson, John, and H. Hain, Boston, Mass. Railway lock-switch	510,750	Dec. 12	1541	382 383	65	1714
Wilson, John C., Washington, Pa. Swinging gate	502,332	Aug. 1	142	33	64	592
Wilson, John D. (See Fraser and Wilson.)						
Wilson, John D., Belle Plaine, Iowa. Vehicle-axle	492,651	Feb. 28	2548	630	62	1304
Wilson, John H. (See Stead, Robert J., assignor.)						
Wilson, John J., <i>et al.</i> (See Sherman, Willis D., assignor.)						
Wilson, John M., Omaha, Nebr. Boiler stay or brace	503,514	Aug. 15	2109	528	64	979
Wilson, John R., assignor of one-half to N. P. Hyndman, Pittsburg, Pa. Automatic dumping apparatus	508,158	Nov. 7	293	73	65	812
Wilson, John W., Brooklyn, N. Y. Positive-pressure blower	497,108	May 9	1151	295	63	814
Wilson, John W., Brooklyn, N. Y. Positive-pressure blower	497,109	May 9	1153	295 296	63	844
Wilson, Joseph B. (See Wilson, Joseph R. and J. B.)						
Wilson, Joseph R. and J. B., Short Creek, W. Va. Apparatus for steering tows	510,749	Dec. 12	1540	382	65	1713
Wilson, Martin M., Llandudno, England. Game apparatus	499,000	June 6	452	106	63	1470
Wilson, Martin M., Llandudno, England. Game apparatus	504,073	Aug. 29	3005	751	64	1180
Wilson, Milton M., assignor to I. N. Forrester and S. Fullerton, Camden, N. J. Cloth-napping machine	504,010	Aug. 29	2916	731	64	1164
Wilson, Mathew, Garrison, Iowa. Harvester cutting apparatus	489,062	Jan. 3	122	33	62	30
Wilson, Merrick F., Chicago, Ill. Machine for lining strawboard	499,274	June 13	868	210 211	63	1555
Wilson, Merrick F., Chicago, Ill., assignor to Wilson Paper Box Machinery Company, of Illinois. Machine for covering paper boxes	507,605	Oct. 31	3103	758	65	633
Wilson, Minnie E., Indianapolis, Ind. Gas-making apparatus	492,096	May 23	2745	686	63	1159
Wilson, Nicholas E., Thompson, Iowa. Door and hinge	503,730	Aug. 22	2477	616	64	1062
Wilson Paper Box Machinery Company. (See Wilson, Merrick F., assignor.)						
Wilson, Robert, Memphis, Tenn. Advertising-balloon	496,177	Apr. 25	2622	600	63	534
Wilson, Robert, assignor of one-half to C. F. Cornman, Allen, Pa. Cultivator-tooth	493,741	Mar. 21	1572	400	62	1696
Wilson, Richard F., Stockton, Cal. Non-shrinking stove	489,063	Jan. 3	123	33	62	31
Wilson, Robert H., Baggs, Wyo. Washing-machine	496,763	May 2	589	157	63	725
Wilson, Robert M., Newberry, Pa. Window-blind	496,267	Apr. 25	2795	699	63	567
Wilson, Robert R., assignor of one-half to W. H. Bafinger and A. Burbank, New Orleans, La. Car-coupling	495,539	Apr. 18	1639	411	63	340
Wilson, Samuel C., Alpha, Ill. Compound for increasing the yield of butter from milk	499,775	Jan. 10	1218		62	267
Wilson, Stephen, Philadelphia, Pa. Rocking-horse motor	490,465	Jan. 24	2361	612	62	522
Wilson, Sylvester, Crooked Tree, Ohio. Sand-band	490,731	Jan. 31	2509	721	62	625
Wilson, Walter H., and W. J. Pirrie, Belfast, Ireland. Boat-disengaging gear	503,637	Aug. 22	2336	582	64	1035
Wilson, William C., assignor of one-half to J. R. Foran and W. H. Ehlers, Kansas City, Mo. Liquid-containing vessel	507,055	Oct. 17	2121	527	65	425
Wilson, William C., assignor of one-half to J. R. Foran and W. H. Ehlers, Kansas City, Mo. Land-roller	508,157	Nov. 7	292	73	65	812
Wilson, William C., assignor of one-half to J. R. Foran and W. H. Ehlers, Kansas City, Mo. Mail-pouch	509,711	Nov. 28	2891	700	65	1345
Wilson, William P. (See Van Buskirk and Wilson.)						
Wilson, William R. (See Hosmer and Wilson.)						
Wilson, William T. (See Hetrick, Wilson, and Rowe)						
Wilson, Zachary T., Inverness, Fla. Hub for vehicle-wheels	505,740	Sept. 26	2407	609	64	1761
Wilton, Robert W., London, England. Apparatus for cutting paper, &c.	509,989	Dec. 5	249	58	65	1456
Wiltse, William, Jr., Gilboa, N. Y. Grafting-knife	496,079	Apr. 25	2479	686	63	507
Wimberg, Henry, <i>et al.</i> (See Bryan, John, assignor.)						
Wimer, Ephraim, Crabbottom, Va. Nail	497,154	May 9	1228	313	63	857
Wimer, Jefferson D. (See Taylor and Wimer.)						
Winand, Paul A. N., Philadelphia, Pa. Electrical ignitor for gas or hydrocarbon engines	507,515	Oct. 24	2931	719	65	588
Winand, Paul A. N., Philadelphia, Pa. Electrical ignitor for gas or hydrocarbon engines	507,516	Oct. 24	2932	719 720	65	588
Winand, Paul A. N., assignor to Schleicher, Schumm & Co., Philadelphia, Pa. Making gas	496,502	May 2	170	48	63	650
Winand, Paul A. N., and C. O. C. Bilbey, Philadelphia, Pa. Multiphase electric motor	497,110	May 9	1155	296	63	845
Winans, Thomas J., Binghamton, N. Y. Discharging-valve adapted to air-guns	495,767	Apr. 18	2006	508	63	404
Winans, William L., London, England. Spindle-shaped ocean-steamer	504,120	Aug. 29	3086	773	64	1196
Winchell, James F., assignor to Foos Manufacturing Company, Springfield, Ohio. Feed-mill cut-off	509,416	Nov. 28	2400	581	65	1250
Winchell, James F., assignor to Foos Manufacturing Company, Springfield, Ohio. Sweep-mill	509,417	Nov. 28	2401	581	65	1251
Winchell, James F., assignor to Foos Manufacturing Company, Springfield, Ohio. Corn-harvester	510,945	Dec. 19	1931	471	65	1796
Winchell, James F., assignor to Foos Manufacturing Company, Springfield, Ohio. Corn-harvester	510,946	Dec. 19	1933	472	65	1796
Winchester Cotton and Tobacco Press Company. (See Kisinger, William S., assignor.)						
Winchester Repeating Arms Company. (See Bennett, Thomas G., assignor.)						
Winchester Repeating Arms Company. (See Browning, John M., assignor.)						
Winchester Repeating Arms Company. (See Browning, John M. and M. S., assignors.)						
Winchester Repeating Arms Company. (See Mason, William, assignor.)						
Winckler, Fredrick W., assignor to himself, A. G. Quartius, and D. Welterau, Hicksville, N. Y. Apple corer and slicer	498,528	May 30	3460	858	63	1300
Winckhofer, Charles, Newark, N. J. Combined door spring, check, and latch	501,702	July 18	1865	464	64	370
Windeatt, William H., assignor to Johnstone, Norman & Co., London, England. Extension-table	490,936	Jan. 31	3141	806	62	690
Winding, George, Milwaukee, Wis. Asphalt-mixing machine	490,218	Jan. 17	1959	513 514	62	430
Windle, John E., Worcester, Mass. Friction-clutch device	497,506	May 16	1825	460	63	978
Windle, John E., Worcester, Mass. Cloth-measuring machine	507,300	Oct. 24	2560	631	65	517
Windsor, George B., New York, N. Y. Needle-threading attachment for sewing-machines	507,955	Oct. 31	3674	912	65	741
Windus, Werner, Baltimore, Md. Christmas-tree holder	497,999	May 33	2601	651	63	1133
Wine, Joseph S., Mossy Creek, Va. Draft-spring for vehicles	490,527	Jan. 24	2468	636	62	543
Winebrener, John A. (See Ross, George W., assignor.)						
Winegardner, William H., <i>et al.</i> (See Holman, Calvin J., assignor.)						
Wineland, Frank B., Breckenridge, Colo. Bucket-dumping apparatus	491,958	Feb. 14	1438	358	62	1052
Winfield Manufacturing Company. (See Winfield, William C., assignor.)						
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Bottom for cans	504,547	Sept. 5	393	100	64	1343

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Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Means for holding globes in lanterns.	510,058	Dec. 5	369	82	65	1479
Winfield, William D., Winfield, Kans. Corn-popper.	495,864	Apr. 18	2156	541	63	431
Winfield, William N., Detroit, Mich. Blank book.	494,360	Mar. 28	2599	653	62	1904
Wing, Charles M. (See Gard and Wing.)						
Wing, Levi J. (See Delany, Miles H., assignor.)						
Wing, Lingan C., Somerville, assignor to Richardson, Howe & Lovejoy, Boston, Mass. Ruffling attachment for sewing-machines.	492,317	Feb. 21	1992	496	62	1180
Wingate, Enoch, Minton, Ga. Guano-distributor.	500,246	June 27	2507	613	63	1869
Winger, Elam B., Chicago, Ill. Alarm-clock.	491,328	Feb. 7	445	115	62	832
Winkel, John. (See Gerard, Walter, assignor.)						
Winkelmann, Herman R. (See Sattelkau and Winkelmann.)						
Winkelmann, Herman R., Philadelphia, Pa. Reserve-tank for water-elevators.	507,341	Oct. 24	2638	649	65	533
Winkelmann, Herman R., Philadelphia, Pa. Steam vacuum water-elevator.	507,342	Oct. 24	2640	649	65	534
Winkelmann, Herman R., Jacksonville, Fla. assignor to Automatic Water Tank Company, Philadelphia, Pa. Steam-vacuum water-elevator.	489,064	Jan. 3	124	34	62	31
Winkelmann, Herman R., Philadelphia, Pa., assignor to Automatic Water Tank Company, Camden, N. J. Water-supplying device for locomotive-tenders.	499,074	June 6	571	136	63	1490
Winkelmann, Herman R., Philadelphia, Pa., assignor to Automatic Water Tank Company, Camden, N. J. Steam or air connection for water-elevators.	499,179	June 6	734	174 175	63	1518
Winkelmann, Herman R., and P. Sattelkau, Philadelphia, Pa. Steam vacuum water-elevator	507,340	Oct. 24	2637	649	65	533
Winkenwerder, Henry, assignor to Johnson Electric Service Company, Milwaukee, Wis. Pipe or hose coupling.	496,468	May 2	123	33	63	641
Winkler, Alois, Vienna, Austria-Hungary. Embossed sign-plate.	498,923	June 6	313	73	63	1447
Winkler, Charles F., Troy, N. Y. Electric-car truck.	510,661	Dec. 12	1400	344	65	1686
Winkler, Charles F., Troy, N. Y. Electric motor.	510,662	Dec. 12	1401	345	65	1687
Winkler, Charles F., Troy, N. Y., assignor to United Columbian Electric Company, of New Jersey. Electric locomotive.	510,947	Dec. 19	1934	472	65	1796
Winkler, Emil K. (See Decker, Winkler, Friess, and Werner.)						
Winkler, Frank. (See Erwin and Winkler.)						
Winkless, William, Newport, Ky. Safety appliance for elevators.	490,219	Jan. 17	1960	514	62	431
Winkley, Frank D., Madison, Wis. Grinding apparatus.	492,451	Feb. 28	2207	552	62	1235
Winn, Chester A. (See Angell and Winn.)						
Winn, Columbus M., Lunenburg, Va., assignor of one-half to N. H. Neblett. Car-coupling.	489,427	Jan. 3	679	183	62	146
Winn, David J., Sumter, S. C. Spindle-band stretcher.	506,295	Oct. 10	863	213	65	176
Winn, James H., Winchester, Mass. Ball-retarder for bowling-alleys.	499,075	June 6	572	137	63	1491
Winner, William P., assignor to himself, W. P. Roberts, F. Cavanaugh, O. R. Scheetz, and C. A. Klump, Quakertown, Pa. Heating-furnace.	501,034	July 4	785	205 206	64	143
Winslip Machine Company. (See Garraux, Frederick, assignor.)						
Winslow, Charles P., Westborough, Mass. Nitroglycerine-shell.	494,696	Apr. 4	265	68	63	53
Winslow, Francis A., Chicago, Ill. Lock or latch for elevator or other doors.	497,041	May 9	1047	268	63	825
Winslow, James N. (See Blake, George H., assignor.)						
Winslow, Stewart, Rutherford, N. J., assignor of one-half to H. S. Beattie, New York, N. Y. Apparatus for elevating and conveying coal.	489,886	Jan. 10	1369	356	62	298
Winsor, George H., Central Falls, assignor to himself, H. R. Wilcox, trustee, Cranston, and S. C. Harris, Providence, R. I. Machine for making pipes or tubes.	504,687	Sept. 5	612	156	64	1385
Winston, Charles W., and F. Throop, said Throop assignor to said Winston and E. C. Bichowsky, San Gabriel, Cal. Orchard-plow.	491,033	Jan. 31	3310	844 845	62	723
Winston, John S. (See Anderson and Winston.)						
Winter, Adam. (See Conrad and Winter.)						
Winter, Henry W. (See Glidden and Winter.)						
Winter, Henry W., Boston, assignor to J. W. Brooks, trustee, Petersham, Mass. Making rotary toothed cutters.	501,555	July 18	1628	407	64	329
Winter, Henry W., Boston, assignor to J. W. Brooks, trustee, Petersham, Mass. Rotary cutter.	503,067	Aug. 8	1361	341	64	835
Winter, Josef, Ascherlebens, Germany. Machine for splitting grains.	500,729	July 4	319	85	64	60
Winter, John, Sr., Syracuse, N. Y. Photographic posing-chair.	506,025	Oct. 3	345	92	65	67
Winter, Josef, Aschersleben, Germany. Husking-machine for rice, &c.	509,011	Nov. 21	1686	415 416	65	1105
Winter, Louis F., assignor to L. A. Klein and J. Dela Mar, New York, N. Y. Machine for forming fillers for cigars.	504,100	Aug. 29	3057	764 765	64	1190
Winter, Oscar O., Minneapolis, Minn. Rail-joint.	505,181	Sept. 19	1437	370	64	1567
Winterlood, Joseph, London, England. Water-heater.	500,947	July 4	715	188	64	130
Wintermute, James S., Tacoma, Wash. Means for transporting seminal fluid of animals.	507,193	Oct. 24	2384	588	65	485
Winther, Charles A. G., Somerville, assignor of one-half to Star Brass Manufacturing Company, Boston, Mass. Steam-gage tubing.	500,830	July 4	477	125	64	87
Winton, Alexander, Cleveland, Ohio. Bicycle-frame.	500,177	June 27	2404	585	63	1850
Winton, Alexander, Cleveland, Ohio. Ball-bearing.	511,228	Dec. 19	2387	5-2	65	1882
Winton, Henry D., Wellesley, Mass., assignor to Hersey Manufacturing Company, Portland, Me., and Boston, Mass. Leading-piece for overhead electric railways.	492,881	Mar. 7	173	42	62	1392
Wire Goods Company. (See Bement, William O., assignor.)						
Wirsching, Alexander H., Brooklyn, N. Y. Printing-telegraph instrument.	496,549	May 2	248	65, 66	63	664
Wirsig, Oswald H., et al. (See Preston, Leonard Z., assignor.)						
Wirt, Herbert C., Boston, Mass. Safety device for systems of distribution.	499,275	June 13	670	211	63	1556
Wirt, Herbert C., assignor to General Electric Company, Boston, Mass. Wall-socket for incandescent lamps.	497,849	May 23	2355	590	63	1089
Wirt, Herbert C., assignor to General Electric Company, Boston, Mass. Fuse-plug.	508,665	Nov. 14	1119	275	65	984
Wirth, John. (See Tredway and Wirth.)						
Wise Bros. (See Crain, William O., assignor.)						
Wise, Cyrus F., Tama, Iowa. Window-screen and storm-sash.	498,833	June 6	147	35	63	1418
Wise, Morris, New York, N. Y., assignor to himself, H. Davis, S. M. Weed, and J. Woelfle. Detachable heel.	506,614	Oct. 10	1390	348	65	278
Wise, Thomas, South Framingham, Mass. Draft device for locomotives.	498,097	May 23	2747	686	63	1159
Wiseman, Arthur G., St. Louis, Mo. Self-winding and synchronizing clock.	502,156	July 25	2593	632 653	64	518
Wiseman, Arthur G., St. Louis, Mo. Electric winding attachment for clocks.	502,215	July 25	2687	678	64	537
Wiseman, Arthur G., Webster Grove, Mo. Electric-clock synchronizer.	502,157	July 25	2598	653 654	64	519
Wishard, James J., Watsonville, Cal. Earth-carrier.	508,589	Nov. 14	1005	247	65	961
Wishart, James M., North Topeka, Kans. Sad-iron.	501,264	July 11	1164	295 296	64	226
Wisker, Van Buren, Green Ridge, Mo. Writing-guide.	494,697	Apr. 4	267	68	63	54
Wisler, Ignatz. (See Christensen, Emil, assignor.)						
Wismer, Levi, Redman, Mich. Beehive.	499,490	June 13	1254	299	63	1624

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Wisner, Clarence B., Lowell, Ind. Perforating apparatus	494,184	Mar. 28	2309	585	62	1850
Wisner, George W. (See Scott and Wisner.)						
Wiswell, Jacob C., Medford, assignor to C. P. Gorely, Boston, Mass. Amalgamating-machine	504,508	Sept. 5	328	84	64	1331
Wiswell, John F., West Medford, assignor to Electric Gold and Silver Chlorination Company, Kittery, Me., and Boston, Mass. Process of and apparatus for treating ores	495,212	Apr. 11	1110	277	63	224
Witham, Fred W., Galesburg, Ill. Combination hoe	495,081	Apr. 11	863	220	63	180
Witherell, Charles R., et al. (See Jones, Joseph R., assignor.)						
Witherell, George E., assignor to Hartford Machine Screw Company, Hartford, Conn. Cutting-off and forming tool	504,688	Sept. 5	613	157	64	1386
Witherell, George E., assignor to Hartford Machine Screw Company, Hartford, Conn. Knurling-fixture	504,769	Sept. 12	766	193	64	1427
Witherell, George E., assignor to Hartford Machine Screw Company, Hartford, Conn. Clutching mechanism	504,770	Sept. 12	767	193	64	1427
Witherell, Silas. (See Lewis and Witherell.)						
Withers, Henry C. (See Langer, Gotthold, assignor.)						
Withers, Samuel, Philadelphia, Pa. Marbleizing metal, china, &c.	505,303	Sept. 19	1635		64	1605
Witherspoon, John K., et al. (See Kitton, John C., assignor.)						
Withey, Henry, Hastings, Mich. Sliding gate	508,666	Nov. 14	1119	276	65	984
Withington, Charles B., Janesville, Wis. Photographic camera	501,703	July 18	1866	464 465	64	370
Withington, Charles B., Janesville, Wis. Photographic-plate holder	502,799	Aug. 8	949	231	64	756
Witt, James W. M., Cedar Bluff, assignor of two-thirds to F. M. Uptain, Mountainborough, and W. R. Teague, Boaz, Ala. Bed-bottom	506,962	Oct. 17	1971	428	65	398
Witt, Julius, Chicago, Ill. Lock	499,771	June 20	1716	412	63	1718
Witte, Armin, Brenham, Tex. Hay-press	502,942	Aug. 8	1192	293 294	64	800
Wittmann Brothers. (See Spindler, Charles, assignor.)						
Witter, Ezra E., Milford Centre, Ohio. Lubricator	491,153	Feb. 7	141	38	62	776
Wittmann, Will C., Lincoln, Nebr. Bridle-bit	500,831	July 4	479	125	64	87
Wittnauer, Albert. (See Lugin, Henry A., assignor.)						
Witz, Auguste, New York, N. Y. Mixing-machine	506,086	Oct. 3	444	116	65	86
Witzel, Oscar, Langensalza, Germany. Fire-ladder	494,452	Mar. 28	2737	687	62	1928
Wixson, George S., assignor of one-fourth to W. H. Burgess, Crosswell, Mich. Vehicle running-gear	507,702	Oct. 31	3261	798	65	663
Wm. H. Page Boiler Company. (See Page, William H., assignor.)						
Wm. Knabe & Co. Manufacturing Company. (See Smith, William T., assignor.)						
Wock, John, Canton, Ohio. Eaves-trough	502,800	Aug. 8	950	231	64	756
Woddrop, Charles W., et al. (See Steck, Charles C., assignor.)						
Wodiska, Julius, New York, N. Y. Ear-ring	502,801	Aug. 8	951	232	64	756
Woerber, Amos, Moline, Ill. Drill-chuck	508,667	Nov. 14	1121	276	65	984
Woelfel, George P., Spring Garden, Pa. Pipe-wrench	497,260	May 9	1382	350	63	885
Woelfe, Julius, et al. (See Wise, Morris, assignor.)						
Woerner, Ludwig, Brooklyn, N. Y. Bed-couch	493,418	Mar. 14	1008	260	62	1572
Woerner, William K. H. (See Heine and Woerner.)						
Woford, Henry C., Greenville, S. C. Dental tool	501,127	July 11	954	244	64	188
Wohl, Alfred, and A. Kollrepp, Berlin, Germany. Making invert sugar	498,000	May 23	2502		63	1133
Wohlgemuth, Edward L., Amherst, Mass. Brush	503,821	Aug. 22	2611	632	64	1089
Wohlschlegel, Carl F., Rossville, assignor of one-half to G. W. Slaughter, Prince's Bay, N. Y. Pottery-kilo	510,223	Dec. 5	646	152 153	65	1532
Woiceski, William A., V. M. Hyde, and C. C. Martens, Bloomington, Ill. Axle-gage	495,444	Apr. 11	1482	373	63	292
Wojdkow, Louis, Brooklyn, N. Y. Cooking-lamp	493,203	Mar. 21	1673	426	62	1716
Wolcott, Arthur H., Winthrop, assignor to J. L. Whiting & Son, Boston, Mass. Brush-machine	490,181	Jan. 17	1895	493	62	419
Wolcott, Clayton, Hartford, Conn. Sash-cord guide	507,640	Oct. 31	3172	776 777	65	647
Wolcott, Clayton, assignor to Wolcott Hardware Company, Hartford, Conn. Sash-fastener	501,238	July 11	1119	284 285	64	219
Wolcott Hardware Company. (See Wolcott, Clayton, assignor.)						
Wolcott, Henry, et al. (See Ely, William, assignor.)						
Wolcott, Henry E., Syracuse, assignor of one-half to E. W. Clarke and W. C. Ranney, Elbridge, N. Y. Garbage and ash can	511,484	Dec. 26	2837	686	65	1976
Wolcott, Marcus R., Rockford, Ill. Wheel for vehicles	493,419	Mar. 14	1010	260	62	1573
Wolf, Abraham N., Allentown, Pa. Automatic feed-regulator for mills	500,632	July 4	479	125	64	87
Wolf, Carl H., Zwickau, Germany. Igniting material	497,699	May 16	2122	530	63	1032
Wolf, Carl H., Zwickau, Germany. Miner's safety-lamp	509,418	Nov. 23	2403	582	65	1251
Wolf, Edward, Baltimore, Md. Letter-box	507,956	Oct. 31	3675	913	65	741
Wolf, Edward G., et al. (See Wolf, John H., assignor.)						
Wolf, Elmer E., Springfield, Ohio. Transom-lifter	492,250	Feb. 21	1892	472 473	62	1159
Wolf, Harres. (See Bryant, Alden B., assignor.)						
Wolf, John, Jr., assignor of one-half to J. Bloch, Cincinnati, Ohio. Clutch	503,923	Aug. 22	2755	691	64	1117
Wolf, John, Jr., assignor of one-half to J. Bloch, Cincinnati, Ohio. Cloth-cutting machine	505,690	Sept. 26	2328	590 591	64	1747
Wolf, John, Jr., assignor of one-half to J. Bloch, Cincinnati, Ohio. Take-up device for cloth cutting machines	505,741	Sept. 26	2408	609	64	1761
Wolf, John, Jr., and J. Bloch, Cincinnati, Ohio. Cloth-cutting machine	505,689	Sept. 26	2323	590	64	1746
Wolf, John H., Ransom, assignor of one-half to E. Denel, Geneva, and E. G. Wolf, Hudson, Mich. Wind-wheel	510,306	Dec. 5	777	188	65	1557
Wolf, Van Luther. (See Hipple and Wolf.)						
Wolfe, Nathan D., Hartsville, Ind. Bookbinder	500,833	July 4	482	126	64	88
Wolfe, Gordon G., Troy, N. Y. Name-plate attachment for stoves or ranges	509,064	Nov. 21	1759	434	65	1119
Wolfe, Jacob C., New York, N. Y. Printer's furniture	508,263	Nov. 7	473	114	65	845
Wolfe, James H. (See Lehr and Wolfe.)						
Wolfe, James M. (See Plasters, Rankin, and Wolfe.)						
Wolff, Abraham, assignor to Gender & Paeschke Manufacturing Company, Milwaukee, Wis. Combined flour bin and sifter	509,276	Nov. 21	2131	512	65	1190
Wolff, Adrian, assignor to Scovill Manufacturing Company, Waterbury, Conn. Making metal mounts for brushes, &c.	492,177	Feb. 21	1780	445	62	1136
Wolff, Adrian, assignor to Scovill Manufacturing Company, Waterbury, Conn. Hypodermic-syringe case	506,453	Oct. 10	1146	485	65	232
Wolff, Alfred J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Case for hypodermic syringes	505,645	Sept. 26	2253	571	64	1734

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Wolff, C. J., <i>et al.</i> (See Ziegler, Josef, assignor.)						
Wolff & Co., Rudolph. (See Ritter, Abraham, assignor.)						
Wolff, David, <i>et al.</i> (See Lee, William B., assignor.)						
Wolff, Friedrich A., Heilbronn, Germany. Apparatus for manufacturing gelatine and glue.	496,469	May 2	194	33	63	641
Wolfram, Theodore, Columbus, Ohio. Finger-board for musical instruments	497,973	May 23	2557	638	63	1125
Wolhaupter, Benjamin. (See Gardner, Levi S., assignor.) (Reissue.)						
Wolhaupter, Benjamin, Morgan Park, Ill. Cattle-guard	500,730	July 4	320	85, 86	64	60
Wolhaupter, Benjamin, Morgan Park, Ill. Cattle-guard	505,867	Oct. 3	101	26	65	21
Wolhaupter, Benjamin, Oak Park, Ill. Cattle-guard	505,866	Oct. 3	100	26	65	21
Wolhaupter, David F., Washington, D. C. Key for type-writing machines	497,483	May 16	1777	447	63	969
Wolke, Angela, administratrix. (See Wolke, Frederick.)						
Wolke, Frederick, deceased, Rich Prairie, Minn.; A. Wolke, administratrix. Plow-cleaner.	490,420	Jan. 24	2295	596	62	508
Woll, Peter, Jr., Philadelphia, Pa. Machine for twisting and curling hair	493,004	Mar. 7	367	92	62	1431
Woll, Peter, Jr., Philadelphia, Pa. Manufacture of curled hair	497,737	May 16	2171	543	63	1042
Wollam, Clarence M., San Francisco, Cal. Breech-loading firearm	498,043	May 23	2668	667, 668	63	1144
Wollé, Charles E., and A. Trout, Philadelphia, Pa. Steam-separator	511,314	Dec. 19	2534	617	65	1908
Wollensak, John F., Chicago, Ill. Plate for mounting bell-pushes	510,663	Dec. 12	1403	345	65	1687
Wollert, Oscar E., Stockholm, Sweden. Skate	502,109	July 25	2515	631	64	502
Wolsfeld, John. (See Beck, Michael, assignor.)						
Wolstencroft, James, <i>et al.</i> (See Carlinet, John G., assignor.)						
Wolter, Eduard A. W., Berlin, Germany. Stamping in colors	509,109	Nov. 21	1858		65	1138
Wolter, Friedrich, Helmstedt, Germany. Extension-table	496,588	May 2	306	82, 83	63	675
Woltmann, August. (See Busenbenz and Woltmann.)						
Woltmann, Ernst, and H. A. Triggs, assignors to Electrical Specialty Company, Denver, Colo. Circuit-switch	497,756	May 16	2212	554	63	1049
Wolworth, Hartwell C., Dancy, Wis. Beehive	510,751	Dec. 12	1543	383	65	1714
Womach, William R. (See Verst and Womach.)						
Womelsdorff, Henry C., Tyler, Tex. Dumping-car	489,111	Jan. 3	200	53, 54	62	46
Womersley, William, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Clutch	511,390	Dec. 26	2686	651, 652	65	1949
Womersley, William, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Clutch	511,391	Dec. 26	2689	652	65	1949
Wonderly, Joseph H. (See Teel, John, assignor.)						
Wood, Albert H., Hanover, N. H. Sap-spout	506,386	Oct. 10	1024	255	65	207
Wood, Alexander, and T. Davies, Glasgow, Scotland. Chopping or mincing machine	511,425	Dec. 26	2838	686	65	1976
Wood, Alexander H. (See Bull, Edward E., assignor.)						
Wood, Aurin, Worcester, Mass. Boring-mill	497,738	May 16	2172	543	63	1042
Wood, Aurin, Worcester, Mass. Boring-mill	497,739	May 16	2174	543	63	1042
Wood, Austin C. (See Tufts, John H., assignor.)						
Wood, Austin C., and J. H. Tufts, Syracuse, N. Y. Gas washing and scrubbing device	503,395	Aug. 15	1930	479, 480	64	947
Wood, Charles F., Richmond, Va. Automatic electric weighing scale	500,045	June 20	2151	592	63	1794
Wood, Clark B., assignor of one-half to C. A. Jewett, Boston, Mass. Lubricator	502,158	July 25	2600	654	64	519
Wood, Edgar J., Brooklyn, N. Y. Reducing-pressure valve	489,515	Jan. 10	840	219	62	191
Wood, Edgar J., Brooklyn, N. Y. Pump-regulator	489,516	Jan. 10	841	220	62	191
Wood, Edgar J., Brooklyn, N. Y. Damper-regulator for steam-boiler furnaces	505,932	Oct. 3	200	51	65	30
Wood, Edgar J., New York, N. Y. Dynamometer	495,175	Apr. 11	1059	263	63	214
Wood, Edward E., Jr., Northampton, Mass. Carving-fork guard	503,303	Aug. 15	1782	440	64	920
Wood, Edwin, Warmminster, England. Stand for cycles	503,185	Aug. 15	1591	391	64	887
Wood, Egbert O., Nashua, N. H. Till-lock	507,957	Oct. 31	3677	913	65	741
Wood, Egbert O., Nashua, N. H. Manual sales-recorder and cash-drawer	507,958	Oct. 31	3678	913, 914	65	741
Wood, Frank G., Stuart, Iowa. Rotating rack for holding robes, &c.	508,459	Nov. 14	779	192	65	917
Wood, Franz J., Boz, S. D. Band-cutter and feeder for thrashing-machines	496,764	May 2	590	158	63	725
Wood, Ferdinand E., Pomona, Cal. Fruit-clipper	509,970	Dec. 5	250	59	65	1456
Wood, George W., assignor of one-half to P. Vogel, North Granville, N. Y. Ratchet-wrench	500,277	June 27	2551	623	63	1876
Wood, Gleason, assignor to American Waltham Watch Company, Waltham, Mass. Method of and machine for feeding screws	510,224	Dec. 5	647	153, 154	65	1532
Wood, Henry A. W., assignor to Campbell Printing Press and Manufacturing Company, New York, N. Y. Registering device for printing-presses	492,505	Feb. 29	2313	573, 574	62	1256
Wood, Henry S. (See McMullen, Krusi, and Wood.)						
Wood, James, and W. W. Hare, Noblesville, Ind. Whiffletree-hook	493,420	Mar. 14	1011	261	62	1573
Wood, James C., Los Angeles, Cal. Bed-chair	500,091	June 20	2219	541	63	1805
Wood, James C., assignor of one-half to H. R. Henderson, Los Angeles, Cal. Bed-couch	499,902	June 20	1937	470	63	1756
Wood, James J., Fort Wayne, Ind. Alternating-current dynamo	489,065	Jan. 3	127	34, 35	62	32
Wood, James J., Fort Wayne, Ind. Self-lubricating journal-bearing	493,742	Mar. 21	1573	400	62	1697
Wood, James J., Fort Wayne, Ind. Rheostat	502,340	Aug. 1	145	33, 34	64	592
Wood, James J., Fort Wayne, Ind. Armature for dynamos	507,194	Oct. 24	2387	588, 589	65	485
Wood, James J., Fort Wayne, Ind. Hanger-board for electric-arc lamps	507,343	Oct. 24	2641	650	65	534
Wood, James J., Fort Wayne, Ind. Commutator-brush holder	507,344	Oct. 24	2644	650	65	534
Wood, James J., Fort Wayne, Ind. Resistance-coil	507,345	Oct. 24	2646	650	65	535
Wood, James J., Fort Wayne, Ind. Electric transformer	511,574	Dec. 26	2978	726	65	2003
Wood, James J., Brooklyn, N. Y. Alternating-current dynamo-electric machine	491,695	Feb. 14	1033	261, 262	62	972
Wood, Jehu, Jr. (See Halyburton, John L., assignor.)						
Wood, John W., Weston, Mo. Baby-walker	509,991	Dec. 5	251	59	65	1456
Wood, Joseph, Red Bank, N. J. Railway-frog	494,768	Apr. 4	377	94	63	75
Wood, Joseph, and W. Wilkinson, Philadelphia, Pa. Leaf-holder for music	495,865	Apr. 18	2159	541	63	431
Wood, Joseph S., Brooklyn, N. Y. Gas-machine	499,076	June 6	574	137	63	1491
Wood, Julia R., Foxborough, Mass. Lasting and sole-laying machine	508,073	Nov. 7	145	41, 42	65	786
Wood, Lemuel. (See Miles, Stephen S. and C. W., assignors.)						
Wood, Montraville M., Chicago, Ill. Suspending device	493,459	Mar. 14	1086	278, 279	62	1586
Wood, Montraville M., Chicago, Ill. Lightning-arrester	500,178	June 27	2405	585	63	1850
Wood, Robert, Syracuse, N. Y., assignor to United States Automatic Sprinkler Company, Chicago, Ill. Thermostatic sprinkler	499,180	June 6	735	175	63	1518
Wood, Robert E. (See Gartside and Wood.)						
Wood, Rostko O., Worcester, Mass., assignor of one-half to W. M. Jones, Rochester, N. Y. Brake mechanism	495,717	Apr. 18	1926	484, 485	63	388
Wood, Thomas E., Kalamazoo, Mich. Rack for displaying photographs	506,893	Oct. 17	1864	464	65	378

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Wood, Thomas T. (See Acton, William, assignor.)						
Wood, Walter. (See Richards, Francis H., assignor.)						
Wood, Warren, assignor to S. G. McKiernan, Paterson, N. J. Tripod	497,042	May 9	1049	268	63	826
Wood, Warren, assignor to S. G. McKiernan, Paterson, N. J. Rock-drill.	497,043	May 9	1050	268	63	826
Wood, Warren, assignor to S. G. McKiernan, Paterson, N. J. Rock-drill-rotating device.	505,242	Sept. 19	1530	399	64	1524
Wood, Waters D., Pittsburg, assignor to W. Dewees Wood Company, McKeesport, Pa. Manufacturing sheet-iron.	490,236	Jan. 17	1982		62	436
Wood & Willard. (See Belser, James H., assignor.)						
Wood, William C., assignor to Lewis & Fowler Girder Rail Company, Brooklyn, N. Y. Street-railway track	511,068	Dec. 19	2118	523	65	1831
Wood, William H., Media, Pa. Hydraulic riveting-machine	509,782	Nov. 28	3009	728	65	1369
Wood, William H., Media, Pa. Hydraulic automatic safety-valve.	509,992	Dec. 5	253	59	65	1457
Wood, William H., assignor of one-half to J. B. Stanchfield, Elmira, N. Y. Caddy	494,093	Mar. 21	2148	549	62	1805
Wood, William M., Boston, Mass. Refrigerator	490,055	Jan. 17	1688	440	62	376
Wood, William M., Elmira, N. Y. Stop mechanism for steam-engines	497,529	May 16	1856	468	63	984
Woodard, Alonzo B., Hornellsville, N. Y. Wire-fence machine	506,074	Nov. 7	151	43, 44	65	786
Woodard, Alonzo B., Hornellsville, N. Y. Wire-fencing strand and making same	509,343	Nov. 21	2253	545	65	1213
Woodard, Edward C. (See Morton and Woodard.)						
Woodard, George, Bradford, Pa. Tool for oil-wells	505,377	Sept. 19	1749	454	64	1625
Woodard, William H., assignor of one-half to W. A. Andrew and R. H. Gitchel, Marinette, Wis. Weather-strip for windows	496,333	Apr. 25	2877	719	63	582
Woodberry, Jesse, Boston, Mass. Pipe-organ stop-action	489,887	Jan. 10	1370	{ 356 357 }	{ 62 62 }	299
Woodburn, Harry L. (See Dean, Seward A., assignor.)						
Woodbury, Charles B., and O. Greenbaum, Washington, D. C. Coin-purse.	503,447	Aug. 15	2000	496	64	959
Woodbury, Crayton A. (See Richardson and Woodbury.)						
Woodbury, Crayton A., Rutland, Vt. Bicycle	506,454	Oct. 10	1148	285	65	232
Woodbury, Joseph L. (See Shea, Woodbury, and Whipple.)						
Woodbury, Levi. (See Graham, Edmund H., assignor.)						
Woodcock, James M., Bridgeport, Ohio. Track-fastening.	490,704	Jan. 31	2770	712	62	617
Woodcock, Leonard M., Syracuse, N. Y. Car-starter	509,419	Nov. 28	2404	582	65	1251
Woodcock, Reginald C., New York, N. Y., and C. T. Kingzett, London, England, assignors to American and Continental Sanitas Company, Limited, New York, N. Y. Disinfecting or vaporizing device	502,544	Aug. 1	504	120	64	659
Woodcock, William H. (See Purdon, Walters, and Woodcock.)						
Woodfill, Owensby H., assignor of two-thirds to J. Blue and R. E. Ash, Nevada, Mo. Vending-machine	502,598	Aug. 1	584	140	64	673
Woodhead, Frank A., assignor of one-half to T. Hatton, Philadelphia, Pa. Warp-thread-operating mechanism for looms	510,752	Dec. 12	1545	383	65	1714
Woodhead, Richard M., Nottingham, England. Mud-guard for velocipedes	502,802	Aug. 8	952	232	64	756
Woodman, Frank B., Cedar Rapids, Iowa. Car-coupling	498,870	June 6	210	51	63	1430
Woodman, Joel H., Hoboken, N. J. Convertible chair	509,277	Nov. 21	2132	512	65	1190
Woodman, Robert. (See Norrington, Henry H., assignor.)						
Woodruff Manufacturing Company. (See Church, William G., assignor.)						
Woodruff, Oliver D., Southington, Conn. Meat-cutter	507,195	Oct. 24	2391	590	65	466
Woodruff, Theodore T., deceased; I. I. Gerson, Philadelphia, Pa., administrator. Folding canopy for bedsteads	503,954	Aug. 29	2826	705	64	1147
Woodruff, William H., Auburn, N. Y. Billiard-register	504,957	Sept. 12	1065	272	61	1485
Woods, Andrew M., Gainesville, Ala. Umbrella-support	503,338	Aug. 15	1845	457	64	931
Woods, Arthur R. T., Blundellsands, near Liverpool, England. Sleeping-berth	496,765	May 2	502	{ 158 159 }	{ 63 63 }	725
Woods, Charles L. and P. C., assignors of one-fourth to S. H. Armstrong, Canton, Ill. Pendulum-scales	510,948	Dec. 19	1935	472	65	1797
Woods, Edward D., Boston, Mass., assignor of three-fourths to A. S. Hottle, Philadelphia, Pa., and J. B. Hickman, Wilmington, Del. Last	498,044	May 23	2671	668	63	1145
Woods, Granville T., New York, N. Y. Electric-railway supply system	507,606	Oct. 31	3104	{ 758 759 }	{ 65 65 }	634
Woods, Granville T., New York, N. Y., assignor to Universal Electric Company of the City of New York. Electric-railway conduit	509,065	Nov. 21	1760	{ 434 435 }	{ 65 65 }	1120
Woods, John B., Mineola, Tex. Nut-lock	498,834	June 6	148	36	63	1418
Woods, Joseph T., Toledo, Ohio. Hydrostatic bed	429,517	Jan. 10	843	220	62	192
Woods, Martin, Newark, N. J. Button-turning machine	490,937	Jan. 31	3142	806	62	690
Woods, Paul, Wakefield, R. I. Carriage-spring	490,594	Jan. 24	2558	658	62	561
Woods, Perry C. (See Woods, Charles L. and P. C.)						
Woods, Romulus Y. (See Toler, Henry W., assignor.)						
Woods, Solomon A., Brookline, and H. R. Tillison, assignors to S. A. Woods Machine Company, Boston, Mass. Belt-tightener for planing-machines	495,445	Apr. 11	1483	373	63	292
Woods, William C., Fay, Pa. Nut-lock	498,601	May 30	3570	886	63	1321
Woodsum, Daniel R. and F. M., Sunapee, N. H. Ice-cutting machine	509,420	Nov. 28	2406	583	65	1252
Woodsum, Frank M. (See Woodsum, Daniel R. and F. M.)						
Woodward, Abner, Shelbourne Falls, Mass. Child's carriage	510,461	Dec. 12	1029	246	65	1619
Woodward, Ambrose W., Lancaster, Pa. Axle-washer for vehicles	507,868	Oct. 31	3534	869	65	715
Woodward, Anderson, and F. M. Johnston, assignors of one-third to W. Nickless, Leeper, Mo. Wagon-brake	498,145	May 23	2815	704	63	1171
Woodward, Charles E., St. Louis, Mo. Printing	493,850	Mar. 21	1737	442	62	1728
Woodward, Charles E. W., Chicopee Falls, Mass., assignor to Overman Wheel Company, Chicopee Falls, Mass., and Hartford, Conn. Repairing-tool for pneumatic tires	510,664	Dec. 12	1404	345	65	1687
Woodward, Daniel C., Lynn, Mass. Machine for cutting gears	495,866	Apr. 18	2160	542	63	451
Woodward, Earl B., Morris, Minn. Time-lock	496,241	Apr. 25	2725	682	63	553
Woodward, Ed P., Vernon Centre, Conn. Loom	502,024	July 25	2381	598	64	478
Woodward, Elmer E., Rockford, Ill., assignor to James Leffel & Company, Springfield, Ohio. Adjustable nozzle	497,903	May 23	2452	{ 612 613 }	{ 63 63 }	1107
Woodward, Erastus, Somerville, Mass. Machine for loading heels with nails	507,772	Oct. 31	3374	826	65	685
Woodward, Erastus, Somerville, and C. Hatch, Jr., Revere, assignors to Merrick Sewing Machine Company, Boston, Mass. Eyeletting-machine	501,754	July 18	1956	{ 484 385 }	{ 64 64 }	386
Woodward, James H., Nottingham, England. Stocking and knitting same	500,700	July 4	266	72	64	50
Woodward, Mary C., Pony, Montana. Detachable handle for coffee-pots	491,001	Jan. 31	3245	829	62	709
Woodward, Roland E., Chicago, Ill. Inhaler	490,008	Jan. 17	1599	418	62	359
Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Thread-controlling device for sewing-machines	493,461	Mar. 14	1088	279	62	1586
Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Feeding mechanism for sewing-machines	506,455	Oct. 10	1149	285	65	232
Woodworth, Silas F., Clipper Gap, Cal. Lubricator	507,397	Oct. 24	2730	669	65	551
Woodyatt, Augustus R., Guelph, Canada. Lawn-mower	510,753	Dec. 12	1546	384	65	1714

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Wool, Moses, assignor to S. L. Kuschewsky, New York, N. Y. Making brandy-mash and composition for same.	493,460	Mar. 14	1087		62	1586
Woolcocks, George O., Brooklyn, N. Y. Floor-clamp.	495,446	Apr. 11	1484	373	63	292
Woolcott, William, Winchester, Ky. Kneading-machine.	490,182	Jan. 17	1896	493	62	419
Woolf, Albert E., assignor to T. J. Montgomery and R. Woolf, New York, N. Y. Disinfectant and deodorizer.	490,797	Jan. 31	2918		62	645
Woolf, Rosamond, <i>et al.</i> (See Woolf, Albert E., assignor.)						
Woolfenden, Mary F., Highlands, Colo. Window-bead fastener.	494,726	Apr. 4	314	79	63	62
Woolfolk, Lucien B., Newark, N. J. Fountain-pen.	494,769	Apr. 4	379	95	63	75
Woolfolk, Lucien B., Newark, N. J. Fountain-pen.	495,238	Apr. 11	1153	289	63	232
Woolfolk, Lucien B., Orange, N. J. Fountain-pen.	491,770	Apr. 4	384	95	63	76
Woolfolk, Lucien B., Orange, N. J. Fountain-pen.	495,647	Apr. 18	1813	455	63	370
Wool, William W., Detroit, Mich. Side bearing for cars.	493,688	Apr. 18	1876	470	63	380
Woollens, Theodore, Jr., Cheyenne, Wyo. Rotary meter for irrigation-ditches.	497,155	May 9	1229	313	63	857
Woolley, Edward W., Jersey City, N. J., assignor to himself, and C. P. Haughian, Brooklyn, N. Y. Car-coupling.	510,949	Dec. 19	1937	473	65	1797
Woolley, Leonidas G., Grand Rapids, Mich. Scale-beam.	491,458	Feb. 7	658	165	62	874
Woolley, Leonidas G., Grand Rapids, Mich. Disinfectant-vaporizer.	498,146	May 23	2816	704	63	1171
Woolsey, Nicholas I., Lawrence, N. Y. Thill-coupling.	505,691	Sept. 26	2334	591	64	1748
Woonsocket Machine and Press Company. (See Campbell, Malcolm, assignor.)						
Wooster, Clarence, Saugatuck, Conn. Feeding mechanism for machines for making buttons.	490,421	Jan. 24	2295	596	62	509
Wooster, George, Fort Apache, Ariz. Ter. Adjustable bridge for stringed musical instruments.	490,528	Jan. 24	2469	636	62	543
Wooster, Lucius W., Gibbsborough, N. J. Combined dumb-bell, club, and exercising device.	506,894	Oct. 17	1865	464	65	378
Wooten, Julien P., Bainbridge, Ga. Telegraphy.	509,066	Nov. 21	1764	435	65	1121
Wootton, Tempo, Baltimore, Md. Folding stool.	509,639	Nov. 28	2780	436	65	1325
Worcester, Samuel A., Leadville, Colo. Hydraulic elevator.	499,276	June 13	871	668	63	1556
Worcester, Samuel A., Leadville, and W. A. Morgan, Green Mountain Falls, Colo. Drilling-machine.	492,567	Feb. 28	2405	211	62	1277
Worden, Asa E., Philadelphia, Pa. Washing-machine.	493,957	Mar. 21	1917	212	62	1762
Worden, Charles, Rye, N. Y. Metallic railway-tie.	499,077	June 6	576	599	63	1491
Worden, Fletcher D., and J. M. Diven, New York, N. Y. Shield-oiler for heel or edge of running machines.	500,523	June 27	2940	600	63	1946
Worden, Stewart. (See Williams, Mowry S., assignor.)						
Worden, Will J., Port Huron, Mich. Coin-purse.	509,504	Nov. 28	2572	137	65	1285
Workheiser, Charles, assignor to Newell Brothers Manufacturing Company, Springfield, Mass. Machine for cutting out pearl-button blanks.	508,795	Nov. 14	1303	324	65	1019
Workman, Thomas C., Lebanon, Ind. Submerged force-pump.	495,447	Apr. 11	1486	374	63	293
Workley, North S., Evansville, Ind. Puzzle.	505,210	Sept. 19	1485	387	64	1576
Wormser Filterplatten Werk, Peters, Bittel & Co. (See Fischer and Peters, assignors.)						
Wörner, Adolf, Buda-Pesth, Austria-Hungary, assignor to Siemens & Halske, Berlin, Germany. Contact for conduit electric railways.	503,710	Aug. 22	2446	609	64	1056
Wörner, Adolf, Buda-Pesth, Austria-Hungary, assignor to Siemens & Halske, Berlin, Germany. Conduit electric railway.	509,421	Nov. 28	2407	583	65	1252
Worrell, John E., Jeffersonville, Ind. Plumb-level.	500,452	June 27	2828	696	63	1925
Worron, Lewis C. (See Vanderbeek and Worron.)						
Worron, Lewis C., assignor to A. Vanderbeek, Hartford, Conn. Multi-cylinder engine.	501,983	July 25	2309	577	64	464
Worsdell, Thomas W., <i>et al.</i> (See Borries, August von, assignor.)						
Worsley, Samuel L., Taunton, Mass., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Milling-machine.	497,850	May 23	2355	590	63	1089
Worsley, Samuel L., Taunton, Mass., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Lathe.	497,851	May 23	2358	591	63	1090
Worth, William H., Petaluma, Cal. Gas-engine.	504,260	Aug. 29	3322	830	64	1240
Worthen, A. Virginia, administratrix. (See Worthen, William H.)						
Worthen, Andrew J., Murphysborough, Ill. Spice-box.	502,453	Aug. 1	344	82	64	629
Worthen, William H., deceased; A. V. Worthen, administratrix, and assignor to Guild & Garrison, Brooklyn, N. Y. Vacuum-pump.	491,912	Feb. 14	1368	341	62	1037
Worthington, Charles C., Irvington, N. Y. Direct-acting pumping-engine.	504,644	Sept. 5	527	136	64	1370
Worthington, Charles C., Irvington, N. Y. Feed-water system for steam-engines.	508,805	Oct. 17	1712	431	65	351
Worthington, Charles C., Irvington, N. Y. Multiple-expansion engine.	507,196	Oct. 24	2393	590	65	486
Worthington, William W., Caldwell, N. J., assignor to Q. & C. Company, Chicago, Ill. Making railway tie-plates.	506,963	Oct. 17	1972	488	65	399
Wortmann, Sigismund B., New York, N. Y. Motor for clocks.	510,754	Dec. 12	1547	384	65	1715
Worz, Gustav A. (See Newbigging and Worz.)						
Wotton, James A., and E. A. Bostrom, Atlanta, Ga. Electric cautery apparatus.	511,742	Dec. 26	3248	796	65	2051
Wragg, George, Sharpsburg, Pa. Potato-digging machine.	508,460	Nov. 14	780	192	65	917
Wrattisch, Josef, and S. Gergacevics, Graz, Austria-Hungary. Automatic telephone.	504,011	Aug. 29	2916	732	64	1164
Wray, David A., assignor of one-half to S. M. Boyd, Pittsburg, Pa. Composition for roofing, paving, &c.	491,395	Feb. 7	557		62	854
Wray, John C., Peoria, Ill. Arc electric lamp.	497,438	May 16	1707	431	63	958
Wren, Eva I., administratrix. (See Wren and Oliver.)						
Wren, Robert M., and A. J. Oliver, Oakland, Cal.; said Oliver assignor to said Wren, deceased; E. I. Wren, administratrix. Cloth-measuring machine.	502,943	Aug. 8	1194	294	64	800
Wright, Alexander C., Baltimore, Md. Brush.	493,050	Mar. 7	435	110	62	1445
Wright, Alfred M. (See Hayden, Louis S., assignor.)						
Wright, Alfred M., McFall, Mo. Button-hole-cutter.	492,452	Feb. 28	2209	552	62	1336
Wright, Allen J., Cleveland, Ohio. Steam-separator.	492,081	Feb. 21	1622	403	62	1103
Wright, Allen J., Cleveland, Ohio. Steam-separator.	492,082	Feb. 21	1624	403	62	1103
Wright, Allen J., Cleveland, Ohio. Safety steam-separator.	492,083	Feb. 21	1627	404	62	1104
Wright, Almeron J. (See King and Wright.)						
Wright, Augustus, assignor to Hope Electric Appliance Company, Providence, R. I. Electric cut-out.	496,807	May 2	668	177	63	738
Wright, Augustus, assignor to Hope Electric Appliance Company, Providence, R. I. Electric switch.	496,808	May 2	670	177	63	738
Wright, Charles A., Philadelphia, Pa. Card-stacking machine.	492,130	Feb. 21	1699	423	62	1118
Wright, Charles D., Niles, Mich. Fence-post.	510,625	Dec. 12	1334	327	65	1674
Wright, Charles E., Waterbury, Conn. Band-saw guide.	496,178	Apr. 25	2623	660	63	534
Wright, Charles L., <i>et al.</i> (See Jones, John M., assignor.)						
Wright, Charles T. (See Goff, Daniel, assignor.)						
Wright, Edward, Worcester, Mass. Door-hanging gage.	505,868	Oct. 3	103	27	65	21

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Wright, Edward, Worcester, Mass. Pipe-wrench	505,869	Oct. 3	104	27	65	21
Wright, Elias M., Buffalo, N. Y. Burner for oil-stoves	493,743	Mar. 21	1575	{ 400 401	{ 62	1697
Wright, Elina M., Hartford, Conn. Forming decorative panels	501,265	July 11	1165	....	64	227
Wright, Frederick K., assignor to Steam Gauge and Lantern Company, Syracuse, N. Y. Signal-lantern holder	496,470	May 2	126	34	63	641
Wright, Frederick K., assignor to Steam Gauge and Lantern Company, Syracuse, N. Y. Lantern	498,416	May 30	3271	815	63	1267
Wright, Frederick K., assignor to Steam Gauge and Lantern Company, Syracuse, and R. E. Dietz Company, New York, N. Y. Tubular lantern	498,045	May 23	2672	668	63	1145
Wright, George C. (See Tropp, Bernhard, assignor.)						
Wright, George E., Newark, N. J. Reversing-valve for compound engines	510,665	Dec. 12	1405	346	65	1687
Wright, George F., Palmer, Mass. Wire-netting machine	490,009	Jan. 17	1600	{ 418 419	{ 62	359
Wright, George H., Syracuse, N. Y. Milk-can	493,804	Mar. 21	1674	427	62	1716
Wright, George H., assignor of three-fourths to C. A. Horsley and G. M. Bryan, Jr., Galveston, Tex. Funnel	500,453	June 27	2829	696	63	1925
Wright, George W., Table Rock, Nebr. End-gate for wagons	489,137	Jan. 3	235	65	62	54
Wright, Granville W., assignor to Sargent & Company, New Haven, Conn. Door spring and check	491,154	Feb. 7	144	38	62	777
Wright, Granville W., assignor to Sargent & Company, New Haven, Conn. Door-check	491,155	Feb. 7	146	39	62	777
Wright, Granville W., assignor to Sargent & Company, New Haven, Conn. Door spring	491,156	Feb. 7	148	39	62	777
Wright, Granville W., assignor to Sargent & Company, New Haven, Conn. Bench-plane	493,903	Mar. 21	1816	462	62	1743
Wright, J. M., et al. (See Smith, George, assignor.)						
Wright, James. (See McFarlane, William, assignor.)						
Wright, James, Los Angeles, Cal. Fruit-tree suspender	497,853	May 23	2362	592	63	1091
Wright, James, Lancaster, England. Latch	500,179	June 27	2406	585	63	1850
Wright, James, Jackson, Tenn. Belt-stretcher	506,296	Oct. 10	864	213	65	176
Wright, James N., Quincy, Ill. Governor	506,964	Oct. 17	1973	489	65	399
Wright, John A., Indianapolis, Ind. Bicycle-tire	502,390	Aug. 1	236	56	64	609
Wright, John E., New York, N. Y. Printing-telegraph	494,185	Mar. 28	2311	{ 585 586	{ 62	1851
Wright, John J., Richmond, Va. Horse-collar	496,503	May 2	171	48	63	650
Wright, John S. (See Johnson, Samuel S., assignor.)						
Wright, Joseph, London, England. Steam-engine	491,002	Jan. 31	3246	{ 829 830	{ 62	709
Wright, Joseph F., Colorado Springs, Colo. Insulator	496,081	Apr. 25	2481	627	63	507
Wright, Joseph F., Colorado Springs, Colo. Shaft-tip	505,742	Sept. 26	2410	609	64	1761
Wright, Judson E., assignor of one-half to W. B. Moore, Chicago, Ill. Safety-bicycle	501,454	July 11	1468	368	64	283
Wright, Morris S., Worcester, Mass. Reed or pipe organ	509,506	Nov. 28	2575	622	65	1286
Wright, Parvin, Denver, Colo. Rheostat	497,366	May 16	1592	402	63	937
Wright, Parvin, Denver, Colo. Insulation for underground wires	497,852	May 23	2361	592	63	1091
Wright, Parvin, and J. W. Kinsey, Denver, Colo. Switching apparatus for electric motors	509,505	Nov. 28	2573	622	65	1286
Wright, Ransom C., Philadelphia, Pa. Compound locomotive	500,788	July 4	408	107	64	75
Wright, Richard H. (See Rose, William, assignor.)						
Wright, Rufus. (See Morgan and Wright.)						
Wright, Solomon, and W. A. Hermon, Pownall, Vt. Yarn-guiding device for knitting-machines	501,128	July 11	955	244	64	188
Wright, Walter B., Chicago, Ill. Gas-generator	510,462	Dec. 12	1031	247	65	1619
Wright, Warren A. (See Ellison and Wright.)						
Wright, William, Wilmington, Del. Check-valve for boilers	495,082	Apr. 11	864	221	63	180
Wright, William A., Centreton, N. J., assignor of one-half to Brown & Gilman, Philadelphia, Pa. Bicycle	489,112	Jan. 3	201	54	62	47
Wright, William A., Centreton, N. J., assignor of one-half to Brown & Gilman, Philadelphia, Pa. Folding chair	504,855	Sept. 12	903	233	64	1455
Wright, William A., Centreton, N. J., assignor of one-half to C. N. Apple, Philadelphia, Pa. Bicycle, &c.	499,694	June 13	1574	379	63	1679
Wright, William J., Cooperstown, Pa. Stave trimming and jointing machine	492,702	Feb. 28	2615	{ 647 648	{ 62	1318
Wrigley, John, Elmira, N. Y. Semaphore and revolving lamp	496,080	Apr. 25	2480	627	63	507
Wrigley, Thomas, Todmorden, England. Spinning-spindle	492,080	Feb. 21	1621	402	62	1103
Wrigley, Thomas, Todmorden, England. Conveyor and manufacturing same	511,393	Dec. 26	2691	{ 652 653	{ 65	1950
Wrigley, Thomas B. (See Bronson, Douglas B., assignor.)						
Wubbel, Herman, Beaver Falls, Pa. Electric clock	494,832	Apr. 4	494	{ 124 125	{ 63	95
Wubben, Charles. (See Crites, John W., assignor.)						
Wuestefeld, Walter, Toledo, Ohio. Screen-holder	507,398	Oct. 24	2731	670	65	551
Wulf, John W., assignor of one-half to T. E. Stevens, Blair, Nebr. Wrench and rod-vise	501,177	July 11	1034	261	64	203
Wullweber, Otto L., Chicago, Ill. Bicycle-tire	501,239	July 11	1121	225	64	219
Wurdack, William, assignor to Inter State Complete Electric Construction Company, St. Louis, Mo. Lightning-arrester	500,454	June 27	2830	697	63	1926
Wurth, Henry T., et al. (See Allis, Abram Q., assignor.)						
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Thermostatic fuse device	492,547	Feb. 28	2379	590	62	1271
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Lightning-arrester	492,548	Feb. 28	2381	591	62	1272
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Lightning-arrester	492,549	Feb. 28	2382	591	62	1272
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Lightning-arrester	494,186	Mar. 28	2314	586	62	1851
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Lightning-arrester	497,507	May 16	1826	460	63	978
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Lightning-arrester	497,508	May 16	1827	460	63	979
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Lightning-arrester	497,509	May 16	1828	461	63	979
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Automatic short circuit for constant-current machines	500,455	June 27	2833	697	63	1926
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Automatic circuit-breaker	500,456	June 27	2834	697	63	1926
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Automatic circuit-interrupter	501,201	July 11	1066	270	64	209

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Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Electrical condenser.....	503,186	Aug. 15	1591	391	64	887
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Rheostat.....	505,911	Oct. 3	175	45	65	34
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Lightning-arrester.....	509,783	Nov. 28	3011	728	65	1365
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Universal non-arcing lightning-arrester.....	509,784	Nov. 28	3013	728	65	1369
Wurts, Alexander, and C. F. Scott, assignors to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Lightning-arrester.....	497,397	May 16	1638	415	63	946
Württembergische Uhrenfabrik Schwenninger. (See Fecht, Hermann, assignor.)						
Wüstenfeld, Herman. (See Poppowitsch, Edward, assignor.)						
Wutke, Carl W. E., Germersdorf, Germany. Roofing-tile.....	491,625	Feb. 14	928	233	62	949
Wyand, William, assignor to Enterprise Manufacturing Company, Atlantic City, N. J. Mechanical movement.....	508,360	Nov. 7	621	152	65	873
Wyatt, Francis. (See Ingalls and Wyatt.)						
Wyatt, Robert F., Jasper, Ala. Drilling-machine.....	510,148	Dec. 5	516	119	65	1507
Wyckoff, Seamans & Benedict. (See Gifford, Harry E., assignor.)						
Wyckoff, Seamans & Benedict. (See Martin, Harrison S., assignor.)						
Wyckoff, Seamans & Benedict. (See Webb, George B., assignor.)						
Wylde, Edward, Chicago, Ill. Indicator mechanism for elevators.....	496,986	May 9	967	253	63	811
Wylie, Arthur J., Rome, N. Y. Wire-hanger.....	497,439	May 16	1709	431 } 432 }	63	958
Wylie, Josephus, Ireland Hill, Ala. Churn.....	501,984	July 25	2314	578	64	465
Wylie, Parker R., Chelsea, Mass. Combined runner and tip retainer.....	496,029	Apr. 25	2399	607	63	492
Wylie, Parker R., Chelsea, Mass. Umbrella.....	496,504	May 2	172	48	63	650
Wyman, Charles E., Martinsburg, Ind. Harrow.....	494,614	Apr. 4	144	33	63	30
Wyman, Charles F., Minneapolis, assignor to L. E. Gerety and H. W. Knapp, St. Paul, Minn. Electric alarm-clock.....	507,959	Oct. 31	3679	914	65	742
Wyman, Harrington, et al. (See Sugden and Sandy, assignors.)						
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Loom.....	490,238	Jan. 17	1990	522	62	437
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Loom.....	490,239	Jan. 17	1993	522	62	437
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Clutch.....	495,540	Apr. 18	1641	412	63	341
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Shuttle-box-operating mechanism for looms.....	498,417	May 30	3272	815 } 816 }	63	1267
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Take-up mechanism for looms.....	492,418	May 30	3274	816	63	1268
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Shuttle-motion for looms.....	503,924	Aug. 22	2757	691	64	1118
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Pattern mechanism for looms.....	509,712	Nov. 28	2893	700 } 701 }	65	1346
Wyman, Horace, and J. A. Clark, assignors to Crompton Loom Works, Worcester, Mass. Loom for weaving tufted fabrics.....	490,237	Jan. 17	1984	520 } 521 }	62	436
Wyman, Jacob O., and O. L. Eugen, Fargo, N. D. Grain-meter.....	489,776	Jan. 10	1218	319	62	267
Wyman, John A., New York, N. Y. Axle-lubricator.....	495,867	Apr. 18	2163	542	63	432
Wynkoop, Richard J., and J. M. Kemp, Paterson, N. J. Photographic-printing apparatus.....	500,180	June 27	2407	585 } 586 }	63	1850
Wynn, Calvin, assignor of one-third to W. H. Standart, Toledo, Ohio. Wheel-tire.....	494,947	Apr. 4	655	169	63	126
Wynn, Charles W., Asheville, N. C. Sectional cooking-boiler.....	491,865	Feb. 14	1300	321	62	1024
Wynn, Charles W., Asheville, N. C. Antifriction-bearing.....	496,242	Apr. 25	2728	683	63	554
Wynne, Frank, London, England. Conduit system for electric railways.....	502,216	July 25	2690	679	64	537
Wynne, Lionel C. F., et al. (See Ludlow, Ross A., assignor.)						
Wynne, Owen H. O., et al. (See Ludlow, Ross A., assignor.)						
Wythe, William H. (See Wythe, William W. and W. H.)						
Wythe, William W. and W. H., Orange, N. J., assignors to National Cash Register Company, Dayton, Ohio. Check printer and recorder.....	491,626	Feb. 14	928	233 } 234 }	62	949
Wythe, William W. and W. H., Orange, N. J., assignors to National Cash Register Company, Dayton, Ohio. Cash register and indicator.....	507,301	Oct. 24	2561	632 } 633 }	65	517
Xander, John G., assignor of one-half to J. C. Reber, Reading, Pa. Cycle.....	493,201	Mar. 7	661	169	62	1488
Xiezopolski, John C. A., and C. Bode, Milwaukee, Wis. Electric signal apparatus.....	507,869	Oct. 31	3536	869	65	715
Yagermann, Ferdinand. (See Levedahl and Yagermann.)						
Yakle, George. (See Laurie, John, assignor.)						
Yale, Albert P., et al. (See Bruley, Calixte, assignor.)						
Yale & Towne Manufacturing Company. (See Meserve and Morse, assignors.)						
Yale & Towne Manufacturing Company. (See O'Keefe, Andrew, assignor.)						
Yale & Towne Manufacturing Company. (See Ridell, Frank R., assignor.)						
Yale & Towne Manufacturing Company. (See Spencer, Henry A., assignor.)						
Yale & Towne Manufacturing Company. (See Stockwell, Emory and H. C., assignors.)						
Yale & Towne Manufacturing Company. (See Toquet, Benjamin L., assignor.)						
Yale & Towne Manufacturing Company. (See Towne, Henry R., assignor.)						
Yale & Towne Manufacturing Company. (See Weickel, Henry, assignor.)						
Yandow, William T., Winooski, Vt. Destroying insects.....	497,937	May 23	2504	624	63	1115
Yarbrough, Orceneth F., Dallas, Tex. Grain-planter.....	491,459	Feb. 7	650	165	62	874
Yarger, John A., New Hampton, Iowa. Safety-car.....	490,529	Jan. 24	2470	636	62	543
Yarrington, Charles H., Torrington, assignor of one-half to C. French, Seymour, Conn. Spring.....	490,938	Jan. 31	3144	807	62	690
Yarrington, Charles H., Torrington, assignor to Fowler Nail Company, Seymour, Conn. Horseshoe-nail machine.....	495,606	Apr. 18	1741	439	63	358
Yarnell, Charles S., assignor to Moore Carving Machine Company, Minneapolis, Minn. Rubbing-machine.....	507,251	Oct. 24	2481	611	65	503
Yarnell, George M., Seneca, Ohio. Pump attachment.....	489,403	Jan. 3	639	173	62	137
Yaryan Fifth Wheel Company. (See Bosart, Timothy L., assignor.)						
Yates, Charles L. (See McLean, Aaron R., assignor.)						
Yates, Charles M. (See Gallinowsky, Hugo, assignor.)						
Yates, Thomas R., Washington, Pa. Car heating apparatus.....	507,302	Oct. 24	2576	633	65	521
Yates, William B., Bucoda, Wash. Car-coupling.....	499,491	June 13	1256	299	63	1624
Yeager, Jacob E., Philadelphia, Pa. Oven-door for stoves, &c.....	509,012	Nov. 21	1687	416	65	1106
Yeager, Samuel A., and W. I. Luckenbach, Bethlehem, and A. P. Balliet, Coplay, Pa. Car-coupling.....	504,958	Sept. 12	1066	273	64	1486
Yeoman, Robert H., Omaha, Nebr. Hot-air apparatus.....	491,627	Feb. 14	933	234	62	951
Yeoman, Robert H., Omaha, Nebr. Hot-air apparatus.....	491,628	Feb. 14	934	234	62	951
Yerdon, William, Fort Plain, N. Y. Can-opener.....	498,346	May 30	3177	791	63	1248
Yerrington, Henry W., Oceanic, N. J. Drawbridge-gate.....	499,867	June 20	1880	456 } 457 }	63	1745

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Yerrington, Henry W., Oceanic, N. J. Dredge-pump attachment.	506,354	Oct. 10	965	240	65	195
Yingling, John W., Latrobe, Pa. Combined square and bevel-gage.	497,938	May 23	2505	625	63	1116
Yochet, Alfred d', Paris, France, assignor to Société Alsacienne des Constructions Mécaniques, of Belfort. Expanding block.	497,854	May 23	2363	592	63	1091
Yockey, Christopher C. (See Yockey, Isaiah F., J. D., and C. C.)						
Yockey, Isaiah F., J. D., and C. C., Chanute, Kans. Corn-planter.	511,260	Dec. 19	2443	{ 595 596 }	{ 65 }	1891
Yockey, John D. (See Yockey, Isaiah F., J. D., and C. C.)						
Yocum, Harry C., and M. V. Kacer, St. Louis, Mo. Molding circular glass articles.	498,147	May 23	2817	705	63	1172
Yoe, Philip, Dayton, Ohio. Cash register and indicator.	490,466	Jan. 24	2363	612	62	522
York, Edward S. (See Dyre, William E., assignor.)						
York, James E. (See Stevenson, John L., assignor.)						
York, John. (See Nadon, Joseph, assignor.)						
York, Thomas. (See Abbott, Robert, assignor.)						
Yost, Andrew, Steelton, Pa. Truss.	503,223	Aug. 15	1653	406	64	897
Yost, George W. N., assignor to Davidson Writing Machine Company, New York, N. Y. Type-writing machine.	506,965	Oct. 17	1974	489	65	399
Yost, Joseph L., assignor to Yost Manufacturing Company, Toledo, Ohio. Tire-fastening for bicycles.	510,307	Dec. 5	778	189	65	1557
Yost, Joseph L., assignor to Yost Manufacturing Company, Toledo, Ohio. Bicycle-wheel.	511,394	Dec. 26	2694	653	65	1950
Yost, Joseph L., assignor to Yost Manufacturing Company, Toledo, Ohio. Bicycle.	511,395	Dec. 26	2695	653	65	1950
Yost Manufacturing Company. (See Cable, Frank D., assignor.)						
Yost Manufacturing Company. (See Yost, Joseph L., assignor.)						
Yost Writing Machine Company. (See Davidson, Alexander, assignor.)						
Yost Writing Machine Company. (See Merritt, Mortimer G., assignor.)						
Younce, Daniel B. (See Norris, William A., assignor.)						
Young, Abram, Binghamton, N. Y. Car-brake.	489,842	Jan. 10	1313	342	62	283
Young, Albert A., assignor of one-half to D. Hale, Boston, Mass. Air-mattress stay.	496,030	Apr. 25	2400	607	63	492
Young, Alden M. (See Schoenmehl, Charles B., assignor.)						
Young, Charles L., Imogene, Iowa. Portable grain-dump.	510,225	Dec. 5	650	154	65	1532
Young, Charles P. (See Mack, Carl F., assignor.)						
Young, Charles P., York, Pa. Coin and slot machine.	492,178	Feb. 21	1781	445	62	1136
Young, David, Anglesea, N. J. Sash-fastener.	508,361	Nov. 7	623	153	65	874
Young, David T., and H. W. Birmingham, England. Bolt-forcer.	503,188	Aug. 15	1594	392	64	887
Young, Delma H., Walnut Springs, Tex. Tongue-support.	510,560	Dec. 12	1218	295	65	1653
Young, Edward, assignor of one-half to H. L. Clausen, Jeffersonville, Ohio. Grain-harvester.	506,189	Oct. 3	640	163	65	123
Young, Edwin, <i>et al.</i> (See Smith, Henry C., assignor.)						
Young, Edwin J., assignor to Ohio Injector Company, Wadsworth, Ohio. Locomotive-injector.	495,286	Apr. 11	1239	{ 309 310 }	{ 63 }	247
Young, Frank R., Hartford, Conn. Truing-up indicator.	505,870	Oct. 3	105	27	65	22
Young, George, Winton, and W. Crippin, Patricroft, England. Apparatus for dyeing, &c.	496,082	Apr. 25	2482	627	63	507
Young, George W., Lynn, Mass. Boot or shoe and making same.	507,574	Oct. 31	3049	746	65	623
Young, George W., assignor to G. Knowles, Jr., Milwaukee, Wis. Automatic valve.	509,344	Nov. 21	2254	545	65	1213
Young, Harry W. (See Young, David T., and H. W.)						
Young, Hayden M., Chicago, Ill. Manufacturing gas.	507,252	Oct. 24	2482	612	65	503
Young, Henry B., New York, N. Y. Folding bed.	497,156	May 9	1230	313	63	858
Young, Horace C., <i>et al.</i> (See Smith, Henry C., assignor.)						
Young, Howard H., Alexandria, Va. Clip for vehicles.	489,777	Jan. 10	1221	320	62	268
Young, James M., and J. B. Geyser, Allegheny, Pa.; said Geyser assignor to said Young. Ball-cock.	506,145	Oct. 3	546	141	65	106
Young, James W., and L. H. Scruggs, Nashville, Tenn. Ventilating-button for mattresses.	509,345	Nov. 21	2255	545	65	1213
Young, John, assignor to Western Electric Company, Chicago, Ill. Fire-alarm and individual electric call.	503,187	Aug. 15	1592	391	64	887
Young, John A., Chicago, Ill. Type-writing machine.	509,461	Nov. 28	2502	{ 604 605 }	{ 65 }	1272
Young, John C. (See Upp and Young.)						
Young, John C., and W. L. Davis, Neenah, Wis. Dandy-roll.	495,573	Apr. 18	1691	426	63	350
Young, John S., Defiance, Ohio. Fifth-wheel.	493,324	Mar. 14	882	225	62	1546
Young, Lewis R. (See Millar, George G. J., assignor.)						
Young, McClintock, Frederick, Md., assignor to Palmetto Fiber Company, Frederick, Md., and Chicago, Ill. Brush-making tool.	500,247	June 27	2508	613	63	1869
Young, Robert C., Birmingham, England. Lay-motion for looms for weaving looped pile fabrics.	501,585	July 18	1670	417	64	337
Young, Samuel. (See Moskowitz and Young.)						
Young, Stephen A., and C. Alden, Maryville, Mo. Fusible cut-out.	500,248	June 27	2509	613	63	1869
Young, Sylvanus. (See Smith, George M., assignor.)						
Young, Thaddeus D., Warrenton, N. C. Traveling-bag.	495,448	Apr. 11	1488	374	63	293
Young, Washington H., Indianapolis, Ind. Hay-press.	492,652	Feb. 28	2548	{ 630 631 }	{ 62 }	1304
Young, Willard B. (See Cahoon, William, Jr., assignor.)						
Young, William, Weston, Mich. Window-frame.	491,034	Jan. 31	3312	845	62	723
Young, William C., Fort Wayne, Ind. Measuring and registering apparatus.	492,453	Feb. 28	2211	553	62	1236
Young, William F., Toledo, Ohio. Apparatus for filling capsules.	507,870	Oct. 31	3537	{ 869 870 }	{ 65 }	715
Young, William J., assignor of one-half to J. M. Houston, Town Creek, Ala. Tire-tightener.	489,404	Jan. 3	640	173	62	138
Younger, Walter E., Greensburg, Kans. Copy-holder.	510,950	Dec. 19	1938	473	65	1797
Youngjohns, William, assignor to E. Hughes & Sons, Kidderminster, England. Loom for weaving tufted fabrics.	510,755	Dec. 12	1548	{ 384 385 386 387 388 }	{ 65 }	1715
Youngjohns, William, Kidderminster, England, and W. Taylor, deceased; J. L. Norris, Washington, D. C., ancillary administrator. Loom for weaving tufted fabrics.	490,530	Jan. 24	2471	{ 636 637 }	{ 62 }	544
Youngren, Peter L., Oakland, Cal. Continuous kiln.	491,396	Feb. 7	557	141	62	855
Youngren, Peter L., Oakland, Cal. Brick-kiln.	492,251	Feb. 21	1895	473	62	1159
Youngs, Fred E., Allegheny, Pa. Tool-holder.	500,834	July 4	483	126	64	88
Youngs, Fred E., Allegheny, Pa. Fluid-pressure regulator and cut-off.	501,814	July 18	2045	504	64	401
Youngs, Levi W., Sackett's Harbor, N. Y. Gate.	509,346	Nov. 21	2256	546	65	1213
Youngs, William H., Randolph, Iowa. Fan.	495,619	Apr. 18	1764	445	63	362
Yule, Carrie. (See Yule and Baglin, assignors.)						
Yule, George, <i>et al.</i> (See Baglin, William A., assignor.)						
Yule, George, Newark, N. J., and W. A. Baglin, New York, N. Y. Hat-body and making same.	497,083	May 9	1112	286	63	827

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Yule, George, Newark, N. J., and W. A. Baglin, New York, N. Y. Hat-body	497,084	May 9	1115	286	63	838
Yule, George, Newark, N. J., and W. A. Baglin, New York, N. Y. Process of and apparatus for blocking hats	499,492	June 13	1257	299 300	63	1624
Yule, George, and W. A. Baglin; said Yule assignor to C. Yule, Newark, N. J. Endless trimming for head-coverings	497,085	May 9	1116	286	63	838
Yule, George, and W. A. Baglin; said Yule assignor to C. Yule, Newark, N. J. Hat	497,086	May 9	1118	286	63	838
Yuel, John, New York, N. Y. Music-desk for pianos	503,822	Aug. 22	2612	652	64	1089
Zacharias, Paul. (See Pásztor, David, assignor.)						
Zahl, Herman, Mommence, Ill. Bridle-bit	504,959	Sept. 12	1069	273	64	1486
Zahn, William, Newark, N. J. Tawing hides or skins	504,012	Aug. 29	2919		64	1164
Zahn, William, Newark, N. J. Tanning hides or skins	504,013	Aug. 29	2921		64	1164
Zahn, William, Newark, N. J. Tawing skins	504,014	Aug. 29	2922		64	1164
Zahn, William, Newark, N. J. Tawing hides or skins	511,007	Dec. 19	2045		65	1814
Zebe, Fred K., Ashland, Wis. Machine for washing vegetables	508,197	Nov. 7	361	89	65	825
Zehe, Fred K., Ashland, Wis. Vegetable-cutter	509,561	Nov. 28	2666	645 646	65	1303
Zehringer, Philemon, and H. Bucksey, London, England. Fire-escape	497,619	May 16	1992	498	63	1008
Zahn, Frederick H., Michigan City, Ind. Refrigerator	494,049	Mar. 21	2072	529 530	62	1791
Zane, George H., assignor of one-half to J. B. Gallagher, Philadelphia, Pa. Masher for vegetables, fruits, &c.	505,504	Sept. 26	1975	507	64	1680
Zangenberg, Anton E., New York, N. Y. Fly-book for anglers	502,427	Aug. 1	300	72	64	620
Zarenba, Edward, Chicago, Ill. Operating device for bridge-gates	489,113	Jan. 3	202	54, 55	62	47
Zauner, Alexander, San Antonio, Tex. Tumbler-washer	503,638	Aug. 29	2337	593	64	1035
Zbinden, Fritz, Lausanne, Switzerland. Knapsack	504,101	Aug. 29	3059	765	64	1191
Zeh, Jakob, Eglosheim, Germany. Crimping-machine	491,913	Feb. 14	1369	341	62	1037
Zehnder, Benedict. (See Evans, George R., assignor.)						
Zehnder, Morris R. (See Reilly, Bernard T., assignor.)						
Zehneck, Joseph, Magdeburg, Germany. Car-coupling	499,078	June 6	577	138	63	1492
Zeigler, George H., Spring Hope, Pa. Vehicle-brake	498,347	May 30	3178	791	63	1249
Zeigler, George W., Anderson, Ind. Burner for lighting or heating with natural or artificial gas	492,179	Feb. 21	1783	446	62	1136
Zeigler, George W., Anderson, Ind. Machine for cutting paper, cardboard, &c.	504,509	Sept. 5	330	84	64	1331
Zeigler, Milton M. (See Litner, Harry, assignor.)	504,510	Sept. 5	333	85	64	1332
Zeitinger, Christian J., Zeitonia, assignor to St. Louis Stamping Company, St. Louis, Mo. Attachment of handles to vessels	493,140	Mar. 7	575	144	62	1472
Zell, Robert R., assignor of one-half to H. C. Kirk, Jr., Baltimore, Md. Electric-railway conduit	502,842	Aug. 8	1019	248	64	769
Zeller, John G., Richmond, Ind., assignor to United States Baking Company, Pittsburg, Pa. Conveyer	510,626	Dec. 12	1335	327 328	65	1674
Zellers, Mahlon M., Kent, Ohio. Workman's time-recorder	508,461	Nov. 14	782	193	65	918
Zellers, Theodor A., assignor to Ottawa Glass Company, Ottawa, Ill. Glass-furnace	498,148	May 23	2818	705	63	1172
Zellner, Elvin T., Philadelphia, Pa. Cigar-press	507,607	Oct. 31	3107	759	65	635
Zemelman, Sam. (See Choen, Wolf, assignor.)						
Zender, Cender, Berlin, Germany. Pedal-stool	502,944	Aug. 8	1195	294	64	800
Zenk, Josef, Schlüsselfeld, Germany. Photographic camera	492,703	Feb. 28	2620	648	62	1319
Zenner, Albert H., Detroit, Mich. Garbage-receptacle	496,243	Apr. 25	2730	683	63	554
Zerban, Andrew, New York, N. Y. Flue for buildings	495,648	Apr. 18	1816	455	63	370
Zernikow, Friedrich, Oderberg, Germany. Apparatus for manufacturing artificial stone	493,141	Mar. 7	576	144	62	1472
Zetterberg, Nils, Belgrade, Minn. Hay-stacker	510,495	Dec. 12	1080	260	65	1629
Zibell, Gustave A. (See Tyrrell and Zibell.)						
Ziegler, Caroline B., et al., administrators. (See Ziegler, John B. and J. F.)						
Ziegler, Charles F., St. Louis, Mo. Shutter-worker	505,283	Sept. 19	1599	416	64	1597
Ziegler, Frank P., Milwaukee, Wis. Apparatus for warming or heating the constituents of candy	501,310	July 11	1229	310	64	238
Ziegler, Frank P., Milwaukee, Wis. Gas-heater	504,382	Sept. 5	110	28	64	1291
Ziegler, Henry, New York, N. Y. String-frame for upright pianos	509,110	Nov. 21	1858	454 455	65	1138
Ziegler, Henry, New York, N. Y. Upright piano	509,111	Nov. 21	1859	455	65	1139
Ziegler, John B., deceased, and J. F. Ziegler, Toledo, Ohio; C. B. and J. F. Ziegler, administrators. Water-filter	510,666	Dec. 12	1408	346 347	65	1688
Ziegler, John F. (See Ziegler, John B. and J. F.)						
Ziegler, John F., et al., administrators. (See Ziegler, John B. and J. F.)						
Ziegler, Josef, assignor to A. Lembach, U. Schleicher, Biebrich, and C. J. Wolff, Wiesbaden, Germany. Quinolin compound	497,740	May 16	2175		63	1043
Ziegler, Oscar J., assignor to Stover Manufacturing Company, Freeport, Ill. Windmill-tower	494,615	Apr. 4	145	34	63	30
Ziegler, Peter, Brooklyn, N. Y. Till-alarm	502,945	Aug. 8	1197	295	64	801
Ziegler, William F., Lincoln, Kans. Fodder-cutter	498,202	May 23	2917	726	63	1188
Zietlow, Albert W. (See Bersbach and Zietlow.)						
Zihlmann, Joseph, North Baltimore, Ohio. Glass manufacture	496,334	Apr. 25	2878	719	63	582
Zilius, Jacob, Huntingdon, Pa. Car-coupling	504,015	Aug. 29	2923	732	64	1164
Zimmermann, John, assignor to W. W. and J. K. Altamus, Philadelphia, Pa. Gearing	504,645	Sept. 5	532	136	64	1370
Zimmermann, John, assignor to Schaum & Uhlinger, Philadelphia, Pa. Jacquard mechanism for looms	507,575	Oct. 31	3051	746	65	623
Zimmer, Frederick W., Rochester, N. Y. Carriage	505,015	Sept. 12	1163	298 299	64	1504
Zimmer, William L., Petersburg, Va. Label cutting and packing machine	494,616	Apr. 4	146	34	63	30
Zimmerman, Arnold W., Washington Heights, Ill. Axle-box lid	489,888	Jan. 10	1373	357	62	299
Zimmerman, Arnold W., Chicago, Ill. Axle-box lid	489,889	Jan. 10	1374	357 358	62	299
Zimmerman, Casper, Chicago, Ill. Safety attachment for houses	490,720	Jan. 31	2894	742	62	640
Zimmerman, Casper, Denver, Colo. Building for protection against cyclones, &c.	490,779	Jan. 31	2893	742	62	640
Zimmerman, Casper, Denver, Colo. Sifter or separator	493,142	Mar. 7	577	144	62	1472
Zimmerman, Casper, Sioux Falls, S. D. Wagon-tire	493,143	Mar. 7	579	145	62	1473
Zimmerman, John, assignor to National Key-Opening Can Company, Chicago, Ill. Key-opening can	511,487	Dec. 26	2841	687	65	1977
Zimmerman, John, and J. K. Underdown, assignors to National Key-Opening Can Company, Chicago, Ill. Punch for forming tongues in blanks for key-opening cans	504,187	Aug. 29	3207	800	64	1219
Zimmerman, John, and J. K. Underdown, assignors to National Key-Opening Can Company, Chicago, Ill. Machine for forming polygonal can-bodies	511,486	Dec. 26	2839	687	65	1977
Zimmerman, John W., Wilmington, N. C. Stair cover or mat	507,725	Oct. 31	3291	805	65	670
Zimmerman, Joseph, Buffalo, N. Y. Steam-trap	506,760	Oct. 17	1643	411	65	337

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Zimmerman, Lawrence J., Linden, N. J., assignor to himself, and G. V. Hann, New York, N. Y. Electrically-operated piano	507,703	Oct. 31	3262	798	65	664
Zimmerman, Martin, Jeromesville, Ohio. Car-coupling	509,993	Dec. 5	255	59	65	1457
Zimmerman, Peter C., Shiremanstown, Pa. Safety device for elevators	496,179	Apr. 25	2623	661	63	534
Zimmermann, Albert, Stuttgart, Germany. Lantern	503,780	Aug. 22	2557	637	64	1078
Zimmermann, John, Syracuse, N. Y. Hub-boring machine	499,772	June 20	1718	{ 412 413 414 }	63	1718
Zimmermann, Swibert, New York, N. Y. Folding bed	498,602	May 30	3580	886	63	1321
Zimmermann, William. (See Kaestner, Max, assignor.)						
Zindel, Berny. (See Lucas, Zindel, and Schmit.)						
Zink, George H., Geneva, Nebr. Pocket cigarette-machine	489,357	Jan. 3	572	155	62	123
Zink, Peter. (See Peartree, Joseph R., assignor.)						
Zinn, Edward. (See Carlisle, Joseph A., assignor.)						
Zinn, John W., Hawthorn, Fla. Toy	497,974	May 23	2559	638	63	1125
Zinsner, August. (See Kreusler, Arnold, assignor.)						
Ziock, William, assignor to Rockford Mitten and Hosiery Company, Rockford, Ill. Knitting fabrics	491,460	Feb. 7	661	{ 165 166 }	62	874
Zipernowsky, Charles, Buda-Pesth, Austria-Hungary. System of supplying currents to electric railways	498,603	May 30	3580	887	63	1322
Zipp, John. (See Scanlan and Zipp.)						
Zipperling, Ferdinand, Zehlendorf, near Berlin, Germany. Horse-detacher	509,112	Nov. 21	1860	{ 455 456 }	65	1139
Zishka, Carl H., Spencer, Iowa. Band-cutter and feeder	504,383	Sept. 5	111	28, 29	64	1291
Zislspurger, George, Winona, Minn. Folding bed and sofa	507,576	Oct. 31	3053	747	65	624
Zobel, Albert, Munich, Germany. Electric lamp	511,229	Dec. 19	2389	582	65	1882
Zohr, Oscar E., assignor of one-half to S. Hines, Scranton, Pa. Mining-machine	508,856	Nov. 14	1400	349	65	1037
Zohrab, Edward T., London, England. Railway-signal	506,146	Oct. 3	547	{ 142 143 }	65	106
Zoll, Emil. (See Clarenbach and Zoll.)						
Zöllner, Theodor, assignor to Thost & Richter, Leipsic, Germany. Mechanical musical instrument	494,664	Apr. 4	216	54	63	44
Zook, Henry S. (See Byler and Zook.)						
Zopf, Peter, Jr., Galeton, Pa. Shank-stiffener	497,157	May 9	1231	313	63	858
Zorger, William H., Sadorus, Ill. Finger-board for violins, guitars, mandolins, banjos, and kindred instruments	494,698	Apr. 4	268	68	63	54
Zoulek, Joseph, East Jordan, Mich. Brace for vehicle-hounds	489,778	Jan. 10	1222	320	62	263
Zschernig, Friedrich E., assignor to A. K. M. H. Evler, Dresden, Germany. Coin-freed latch	502,898	Aug. 8	1112	{ 273 274 }	64	786
Zuber, Henry, Hennessey, Okla. Ter. Post-hole auger	509,994	Dec. 5	256	60	65	1457
Zuccato, Eugenio de, London, England. Apparatus for the manufacture of stencils	498,149	May 23	2820	705	63	1172
Zuckriegel, Peter, Tell City, Ind. Voting-booth	504,016	Aug. 29	2924	732	64	1165
Zurlinden, John U., Billings, Mont. Lubricator	492,252	Feb. 21	1297	474	62	1160
Zurlinden, John U., Billings, Mont. Oil-cup	492,318	Feb. 21	1994	496	62	1180
Zweig, David D., assignor of one-third to C. Croy, St. Louis, Mo. Foot-guard for frogs	510,226	Dec. 5	652	154	65	1533
Zwietusch, Oscar B. (See Zwietusch, Otto and O. B.)						
Zwietusch, Otto, Milwaukee, Wis. Manufacture of beer	504,145	Aug. 29	3129	782	64	1203
Zwietusch, Otto, Milwaukee, Wis. Fountain for carbonated liquids	506,355	Oct. 10	967	240	65	195
Zwietusch, Otto and O. B., Milwaukee, Wis. Making beer	490,056	Jan. 17	1689	440	62	376

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Volume.	Page.
A. A. Griffling Iron Company. (See Williams and Ambrose, assignors.)				
A. D. Farmer & Son Type Founding Company. (See Jackson, William W., assignor.)				
A. F. Towle & Son Company. (See Oakman, Richard N., Jr., assignor.)				
A. H. Andrews & Company. (See Wilmot, John F., assignor.)				
Abram Cox Stove Company. (See Rankin, Thomas I., assignor.)				
Adams, George E., New Britain, Conn. Buckle	22,336	Apr. 11	63	303
Adams, George E., New Britain, Conn. Buckle	22,337	Apr. 11	63	303
Adams, George E., Providence, R. I., assignor to Traut & Hine Company, New Britain, Conn. Buckle	22,132	Jan. 17	62	444
Adams, George E., New Britain, Conn., assignor to Fisk, Clark & Flagg, New York, N. Y. Buckle	22,868	Nov. 7	65	886
Adams, Walter S., assignor to J. A. Brill, Philadelphia, Pa. Axle-box frame	22,467	May 23	63	1159
Adler, Victor, assignor of one-half to A. J. Somerville, St. Louis, Mo. Easel	22,587	July 4	64	149
Aldine Manufacturing Company. (See Phillips, James T., assignor.)				
Alger, William P., assignor of one-half to C. C. Kelley, West Troy, N. Y. Tool-handle	22,221	Feb. 14	62	1059
Allan, James, Charleston, S. C. Badge	22,109	Jan. 10	62	307
Allen, Walter E., Washington, D. C. Paper-knife	22,278	Mar. 14	62	1642
Ambrose, Edward. (See Williams and Ambrose.)				
Anderson, John H., Paterson, N. J. Kerchief	22,615	July 18	64	428
Anderson, William C., assignor to Libby Glass Company, Toledo, Ohio. Ornamentation of glass-ware	22,098	Jan. 3	62	154
Anderson, William C., assignor to Libby Glass Company, Toledo, Ohio. Ornamentation of glass-ware	22,213	Feb. 14	62	1057
Anderson, William C., assignor to Libby Glass Company, Toledo, Ohio. Cut glass dish	22,433	May 9	63	904
Apple, Charles, Washington, Pa. Pattern for window-glass	22,982	Dec. 26	65	2056
Armitage, John L. (See Stone, Thomson M., assignor.)				
Arnold, Fred H., assignor to Landers, Frary & Clark, New Britain, Conn. Cutlery-handle	22,563	June 27	63	1953
Arnold, Constable & Co. (See Matthews, John, assignor.)				
Art Stove Company. (See Wipfler, Charles, assignor.)				
Asbury, Thomas H. (See Baker and Asbury.)				
Augenbraun, Peter, Stamford, Conn., assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Billiard-table	22,594	July 4	64	150
Aumonier, Frederic, London, England. Wall-paper	22,762	Aug. 29	64	1260
Aumonier, Frederic, London, England. Wall-paper	22,763	Aug. 29	64	1260
Aumonier, Frederic, London, England. Wall-paper	22,764	Aug. 29	64	1260
Aumonier, Frederic, London, England. Wall-paper	22,765	Aug. 29	64	1260
Aumonier, Frederic, London, England. Wall-paper	22,801	Sept. 26	64	1784
Aumonier, Frederic, London, England. Wall-paper	22,802	Sept. 26	64	1784
Aumonier, Frederic, London, England. Wall-paper	22,803	Sept. 26	64	1784
Aumonier, Frederic, London, England. Wall-paper	22,804	Sept. 26	64	1784
Aumonier, Frederic, London, England. Wall and ceiling paper	22,805	Sept. 26	64	1784
Aumonier, Frederic, London, England. Wall-paper	22,956	Dec. 5	65	1587
Aumonier, Frederic, London, England. Wall-paper	22,957	Dec. 5	65	1588
Aumonier, Frederic, London, England. Wall-paper	22,958	Dec. 5	65	1588
Aumonier, Frederic, London, England. Wall-paper	22,959	Dec. 5	65	1588
Aumonier, Frederic, London, England. Wall-paper	22,960	Dec. 12	65	1760
Aumonier, Frederic, London, England. Wall-paper	22,961	Dec. 12	65	1761
Aumonier, Frederic, London, England. Wall-paper	22,962	Dec. 19	65	1910
Aumonier, Frederic, London, England. Wall-paper	22,970	Dec. 19	65	1910
Austice, Josiah W. E. Warner, Rochester, and N. R. Streeter, Groton, N. Y. Ice-pick	22,394	May 2	63	751
Avery, Robert S., Washington, D. C. Font of printing-type	22,478	May 30	63	1374
Avery, Robert S., Washington, D. C. Font of phonetic printing-type	22,613	July 18	64	428
Ayer, Harry L., Boston, assignor to Carleton Company, Malden, Mass. Barometer-frame	22,508	June 6	63	1324
B. F. Norris, Allister & Co. (See Jamouneau and Verschuur, assignors.)				
Babbitt, Seth W., Meriden, Conn. Dish	22,799	Sept. 26	61	1783
Babbitt, Seth W., Meriden, Conn. Box	22,986	Dec. 26	65	2057
Bailey, Charles A., Cromwell, Conn. Toy bank	22,405	May 2	63	752
Bailey, Charles A., assignor to J. & E. Stevens Company, Cromwell, Conn. Wheeled toy	22,863	Oct. 31	65	747
Baker, John G., and T. H. Asbury, Philadelphia, Pa. Frame for lawn-sprinklers	22,190	Jan. 31	62	737
Ball, Webster C., Cleveland, Ohio. Hand for timepieces	22,702	Aug. 15	64	999
Ball, Webster C., Cleveland, Ohio. Hand for timepieces	22,703	Aug. 15	64	999
Barclay, Charles, Lead, S. D. Spoon	22,558	June 27	63	1953
Barker, Charles B., Brooklyn, N. Y. Spoon	22,639	July 18	64	433
Barnes, David L., Chicago, Ill., assignor to National Malleable Castings Company, Cleveland, Ohio. Center plate for cars	22,130	Jan. 10	62	311
Bartlett, William H., Worcester, Mass. Badge	22,636	July 18	64	432
Barton, Celestine. (See Miller and Barton.)				
Barton, Richard T., assignor to R. T. Barton Company, New Haven, Conn. Lamp-burner	22,395	May 2	63	751
Bates, William S., Chicago, Ill. Puzzle	22,479	May 30	63	1374
Beach, Clifton H., assignor to Saltsburg Bottle Works Company, Limited, Pittsburg, Pa. Bottle	22,167	Jan. 31	62	733
Beach, Henry B., Meriden, Conn. Nail-ring	22,947	Dec. 5	65	1586
Bedichimer, Isaac, Philadelphia, Pa. Badge	22,108	Jan. 10	62	307
Bendl, Marianne, Vienna, Austria-Hungary. Bosom-protector	22,857	Oct. 31	65	747
Bennett, Ernest H., East Orange, N. J., assignor to J. H., J. H., and E. Bromley. Rug	22,210	Feb. 14	62	1057
Bennett, Ernest H., East Orange, N. J., assignor to J. H., J. H., and E. Bromley. Rug	22,211	Feb. 14	62	1057
Berger, Leander D., Philadelphia, Pa. Conductor-hook	22,324	May 2	63	749
Berger, Louis, Chicago, Ill. Match-safe	22,366	Apr. 25	63	604
Bergstrom Brothers & Co. (See Bergstrom, George O., assignor.)				
Bergstrom, George O., assignor to Bergstrom Brothers & Co., Neenah, Wis. Heating-stove	22,910	Nov. 14	65	1060
Bernard, William, and L. Frank, New York, N. Y. Match-safe	22,353	Apr. 18	63	456
Bernard, William, and L. Frank, New York, N. Y. Cigar-ash receptacle, &c	22,872	Nov. 7	65	887
Bernheim, Eugene C., assignor to C. Petersen, Washington, D. C. Spoon	22,093	Jan. 3	62	154

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
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Bernheimer & Brother, Jacob S. (See Friedlander, William S., assignor.)				
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Brush or mirror back	22,174	Jan. 31	62	734
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Brush or mirror back	22,175	Jan. 31	62	735
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Brush or mirror back	22,176	Jan. 31	62	735
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Brush or mirror back	22,177	Jan. 31	62	735
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Sugar-bowl	22,530	June 13	63	1681
Best, John, Paterson, N. J. Book-mark	22,775	Sept. 12	64	1527
Best, John, Paterson, N. J. Banneret	22,983	Dec. 26	65	2056
Bidwell, Joel E., Kalamazoo, Mich. Radiator	22,493	May 30	63	1376
Bigelow Carpet Company. (See Brown, William F., assignor.)				
Bigelow Carpet Company. (See Daintrey, William M., assignor.)				
Bigler, William A., Chicago, Ill. Spoon	22,094	Jan. 3	62	154
Bingham, Hamilton W., assignor of one-half to M. H. Hartman, Lancaster, Pa. Tooth-pick case	22,505	June 6	63	1524
Birge & Sons, M. H. (See Booze, Charles, assignor.)				
Birge & Sons, M. H. (See Hatch, Mary G., assignor.)				
Birge & Sons, M. H. (See Herrick, Caroline K., assignor.)				
Birmingham, Joseph E., and C. Grandjean, San Francisco, Cal. Spoon	22,223	Feb. 14	62	1059
Bishop, Albert T., Southington, Conn. Can-opener	22,348	Apr. 11	63	305
Bishop, Fredrick, Los Angeles, Cal. Casing for coin-controlled apparatus	22,761	Aug. 29	64	1260
Blackmore, Lawrence R., Newark, N. J. Radiator	22,401	May 2	63	752
Blackmore, Lawrence R., Newark, N. J. Radiator	22,402	May 2	63	752
Blaker, Eliza A., Indianapolis, Ind. Spoon, &c	22,375	May 2	63	748
Blanchard, Denman. (See Mills, Robert, assignor.)				
Bloomberg, Casper, New York, N. Y. Suspender-web	22,924	Nov. 28	65	1396
Blumenberg, Mendum R., Washington, D. C. Button	22,191	Feb. 7	62	891
Boeck, Charles H., Jackson, Mich. Roller-base for oil-stoves	22,742	Aug. 22	64	1126
Boeck, Charles H., assignor to H. L. Smith, Jackson, Mich. Stove	22,709	Aug. 15	64	1000
Boles, Warren H., et al. (See Rowlands, John R., assignor.)				
Boller, Charly M. B., Brownsville, Wis. Work-table	22,518	June 6	63	1526
Bonney, Charles C., Chicago, Ill. Medal	22,455	May 23	63	1194
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,789	Sept. 19	64	1644
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,838	Oct. 24	65	591
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,839	Oct. 24	65	591
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,840	Oct. 24	65	591
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,841	Oct. 24	65	591
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,842	Oct. 24	65	592
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,843	Oct. 24	65	592
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,844	Oct. 24	65	592
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,845	Oct. 24	65	592
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,846	Oct. 24	65	592
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,847	Oct. 24	65	593
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,848	Oct. 24	65	593
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,849	Oct. 24	65	593
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,850	Oct. 24	65	593
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,851	Oct. 24	65	593
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,852	Oct. 24	65	594
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,885	Nov. 14	65	1057
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,886	Nov. 14	65	1057
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,887	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,888	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,889	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,890	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,891	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,892	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,893	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,894	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,895	Nov. 14	65	1058
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,896	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,897	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,898	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,899	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,900	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,901	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,902	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,903	Nov. 14	65	1059
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,904	Nov. 14	65	1060
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,905	Nov. 14	65	1060
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,906	Nov. 14	65	1060
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,907	Nov. 14	65	1060
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,908	Nov. 14	65	1060
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,909	Nov. 14	65	1060
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,926	Nov. 28	65	1397
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,927	Nov. 28	65	1397
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,928	Nov. 28	65	1397
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,929	Nov. 28	65	1397
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,930	Nov. 28	65	1397
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,931	Nov. 28	65	1398
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,932	Nov. 28	65	1398
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,933	Nov. 28	65	1398
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,934	Nov. 28	65	1398
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,935	Nov. 28	65	1398
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,936	Nov. 28	65	1398
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,988	Dec. 26	65	2057
Boss-Grip Lock-Nut Company. (See Rouse, Albion M., assignor.)				
Boston Woven Hose and Rubber Company. (See Melavin, John H., assignor.)				
Boulay, Jean L., Paris, France. Jewel-casket	22,641	July 18	64	443
Boutwell, George S., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Handle for knives, &c	22,564	June 27	63	1953
Bradfield, Lucetta, and R. C. Riggs, Harrisonville, Ohio. Holder for soap-cups	22,728	Aug. 22	64	1123
Bradley, Daniel R., New York, N. Y. Perfumery-holder	22,624	July 18	64	430
Bradley, William, Philadelphia, Pa. Flag	22,306	Mar. 28	62	1958
Brainard & Armstrong Company. (See Whitcomb, Ellen, assignor.)				
Bremer, Max, assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Coffin-handle car-plate	22,548	June 20	63	1812

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Bridge & Beach Manufacturing Company. (See Holland, George H., assignor.)				
Bridge & Beach Manufacturing Company. (See Nellis, Emery D., assignor.)				
Brill, John A., Philadelphia, Pa. Axle-box frame	22,468	May 23	63	1195
Brill, John A., Philadelphia, Pa. Upper chord for car-trucks	22,471	May 23	63	1196
Brill, John A., Philadelphia, Pa. Axle-box frame	22,490	May 30	63	1375
Brill, John A., Philadelphia, Pa. Upper chord for car-trucks	22,492	May 30	63	1376
Brill, John A., Philadelphia, Pa. Truck side bar	22,920	Nov. 28	65	1396
Brill, John A., Philadelphia, Pa. Axle-box frame	22,966	Dec. 12	65	1761
Brogan, Anthony D., and A. M. Malloch, Glasgow, Scotland. Surface ornamentation of sheet-glass	22,356	Apr. 18	63	457
Bromley, Edward, <i>et al.</i> (See Bennett, Ernest H., assignor.)				
Bromley, Edward, <i>et al.</i> (See Petzold, Adolph, assignor.)				
Bromley, John H., <i>et al.</i> (See Bennett, Ernest H., assignor.)				
Bromley, John H., <i>et al.</i> (See Petzold, Adolph, assignor.)				
Bromley, Joseph H., <i>et al.</i> (See Bennett, Ernest H., assignor.)				
Bromley, Joseph H., <i>et al.</i> (See Petzold, Adolph, assignor.)				
Brower, John B., assignor of one-half to A. E. Potts, Philadelphia, Pa. Safety-pin frame	22,948	Dec. 5	65	1586
Brown, John W., Jr., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Sad-iron	22,811	Sept. 26	64	1785
Brown, Thomas B., <i>et al.</i> (See Brown, William A., assignor.)				
Brown, Thomas G., <i>et al.</i> (See Brown, William A., assignor.)				
Brown, William A., assignor to himself, T. G. and T. B. Brown, New York, N. Y. Cup	22,580	July 4	64	148
Brown, William F., Newark, N. J., assignor to Bigelow Carpet Company, New York, N. Y. Carpet	22,772	Sept. 12	64	1527
Brown, William T., Winston, N. C. Plug-tobacco	22,827	Oct. 3	65	130
Brumby, Robert W., and S. Clarke, Hull, England. Calendar-case	22,299	Mar. 14	62	1646
Bruner, Harrison, Sundance, Wyo. Badge	22,716	Aug. 22	64	1122
Brunswick Balke-Collender Company. (See Augenbraun, Peter, assignor.)				
Brunt, Henry, Baltimore, Md. Ewer	22,303	Mar. 21	62	1815
Brunt, Henry, Baltimore, Md. Covered dish	22,817	Oct. 3	65	129
Bryant, James R., Crawfordsville, Ind. Crest-tile	22,832	Oct. 10	65	292
Buckley, Thomas H., Worcester, Mass. Lunch-wagon body	22,743	Aug. 22	64	1126
Buechner, Hugo E., Cheyenne, Wyo. Spoon	22,545	June 20	63	1811
Buehl, Edward W., Chicago, Ill. Pie-fork	22,992	Dec. 26	65	2057
Bugh, John C., Columbus, Ohio. Soap-dish	22,705	Aug. 15	64	999
Bull, Annabell C., Peoria, Ill. Belt	22,552	June 27	63	1952
Bull, Annabell C., Peoria, Ill. Knee-protector	22,767	Sept. 5	64	1390
Bulova, Joseph, New York, N. Y. Finger-ring	22,224	Feb. 14	62	1059
Bunting, William, Jr., Flushing, assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Lavatory or sink trap	22,775	Sept. 12	64	1529
Burger, Louis, Chicago, Ill. Spoon	22,242	Feb. 28	62	1342
Burger, Louis, Chicago, Ill. Spoon	22,253	Mar. 7	62	1502
Burger, Louis, Chicago, Ill. Spoon	22,254	Mar. 7	62	1503
Burger, Louis, Chicago, Ill. Spoon	22,255	Mar. 7	62	1503
Burger, Louis, Chicago, Ill. Spoon	22,256	Mar. 7	62	1503
Burger, Louis, Chicago, Ill. Spoon	22,257	Mar. 7	62	1503
Burger, Louis, Chicago, Ill. Badge	22,317	Apr. 4	63	143
Burger, Louis, Chicago, Ill. Souvenir spoon	22,319	Apr. 4	63	143
Burns, George W., Troy, N. Y. Flower-bed support for graves	22,536	June 13	63	1682
Burnworth, Hezekiah J., Cambridge, Ohio. Box	22,290	Mar. 14	62	1644
Butler Hard Rubber Company. (See Witteck, Paul, assignor.)				
Button, Eugene L., Brooklyn, N. Y. Packing-can	22,664	Aug. 1	64	707
Byron, Henry, New York, N. Y. Toy savings-bank	22,950	Dec. 5	65	1556
Cahn, Benjamin F., Cincinnati, Ohio. Wall-fixture for counters	22,589	July 4	64	149
Cahn, Benjamin F., Cincinnati, Ohio. Wall-fixture for counters	22,590	July 4	64	149
Calcutt, Reginald B., Chicago, Ill. Fruit-jar	22,873	Nov. 7	65	887
Caldwell & Co., James E. (See Houston, Hugh B., assignor.)				
Caldwell, John M., Anniston, Ala. Badge	22,307	Mar. 28	62	1958
Camizzi, Vincenzo, New York, N. Y. Table	22,758	Aug. 29	64	1259
Campbell, William H., and J. J. Willingham, Pueblo, Colo. Memorial tablet	22,611	July 11	64	292
Cantwell, Michael J., Madison, Wis. Cabinet	22,588	July 4	64	149
Cappel, Carl, Pittsburg, Pa. Confection-dish	22,601	July 11	64	292
Carey, William C. (See Renniman and Carey.)				
Carleton Company. (See Ayer, Harry L., assignor.)				
Cascaden, Thomas, Jr., Waterloo, Iowa. Furnace	22,403	May 2	63	752
Casemere, Louisa, Warren, Pa. Gas-burner frame	22,784	Sept. 12	64	1528
Casler, Herman, Syracuse, N. Y. Camera-case	22,649	July 25	64	555
Cave, Joseph, Philadelphia, Pa., assignor to Smith, Kline & French Company, of Pennsylvania. Bottle-stopper	22,582	July 4	64	148
Chadwick Plush Company. (See Schofield, John, assignor.)				
Chance Brothers & Company. (See Woodward, Thomas J., assignor.)				
Chandler, Louis J., Springfield, Mass. Badge	22,528	June 13	63	1681
Charest, Eugene, Detroit, Mich. Toy savings-bank	22,419	May 9	63	902
Cheney Brothers. (See Garey, Grace T., assignor.)				
Cheney Brothers. (See Tarbell, John H., assignor.)				
Chrisman, Horace, Pittsburg, Pa. Meter case	22,349	Apr. 11	63	305
Clarke, Joseph H., <i>et al.</i> (See Scales, William S., assignor.)				
Clarke, Sidney A., Chicago, Ill. Curtain-ring	22,347	Apr. 11	63	305
Clarke, Simpson. (See Brumby and Clarke.)				
Clawson, Henry T., Newark, N. J. Monument	22,476	May 30	63	1373
Clowes, Walter F., St. Louis, Mo. Book-mark	22,461	May 30	63	1374
Cohen, Bernard, New York, N. Y. Head for fur collars	22,284	Mar. 14	62	1643
Cohen, Louis. (See Eckert and Cohen.)				
Comte, Frank, Springfield, Nebr. Scarf-pin	22,555	June 27	63	1952
Conde, Alonzo B., Albany, N. Y. Covered cooking-pan	22,782	Sept. 12	64	1528
Conde, Samuel L., Rockford, Ill. Type-writer cabinet	22,398	May 2	63	751
Cone, Edward M., Newark, N. J. Bottle	22,835	Oct. 17	65	436
Conkey, Walter B., assignor to W. B. Conkey Company, Chicago, Ill. Badge	22,984	Dec. 26	65	2056
Connolly, Alonzo P., Chicago, Ill. Badge	21,597	July 11	64	291
Conser, Charles J., Chicago, Ill. Bed-sofa	22,922	Nov. 28	65	1396
Coon, George W., New York, N. Y. Top	22,378	May 2	63	748
Cope, Edward, Nottingham, England. Lace fabric	22,281	Mar. 14	62	1643
Cope, Edward, Nottingham, England. Lace fabric	22,282	Mar. 14	62	1643
Cope, George W., Detroit, assignor to H. L. Smith, Jackson, Mich. Stove	22,189	Jan. 31	62	737
Cope, George W., Detroit, assignor to H. L. Smith, Jackson, Mich. Oil-stove	22,371	Apr. 25	63	605

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Cope, George W., Detroit, Mich., assignor to Foster Stove Company, Ironton, Ohio. Stove	22,430	May 9	63	904
Corbin Cabinet Lock Company. (See Horne, Henry, assignor.)				
Cort, Warren L., Flatbush, N. Y. Gas-stove	22,429	May 9	63	904
Cox, Palmer, New York, N. Y. Ruler	22,583	July 4	64	148
Cox, Palmer, New York, N. Y. Ruler	22,584	July 4	64	148
Criswell, Francis M., Washington, D. C. Pulsometer	22,198	Feb. 7	62	892
Crosby, Joseph H., Jr. (See Greenleaf and Crosby.)				
Crosby, Joseph H., Jr., Jacksonville, Fla. Knife-handle, &c	22,681	Aug. 8	64	852
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to Dominick & Haff, New York, N. Y. Silver-smiths' stock	22,194	Feb. 7	62	892
Culver, William W., assignor to Wrought Iron Range Company, St. Louis, Mo. Cooking-range	22,131	Jan. 10	62	311
Cunningham, Mary, Bellevue, Idaho. Toy	22,626	July 18	64	431
Curran, John T., Brooklyn, assignor to Tiffany & Co., New York, N. Y. Spoon	22,698	Aug. 15	64	999
Curran, John T., Brooklyn, assignor to Tiffany & Co., New York, N. Y. Handle for forks, &c	22,829	Oct. 10	65	291
Curran, John T., Brooklyn, assignor to Tiffany & Co., New York, N. Y. Handle for spoons, &c	22,830	Oct. 10	65	292
Curtis, Edward O., U. S. Army. Watch charm	22,411	May 9	63	901
D'Arcy, Frank P., Kalamazoo, Mich. Label-tag	22,726	Aug. 22	64	1123
Daintrey, William M., assignor to Bigelow Carpet Company, New York, N. Y. Carpet	22,235	Feb. 21	62	1201
Dalzell, Annie P., administratrix. (See Dalzell, James.)				
Dalzell, James, deceased; A. P. Dalzell, Findlay, Ohio, administratrix. Stalactite for electric lamps	22,712	Aug. 15	64	1001
Dávalos, Luis G., Chicago, Ill. Bridge for street-crossings	22,826	Oct. 3	65	132
Davenport, Arthur, Philadelphia, Pa. Tassel	22,944	Dec. 5	65	1585
Davies, Benjamin, Brooklyn, assignor to L. Straus & Sons, New York, N. Y. Ornamentation of glass vessels	22,286	Mar. 14	62	1644
Davidson, Ferdinand, <i>et al.</i> (See Davidson, George J., assignor.)				
Davidson, George J., assignor of two-thirds to F. Davidson and A. G. Spratley, Richmond, Va. Heel or sole plate	22,294	Mar. 14	62	1645
Dawes, Edward L., New Brighton, Pa. Bath-tub	22,809	Sept. 26	64	1785
De Haven, Isaac, Allegheny, Pa. Stove	22,220	Feb. 14	62	1059
De La Bastide, Pierre, Limoges, France. Dish	22,154	Jan. 24	62	5-2
De Rogy, Eugene, Newark, N. J. Breastpin	22,628	July 18	64	431
De Witt, John, Washington, D. C. Car-body	22,759	Aug. 29	64	1259
Dean, Charles E., Chicago, Ill. Table	22,461	May 23	63	1194
Denison, Edwin N., Westerly, R. I. Spoon	22,859	Oct. 31	65	747
Derby Silver Companv. (See Berry, Henry, assignor.)				
Deslauriers, Philipp A., St. Paul, Minn. Siding-plate	22,297	Mar. 14	62	1646
Deslauriers, Philipp A., St. Paul, Minn. Siding-plate	22,609	July 11	64	293
Deslauriers, Philipp A., St. Paul, Minn. Siding-plate	22,610	July 11	64	293
Detroit Dental Manufacturing Company. (See Kerr, John, assignor.)				
Diehl, Albert C., Philadelphia, Pa. Pattern for quilting	22,247	Feb. 28	62	1343
Dillingham, Henry, Chelsea, Mass. Toy savings-bank	22,232	Feb. 21	62	1201
Dillman, Francis J. (See Hofmann and Dillman.)				
Ditmars, William B., Stamford, assignor to Yale & Towne Manufacturing Company, of Connecticut. Escutcheon-plate	22,218	Feb. 14	62	1058
Dominick & Haff. (See Crowell, Gilbert L., Jr., assignor.)				
Donoghue, Jeremiah G., Philadelphia, Pa., assignor to Ledig Manufacturing Company, of Pennsylvania. Pitcher	22,214	Feb. 14	62	1058
Dorflinger & Sons, C. (See O'Connor, James J., assignor.)				
Dorsam, Louis. (See Dorsam, William and L.)				
Dorsam, William and L., Millville, N. J. Paper-weight	22,682	Aug. 8	64	852
Dowling, Frank A., Cleveland, Ohio. Spoon, &c	22,778	Sept. 12	64	1527
Dressel, George C., New York, N. Y. Lantern	22,854	Oct. 24	65	594
Dressing Cabinet Supply Company of Baltimore City, of Maryland. (See Spear, James O., assignor.)				
Dreyfuss, Julius, New York, N. Y. Dress-trimming	22,672	Aug. 8	64	851
Dueber, John C., Canton, Ohio. Watch-dial	22,599	July 11	64	291
Dufault, Arthur, Providence, R. I. Razor-holder	22,531	Oct. 10	65	292
Duncan, Anna C., Kansas City, Mo. Piano-case	22,188	Jan. 31	62	737
Dungan, Cornelius P., Chicago, Ill. Jigger	22,768	Sept. 5	64	1390
Dunlap & Sons, John. (See Kaeslin, Andrew, assignor.)				
Dunlap & Sons, John. (See Lawton, Thomas L., assignor.)				
Durgire, William H. (See Rhodes, Rowland, assignor.)				
Dwiggius, John W., assignor of two-thirds to A. D. Hurst and W. H. H. Quick, Frankton, Ind. Fence-panel	22,358	Apr. 18	63	457
Dwiggius, John W., assignor of two-thirds to A. D. Hurst and W. H. H. Quick, Frankton, Ind. Fence-panel	22,359	Apr. 18	63	457
Dyrenforth, Harold. (See Even, Theodore, assignor.)				
Eagle Pencil Company. (See Kraus, Samuel, assignor.)				
Earnshaw, Joseph C., Yonkers, N. Y. Curtain	22,120	Jan. 10	62	309
Eberhard Manufacturing Company. (See Zeller, Melancthon E., assignor.)				
Eberhardt, Ulrich, Newark, N. J. Frame for barrel-scrubbing machines	22,361	Apr. 18	63	457
Eckert, Otto C., and L. Cohen, Providence, R. I. Penholder-handle	22,524	June 13	63	1680
Edes, Edwin L., Plymouth, Mass. Lamp-fount	22,819	Oct. 3	65	109
Edwards, Charles L., Dallas, Tex. Badge	22,637	July 18	64	432
Egginton, Walter, Corning, N. Y. Ornamentation of glass or other vessels	22,136	Jan. 17	62	445
Elliott, Sterling, Newton, Mass. Reach for bicycles	22,671	Aug. 1	64	708
Elliott, Sterling, Newton, Mass. Sully-axle	22,691	Aug. 8	64	853
Elliott, Sterling, Newton, Mass. Sully-axle	22,815	Sept. 26	64	1786
Ely, Alfred G., assignor of two-thirds to C. C. and F. Ely, New York, N. Y. Nasal tube	22,757	Aug. 29	64	1259
Ely, Charles C., <i>et al.</i> (See Ely, Alfred G., assignor.)				
Ely, Frederick, <i>et al.</i> (See Ely, Alfred G., assignor.)				
Emerson, Ralph W., Rockford, Ill. File-case	22,397	May 2	63	751
Emrich, Christopher. (See Rayner, Lewis D., assignor.)				
Enterprise Manufacturing Company of Pennsylvania. (See Brown, John W., Jr., assignor.)				
Envelope and Stamp Machine Company. (See Lyon, Asa, assignor.)				
Erben, Louis D. (See Lawton, Thomas L., assignor.)				
Erben, Louis D., St. Davids, Pa. Woven fabric	22,945	Dec. 5	65	1585
Esser, Hermann, Hoboken, N. J. Fork for dividers	22,295	Mar. 14	62	1645
Ettel, Elijah, Palmyra, Ill. Type	22,656	Aug. 1	64	706
Evans, William J., assignor to McKesson & Robbins, New York, N. Y. Atomizer-body	22,683	Aug. 8	64	852
Even, Theodore, assignor to H. Dyrenforth, Chicago, Ill. Badge	22,260	Mar. 7	62	1503
Ewing, Edwin C. (See Grafton, Ewing, and Glass.)				
Fahrney, Peter, Chicago, Ill. Bottle or flask	22,116	Jan. 10	62	308
Farmer, George P., Montclair, N. J. Hair-pin	22,612	July 25	64	554

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Farmer, William W. (See Spencer, William, assignor.)				
Fernald, Charles H., Ayer, Mass. Celluloid sheet.	22,788	Sept. 19	64	1644
Ferry, Darius, Jr., Brooklyn, N. Y. Tobacco-bag.	22,674	Aug. 8	64	851
Fisk, Clark & Flagg. (See Adams, George E., assignor.)				
Fisk, Clark & Flagg. (See Flagg, Thomas J., assignor.)				
Field, Charles C., New York, N. Y. Wagon-hub band	22,469	May 23	63	1196
Fisher, Edwin, New York, N. Y., assignor to Lowell Manufacturing Company, Boston, Mass. Carpet.	22,475	May 30	63	1373
Fisher, Mary A., New Rochelle, N. Y. Spoon	22,438	May 16	63	1052
Flagg, Thomas J., assignor to Fisk, Clark & Flagg, New York, N. Y. Suspender-buckle.	22,309	Mar. 28	62	1958
Flesher, Jennie E., New York, N. Y. Dressmaker's square	22,248	Feb. 28	62	1343
Forbes, Daniel, Brooklyn, N. Y. Cut-glass dish	22,662	Aug. 1	64	707
Forbes, Daniel, Brooklyn, N. Y. Cut-glass dish	22,663	Aug. 1	64	707
Ford, George H., assignor to Grilley Company, New Haven, Conn. Coffin-plate	22,724	Aug. 22	64	1123
Ford, George H., assignor to Grilley Company, New Haven, Conn. Coffin-plate	22,769	Sept. 5	64	1390
Ford, John W., Philadelphia, Pa. Gage for finger-rings	22,531	June 13	63	1681
Fordon, Alexander A. (See Plant, Edgar C., assignor.)				
Foster, Jonas R., Stoneham, Mass. Pencil-sharpener.	22,853	Oct. 24	65	594
Foster Stove Company. (See Cope, George W., assignor.)				
Frances, Edwin, Calais, France. Lace fabric	22,314	Mar. 28	62	1959
Frank, Leo. (See Bernard and Frank.)				
Fraser, Philip H., Bayonne, N. J. Sleeve-button or like article	22,697	Aug. 15	64	999
Frederick, George L., Ebensburg, Pa. Buckle and snap-hook	22,631	July 18	64	432
Freeman, Jacob J., Toledo, Ohio. Spoon	22,376	May 2	63	744
Freeman, Sarah S., Los Angeles, Cal. Dressmaker's ruler	22,646	July 25	64	555
Frelleohr, Julius, New York, N. Y. Embroidery fabric	22,553	June 27	63	1952
Freund, George, Durango, Colo. Spoon	22,406	May 9	63	900
Friedlander, William S., Passaic, N. J., assignor to J. S. Bernheimer & Brother, New York, N. Y. Fabric	22,800	Sept. 26	64	1784
Frye, Maude B., Boston, Mass. Spoon	22,546	June 20	63	1811
Fuchs, Gustav, Chicago, Ill. Advertising-statue	22,792	Sept. 19	64	1644
Fuchs, Henry F. G., Jersey City, N. J. Badge	22,226	Feb. 21	62	1199
Fulton & Walker Company. (See Rickards, Zachary T., assignor.)				
Gaines, Wilbur H., assignor to Rogers & Hamilton Company, Waterbury, Conn. Handle for spoons, &c	22,746	Aug. 29	64	1258
Gale, Freeman K., Saratoga Springs, N. Y. Truck-brace	22,915	Nov. 21	65	1217
Gardner, George W., Dawkins, Colo. Game-board	22,790	Sept. 19	64	1644
Garey, Grace T., Quincy, Mass., assignor to Cheney Brothers, South Manchester, Conn. Textile fabric	22,434	May 16	63	1051
Garretson, Oliver L., Buffalo, N. Y. Book-cover	22,596	July 11	64	291
Garside, John E., Peoria, Ill. Game-board	22,686	Aug. 8	64	852
Gauger, Paul. (See Grunewald and Gauger.)				
Gay, Charles A., Seattle, Wash. Badge	22,410	May 9	63	901
Gaynor, Thomas F., Brooklyn, N. Y. Coin or medal holder	22,816	Oct. 3	65	129
Geer, Henry J., Providence, R. I., assignor to G. W. Hopkinson, New York, N. Y. Perfumery-holder	22,112	Jan. 10	62	308
Gelas, Jean P., St. Etienne, France. Pattern for textile fabrics	22,179	Jan. 31	62	736
Gelas, Jean P., St. Etienne, France. Pattern for textile fabrics	22,180	Jan. 31	62	736
Gelas, Jean P., St. Etienne, France. Pattern for textile fabrics	22,181	Jan. 31	62	736
Gildemeyer, Charles A., Haddonfield, N. J. Ink-well	22,311	Mar. 28	62	1959
Gilmore, William J., New York, N. Y. Pen-rack	22,861	Oct. 31	65	747
Glabn, George A., assignor to Simpson, Hall, Miller & Company, Wallingford, Conn. Plate	22,602	July 11	64	292
Glass, Alexander. (See Grafton, Ewing, and Glass.)				
Globe Savings Bank. (See Spalding, Charles W., assignor.)				
Gnichwitz, Rudolph, Ashbourne, assignor to Mather Manufacturing Company, Philadelphia, Pa. Font of printing type	22,148	Jan. 24	62	581
Gnichwitz, Rudolph, Ashbourne, assignor to Mather Manufacturing Company, Philadelphia, Pa. Font of printing type	22,412	May 9	63	901
Gnichwitz, Rudolph, Ashbourne, assignor to Mather Manufacturing Company, Philadelphia, Pa. Font of printing type	22,870	Nov. 7	65	886
Golde, Robert, Brooklyn, N. Y. Picture-frame	22,949	Dec. 5	65	1586
Golde, Robert, Brooklyn, assignor to Royal Metal Manufacturing Company, New York, N. Y. Frame, &c	22,657	Aug. 1	64	706
Golde, Robert, Brooklyn, assignor to Royal Metal Manufacturing Co., New York, N. Y. Picture-frame, &c	22,977	Dec. 19	65	1912
Goldsberry, William H., Chicago, Ill. Measuring-rule	22,124	Jan. 10	62	310
Goldsmith, Byron B., New York, N. Y. Lead-pencil	22,511	June 6	63	1525
Goldsmith, Byron B., New York, N. Y. Lead-pencil	22,512	June 6	63	1525
Goldsmith, Byron B., New York, N. Y. Lead-pencil	22,513	June 6	63	1525
Goldsmith, Byron B., New York, N. Y. Lead-pencil	22,514	June 6	63	1525
Goldstein, Joseph A., Washington, D. C. Plaque	22,500	July 11	64	292
Good, Adam. (See Good, Peter and A.)				
Good, Peter and A., Wilkes-Barré, Pa. Oil-can	22,489	May 30	63	1375
Gorham Manufacturing Company. (See Wilkinson, George, assignor.)				
Gosden, Ro-a, Midhurst, England. Bidet	22,729	Aug. 22	64	1123
Gould, Wallace W., Bridgeport, Conn., assignor to Warner Brothers Corset Company, of Connecticut. Corset	22,883	Nov. 14	65	1057
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Ceiling-plate	22,272	Mar. 7	62	1505
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Ceiling-plate	22,273	Mar. 7	62	1505
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Ceiling-plate	22,274	Mar. 7	62	1505
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Ceiling-plate	22,275	Mar. 7	62	1505
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Metallic finishing-plate	22,344	Apr. 11	63	304
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Metallic finishing-plate	22,345	Apr. 11	63	305
Grafton, William S., Steubenville, Ohio, E. C. Ewing, and A. Glass, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Metallic finishing-plate	22,346	Apr. 11	63	305
Graham, Charles, Brooklyn, N. Y. Stationary tub-support	22,316	Mar. 28	62	1960
Graham, Lewis S., New Orleans, La. Pamphlet-cover	22,147	Jan. 24	62	581
Graham, William H., St. Louis, Mo. Sink-trap	22,237	Feb. 21	62	1202

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Graham, William H., St. Louis, Mo. Sink-trap	22,238	Feb. 21	62	1202
Grandjean, Charles. (See Birmingham and Grandjean.)				
Gray, Lawrence B., Boston, Mass. Insulator	22,684	Aug. 8	64	852
Great Western Wire Works Company. (See Morrow, Charles B., assignor.)				
Greenleaf, Damon, and J. H. Crosby, Jr., Jacksonville, Fla. Spoon	22,717	Aug. 22	64	1122
Greenleaf, Damon, and J. H. Crosby, Jr., Jacksonville, Fla. Knife-handle	22,860	Oct. 31	65	747
Greenwood Pottery Company. (See Tams, William H., assignor.)				
Gregory, William F., Buffalo, N. Y. Grate-bar	22,739	Aug. 22	64	1125
Griley Company. (See Ford, George H., assignor.)				
Grunewald, Julius, and P. Gauger, Chicago, Ill. Cap	22,520	June 13	63	1680
Guérin, William, Limoges, France. Covered dish	22,420	May 9	63	902
Guérin, William, Limoges, France. Covered dish	22,421	May 9	63	902
Gulick, Alexander E. (See Gulick, William R., assignor.)				
Gulick, Arnatt R., Brooklyn, N. Y. Bed-pan	22,967	Dec. 12	65	1762
Gulick, William R., Bay Head, N. J., assignor to A. R. Gulick, New York, N. Y. Compartment-plate	22,305	Mar. 21	62	1816
Gurney, Edward, Toronto, Canada. Radiator	22,543	June 13	63	1633
Gutlohn, Gabriel, Philadelphia, Pa. Hat-trimming	22,457	May 23	63	1194
Gutlohn, Gabriel, Philadelphia, Pa. Hat-trimming	22,645	July 25	64	555
Gutsell, Ida A., Ithaca, N. Y. Pattern for printed fabrics	22,946	Dec. 5	65	1581
Hache, Alfred, Vierzon, France. Plate	22,780	Sept. 12	64	1528
Hahn, Edgar J., St. Louis, Mo. Medal	22,675	Aug. 8	64	851
Hall, Henry O., Washington, D. C. Bicycle-oiler	22,357	Apr. 18	63	457
Hall, Zachary T. (See Lockwood, James F., assignor.)				
Hammann, Edward, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Lavatory-log	22,689	Aug. 8	64	853
Hammann, Edward, Brooklyn, and W. C. Peet, assignors to J. L. Mott Iron Works, New York, N. Y. Water-closet cover	22,449	May 16	63	1053
Harder, Charles N. (See Sagendorph, Longley L., assignor.)				
Harris, Charles R., Williamsport, Pa. Buckle-front	22,225	Feb. 21	62	1199
Harrison, Dora, Lansing, Mich. Buckle	22,111	Jan. 10	62	308
Harsha, Leslie R., Chicago, Ill., assignor to L. R. Harsha Manufacturing Company. Curtain-pole	22,185	Jan. 31	62	736
Harsha, Leslie R., Chicago, Ill., assignor to L. R. Harsha Manufacturing Company. Curtain-pole	22,186	Jan. 31	62	737
Harsha, Leslie R., Chicago, Ill., assignor to L. R. Harsha Manufacturing Company. Curtain-pole	22,187	Jan. 31	62	737
Harsha, Leslie R., Chicago, Ill., assignor to L. R. Harsha Manufacturing Company. Curtain-pole	22,250	Feb. 28	62	1344
Hart, Charles W., assignor to H. A. Hart, Troy, N. Y. Fulcrum-post for mops	22,812	Sept. 26	64	1785
Hart, Harriet A. (See Hart, Charles W., assignor.)				
Hartman, Milton H. (See Bingham, Hamilton W., assignor.)				
Hartung, Charles C., assignor to E. Walsh, Jr., St. Louis, Mo. Sheet-glass	22,343	Apr. 11	63	304
Hartz, Johannes F., Detroit, Mich. Depurator	22,510	June 6	63	1524
Hatch, Mary G., New York, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,938	Nov. 28	65	1399
Hatch, Mary G., New York, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,939	Nov. 28	65	1399
Hatch, Mary G., New York, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,940	Nov. 28	65	1399
Hatch, Mary G., New York, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,941	Nov. 28	65	1399
Hatch, Mary G., New York, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,942	Nov. 28	65	1400
Hatch, Mary G., New York, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,943	Nov. 28	65	1400
Hathaway, Edgar F., Hornellsville, N. Y. Fence-strand	22,350	Apr. 11	63	305
Hausmann, Lincoln. (See Tonetti, Louis, assignor.)				
Haviland, Charles E., Limoges, France. Cup	22,201	Feb. 7	62	893
Haviland, Charles E., Limoges, France. Cup	22,202	Feb. 7	62	893
Haviland, Charles E., Limoges, France. Dish	22,230	Feb. 21	62	1200
Haviland, Charles E., Limoges, France. Cover-dish	22,231	Feb. 21	62	1200
Haviland, Charles E., Limoges, France. Plate	22,617	July 18	61	429
Haviland, Charles E., Limoges, France. Salad-bowl	22,618	July 18	61	429
Haviland, Charles E., Limoges, France. Dish	22,619	July 18	64	429
Haviland, Charles E., Limoges, France. Cover-dish	22,620	July 18	64	429
Haviland, Charles E., Limoges, France. Cover-dish	22,621	July 18	64	430
Haviland, Charles E., Limoges, France. Cover-dish	22,622	July 18	64	434
Haviland, Theodore, Ambazac, France. Dish	22,117	Jan. 10	62	309
Haviland, Theodore, Ambazac, France. Dish	22,118	Jan. 10	62	309
Haviland, Theodore, Ambazac, France. Dish	22,199	Feb. 7	62	892
Haviland, Theodore, Ambazac, France. Dish	22,200	Feb. 7	62	892
Haviland, Theodore, Ambazac, France. Plate	22,440	May 16	63	1052
Haviland, Theodore, Ambazac, France. Dish	22,979	Dec. 19	65	1912
Hayden, William W., Newark, N. J. Match-box	22,095	Jan. 3	62	154
Hayden, William W., Newark, N. J. Match-box	22,377	May 2	63	748
Haynes, David F., Baltimore, Md. Covered dish	22,155	Jan. 24	62	582
Haynes, David F., Baltimore, Md. Ewer or jug	22,156	Jan. 24	62	582
Hazzard, Ira G., East Portland, Oreg. Fire-kindler	22,825	Oct. 3	65	103
Heald, Harvey L., Granville Centre, Pa. Halter-plate	22,204	Feb. 7	62	893
Heald, Harvey L., Granville Centre, Pa. Cheek-piece	22,205	Feb. 7	62	893
Heine, Herman L., Chicago, Ill. Lap-last	22,289	Mar. 14	62	1644
Heinz, Henry J., Pittsburg, Pa. Bottle	22,304	Mar. 21	62	1815
Heinz, Henry J., Pittsburg, Pa. Bottle	22,312	Mar. 28	62	1959
Heinz, Henry J., Pittsburg, Pa. Watch-charm	22,321	Apr. 4	63	144
Henderson, James G., Cincinnati, Ohio. Memorial card	22,477	May 30	63	1373
Hendrick, Eli E., Carbondale, Pa. Filter-press ring	22,918	Nov. 28	65	1395
Herick, Caroline K., East Orange, N. J., assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,937	Nov. 28	65	1399
Herick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Razor-strop	22,871	Nov. 7	65	886
Herron, Ashley M. (See Wahlers, Charles, assignor.)				
Hertlein, Christopher E., New York, N. Y. Gimp	22,379	Mar. 14	62	1643
Hertlein, Christopher E., New York, N. Y. Gimp	22,380	Mar. 14	62	1643
Hertlein, Christopher E., New York, N. Y. Gimp	22,351	Apr. 18	63	456
Heskier, Niels P., Copenhagen, Denmark. Galvanic pile	22,954	Dec. 5	65	1587
Hill, Philip, Philadelphia, Pa. Umbrella-carrier	22,262	Mar. 7	62	1503
Hill, Thomas R., Philadelphia, Pa., assignor to United States Metallic Packing Company, of Pennsylvania. Oil-cup	22,385	May 2	63	749
Hiller, Louis C., assignor to Meriden Silver Plate Company, Meriden, Conn. Metal border	22,460	May 23	63	1194
Hillman, William, Coventry, England. Saddle-post for bicycles	22,714	Aug. 15	64	1001
Hillman, William, Coventry, England. Velocipede-frame	22,715	Aug. 15	64	1001
Hilyard, James F., Rancocas, N. J. Spoon	22,197	Feb. 7	62	892
Hinde, Maud S., Chicago, Ill. Spoon, &c.	22,407	May 9	63	901
Hinsdale, Winfield E., New Haven, Conn. Sewer-gas trap	22,606	July 11	64	290
Hirschfeld, Henry W., assignor to Meriden Britannia Company, Meriden, Conn. Spoon, &c.	22,525	June 13	63	1681

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Hiscock, Emery C., Detroit, Mich. Bracket	22,586	July 4	64	143
Hitch, John E., Wilmington, Ohio. Nail-set or countersink	22,647	July 25	64	559
Hobbs, John E., North Berwick, Me. Hub-runner	22,912	Nov. 14	65	1061
Hoffmann, Otto, Manchester, England. Humidifier-casing	22,706	Aug. 15	64	1000
Hofmann, Frederick W., and F. J. Dillman, Philadelphia, Pa., assignors to Philip J. Ritter Conserve Company. Bottle	22,423	May 9	63	903
Holland, George H., St. Louis, Mo., assignor to Bridge & Beach Manufacturing Company, of Missouri. Heating-stove	22,542	June 13	63	1683
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Heating-stove	22,573	June 27	63	1954
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Heating-stove	22,574	June 27	63	1955
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Stove	22,575	June 27	63	1955
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Stove	22,576	June 27	63	1955
Holmes & Edwards Silver Company. (See Smith, Sidney, assignor.)				
Holmes, Helen V., Chicago, Ill. Flag-holder	22,128	Jan. 10	62	311
Holmes, James, and K. Peterson, Jamestown, N. Y. Hinge	22,875	Nov. 7	65	887
Homan & Co. (See Leavenworth, Seth H., assignor.)				
Homer, George E., Boston, Mass. Spoon	22,480	May 30	63	1374
Hook, Harry, Philadelphia, Pa. Dress-trimming	22,652	Aug. 1	64	706
Hook, Harry, assignor to Partridge & Richardson, Philadelphia, Pa. Gimp	22,245	Feb. 28	62	1343
Hook, Harry, assignor to Partridge & Richardson, Philadelphia, Pa. Gimp	22,246	Feb. 28	62	1343
Hook, Harry, assignor to Partridge & Richardson, Philadelphia, Pa. Gimp	22,266	Mar. 7	62	1504
Hopkinson, George W. (See Geer, Henry J., assignor.)				
Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Boston, Mass. Carpet	22,332	Apr. 11	63	302
Horn, Frederick F., Colorado Springs, Colo. Spoon	22,229	Feb. 21	62	1200
Horn, Frederick F., Colorado Springs, Colo. Spoon	22,629	July 18	64	432
Horne, Henry, assignor to Corbin Cabinet Lock Company, New Britain, Conn. Padlock-case	22,456	May 23	63	1194
Housman, Charles H., Boston, Mass. Cigar-case	22,418	May 9	63	902
Houston, Hugh B., assignor to J. E. Caldwell & Co., Philadelphia, Pa. Breastpin	22,258	Mar. 7	62	1503
Howard, Stephen C., assignor to Howard Sterling Company, Providence, R. I. Dish	22,313	Mar. 28	62	1959
Howard Sterling Company. (See Howard, Stephen C., assignor.)				
Howard Sterling Company. (See Wientge, Charles C., assignor.)				
Humphrey, John B., et al. (See Scales, William S., assignor.)				
Hunt, Jonathan A. (See Jourdan and Hunt.)				
Hunt Manufacturing Company. (See Jourdan and Hunt, assignors.)				
Hurd, William W., Newark, N. J. Clasp	22,338	Apr. 11	63	303
Hurst, A. D., et al. (See Dwiggins, John W., assignor.)				
Huss Brothers Company. (See Huss, William C., assignor.)				
Huss, William C., Cincinnati, Ohio. Wall-fixture for counters	22,591	July 4	64	141
Huss, William C., assignor to Huss Brothers Company, Cincinnati, Ohio. Wall-fixture for counters.	22,127	Jan. 10	62	310
Hutchinson, Edward W., Chicago, Ill. Tool-handle	22,633	July 18	64	439
Hvass, Charles, assignor of one-half to L. Kahner, New York, N. Y. Head-former for cigars	22,463	May 23	63	1194
Hvass, Charles, assignor of one-half to L. Kahner, New York, N. Y. Head-former for cigars	22,595	July 4	64	152
Ingersoll, Robert H., New York, N. Y. Watch-chain	22,332	Apr. 4	63	144
Ives, Albert J. (See Sencenbaugh and Ives.)				
J. & E. Stevens Company. (See Bailey, Charles A., assignor.)				
J. H. Johnston & Company. (See Verschuur, Justus, assignor.)				
J. L. Mott Iron Works. (See Hammann, Edward, assignor.)				
J. L. Mott Iron Works. (See Hammann and Peet, assignors)				
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons.	22,105	Jan. 10	62	307
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons.	22,133	Jan. 17	62	444
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Brush or mirror back.	22,341	Apr. 11	63	304
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Spoon	22,453	May 23	63	1193
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Tea or coffee pot.	22,727	Aug. 22	64	1123
Jackson, William W., Philadelphia, Pa., assignor to A. D. Farmer & Son Type Founding Company, New York, N. Y. Font of printing-type	22,437	May 16	63	1052
Jacobs, George T., assignor of one-half to D. Williams, Washington, D. C. Spoon	22,718	Aug. 22	64	1122
Jacobs, Jacob, New York, N. Y. Lens for vault-lights	22,388	May 2	63	750
Jacobs, Jacob, New York, N. Y. Lens for vault-lights	22,389	May 2	63	750
Jacobs, Jacob, New York, N. Y. Lens for vault-lights	22,390	May 2	63	750
Jacobs, Jacob, New York, N. Y. Lens for vault-lights	22,391	May 2	63	750
Jacobs, Jacob, New York, N. Y. Pattern for vault-light frames	22,980	Dec. 26	65	2055
Jacobs, Jacob, New York, N. Y. Pattern for vault-light frames	22,981	Dec. 26	65	2056
Jacobs, Winthrop L., East Orange, N. J., assignor to Lowell Manufacturing Company, Boston, Mass. Carpet	22,473	May 30	63	1373
Jacobson, James, New York, N. Y. Trimming	22,858	Oct. 31	65	747
Jamouneau, William H., Newark, N. J., assignor to B. F. Norris, Alister & Co., Chicago, Ill. Spoon	22,678	Aug. 8	64	851
Jamouneau, William H., Newark, and J. Verschuur, Jersey City, N. J., assignors to B. F. Norris, Alister & Co., Chicago, Ill. Spoon	22,499	June 6	63	1523
Jamouneau, William H., Newark, and J. Verschuur, Jersey City, N. J., assignors to B. F. Norris, Alister & Co., Chicago, Ill. Spoon	22,500	June 6	63	1523
Jeffery, Thomas B., Chicago, Ill. Velocipede-handle	22,760	Aug. 29	64	1260
Jenkins, James, Buckley, Wash. Watch-chain	22,862	Oct. 31	65	747
Jennings, Arthur O., Southport, assignor to New Haven Clock Company, New Haven, Conn. Clock-case	22,125	Jan. 10	62	310
Jewelers Crown Guild. (See Kolley, George B., assignor.)				
Johnes, David, Brooklyn, N. Y. Coal-scuttle	22,607	July 11	64	290
Johnson, Robert L., Hanley, England. Covered dish	22,565	June 27	63	1953
Juliet Stove Works. (See Wipfler, Charles W., assignor.)				
Jorgensen, Charles J., Milwaukee, Wis. Picture or analogous frame	22,292	Mar. 14	62	1645
Jourdan, Walter B., and J. A. Hunt, assignors to Hunt Manufacturing Company, Westborough, Mass. Saddle-seat	22,713	Aug. 15	64	1001
Julian, Pernelia, Red Bridge, Ind. Pie-holder	22,921	Nov. 28	65	1396
Juran, Joseph, New York, N. Y. Muff	22,828	Oct. 10	65	291
Kaestlin, Andrew, assignor to J. Dunlap & Sons, Philadelphia, Pa. Carpet	22,836	Oct. 17	65	437
Kahn, Leopold, New York, N. Y. Hardware ornamentation	22,604	July 11	64	293
Kahn, Leopold, New York, N. Y. Ornamental metal sheet	22,625	July 18	64	431
Kahner, Lazarus. (See Hvass, Charles, assignor.)				
Keep, William J., Detroit, Mich. Stove	22,688	Aug. 8	64	853
Keep, William J., Detroit, Mich. Water-tank for stoves	22,741	Aug. 22	64	1125
Keils, John, Detroit, Mich. Oil-stove	22,592	July 4	64	150

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Kelley, Charles C. (See Alger, William P., assignor.)				
Kelley, George B., Rockford, Ill., assignor to Jewelers Crown Guild. Spoon	22,228	Feb. 21	62	1200
Kellogg, Walter P., Syracuse, N. Y. Feed-box	22,400	May 2	63	751
Kelly, J. M., trustee. (See Smith, George B., assignor.)				
Kennard, Charles W., Baltimore, Md. Cane or umbrella handle	22,720	Aug. 22	64	1122
Kennard, Charles W., Baltimore, Md. Cane or umbrella handle	22,721	Aug. 22	64	1122
Kennard, Charles W., Baltimore, Md. Cane or umbrella handle	22,722	Aug. 22	64	1122
Kerr, John, assignor to Detroit Dental Manufacturing Company, Detroit, Mich. Dental clasp	22,668	Aug. 1	64	708
King, Louis, Rochester, N. Y. Lamp-chimney	22,139	Jan. 17	62	445
Kinnear, William R., Columbus, Ohio. Ceiling plate or panel	22,968	Dec. 19	65	1910
Kinney, Marshall J., Astoria, Oreg. Can	22,270	Mar. 7	62	1504
Kleinhans, Louis, assignor to Sutto Bros. Braid Company, New York, N. Y. Braid	22,268	Mar. 7	62	1504
Koch, Alma F., Louisville, Ky. Spoon	22,526	June 13	63	1681
Koenig, Francis, assignor to R. G. Ledig, Philadelphia, Pa. Lamp-body	22,140	Jan. 17	62	445
Koenig, Francis, assignor to R. G. Ledig, Philadelphia, Pa. Lamp-base	22,144	Jan. 17	62	446
Koenig, Francis C., assignor to R. G. Ledig, Philadelphia, Pa. Lamp-base	22,442	May 16	63	1052
Koenig, Francis C., assignor to R. G. Ledig, Philadelphia, Pa. Lamp-base	22,443	May 16	63	1052
Koenig, Francis C., assignor to R. G. Ledig, Philadelphia, Pa. Lamp-base	22,444	May 16	63	1053
Koenig, Francis C., assignor to R. G. Ledig, Philadelphia, Pa. Table	22,708	Aug. 15	64	1000
Kohler, Frederick E., Canton, Ohio. Handle for can-openers	22,533	June 13	63	1682
Kohler, Frederick E., Canton, Ohio. Stable-comb	22,537	June 13	63	1682
Kohler, Frederick E., Canton, Ohio. Lawn-rake	22,605	July 11	64	292
Kohnle, Frank, et al. (See Kohnle, Frederick, assignor.)				
Kohnle, Frederick, Dayton, assignor of two-thirds to F. Kohnle, St. Mary's, Ohio, and L. B. Kohnle, Chicago, Ill. Cane	22,096	Jan. 3	62	154
Kohnle, Lawrence B., et al. (See Kohnle, Frederick, assignor.)				
Kraus, Samuel, assignor to Eagle Pencil Company, New York, N. Y. Lead-pencil	22,413	May 9	63	902
Kraus, Samuel, assignor to Eagle Pencil Company, New York, N. Y. Lead-pencil	22,414	May 9	63	902
Kraus, Samuel, assignor to Eagle Pencil Company, New York, N. Y. Lead-pencil	22,415	May 9	63	902
Krouse, Andrew, Bridgeport, Conn. Handle for canes, &c	22,750	Aug. 29	64	1258
Kurtz, Paul, Marshalltown, Iowa. Furniture-case	22,100	Jan. 3	62	155
L. R. Harsha Manufacturing Company. (See Harsha, Leslie R., assignor.)				
Lahn, Ferdinand, St. Louis, Mo. Button	22,381	May 2	63	749
Lampman, George W., Swanton, Vt. Playing-card	22,640	July 18	64	433
Landers, Frary & Clark. (See Arnold, Fred H., assignor.)				
Landers, Frary & Clark. (See Mosman, Charles F., assignor.)				
Landers, Frary & Clark. (See Smith, Charles F., assignor.)				
Lanning, James A., Camden, N. J. Jar	22,751	Aug. 29	64	1258
Lape, Willard E., Syracuse, N. Y. Frame for lawn-mowers	22,431	May 9	63	904
Lawton, Thomas L., Philadelphia, Pa., assignor to L. D. Erben. Curtain, &c	22,435	May 16	63	1051
Lawton, Thomas L., assignor to J. Dunlap & Sons, Philadelphia, Pa. Carpet	22,436	May 16	63	1052
Leavenworth, Seth H., assignor to Honan & Co., Cincinnati, Ohio. Cake-basket	22,352	Apr. 18	63	456
Ledig Manufacturing Company. (See Donoghue, Jeremiah G., assignor.)				
Ledig, Reinhold G. (See Koenig, Francis, assignor.)				
Ledig, Reinhold G. (See Koenig, Francis C., assignor.)				
Ledig, Rudolph, Newark, N. J. Counter for bar-rooms	22,399	May 2	63	751
Lee, James R., assignor to Torsch & Lee, Baltimore, Md. Badge	22,110	Jan. 10	62	307
Lee, John E., Conshohocken, Pa. Jar	22,115	Jan. 10	62	308
Leedy, Caleb K., Mount Vernon, Ohio. Puzzle-board	22,265	Mar. 7	62	1504
Lehr, Harry, New York, N. Y. Finger-ring	22,192	Feb. 7	62	891
Leyson, John H., Butte City, Mont. Breastpin	22,166	Jan. 31	62	733
Libbey Glass Company. (See Anderson, William C., assignor.)				
Librowicz, Julius, New York, N. Y. Bottle	22,137	Jan. 17	62	445
Librowicz, Julius, New York, N. Y. Bottle	22,138	Jan. 17	62	445
Librowicz, Julius, New York, N. Y. Base or pedestal	22,165	Jan. 31	62	733
Librowicz, Julius, New York, N. Y. Bottle stopper or top	22,168	Jan. 31	62	733
Librowicz, Julius, New York, N. Y. Bottle-stopper	22,324	Apr. 4	63	144
Lindenthal, Carl, New York, N. Y. Gimp	22,267	Mar. 7	62	1504
Lines, John, assignor to Scovill Manufacturing Company, Waterbury, Conn. Coin-holder	22,216	Feb. 14	62	1058
Lockwood, James F., assignor to Z. T. Hall, Philadelphia, Pa. Stove-mat	22,123	Jan. 10	62	309
Long, Curtis E., Chicago, Ill. Badge	22,529	June 13	63	1681
Low, Abbot A., Brooklyn, N. Y. Badge	22,696	Aug. 15	64	999
Lowell Manufacturing Company. (See Fisher, Edwin, assignor.)				
Lowell Manufacturing Company. (See Horan, Henry, assignor.)				
Lowell Manufacturing Company. (See Jacobs, Winthrop L., assignor.)				
Lowell Manufacturing Company. (See Sauer, Emil G., assignor.)				
Lowell Manufacturing Company. (See Swapp, Charles W., assignor.)				
Lydiek, Dent L., Quaker City, Ohio. Penholder	22,264	Mar. 7	62	1503
Lydiek, Dent L., Quaker City, Ohio. Penholder	22,523	June 13	63	1680
Lyon, Asa, assignor to Envelope and Stamp Machine Company, Chicago, Ill. Case for vending-machines	22,102	Jan. 3	62	155
Lyon, James W. (See Porteous, George, assignor.)				
MacMonnies, Frederick, Paris, France, assignor to Niagara Falls Power Company, New York, N. Y. Seal	22,658	Aug. 1	64	706
Mackey, Thomas R., Allegheny, assignor to United States Baking Company, Pittsburg, Pa. Cracker	22,990	Dec. 26	65	2057
Maillet, John W., assignor to F. M. Whiting & Co., North Attleborough, Mass. Spoon	22,251	Mar. 7	62	1502
Maillet, John W., assignor to F. M. Whiting & Co., North Attleborough, Mass. Handle for spoons	22,702	Mar. 21	62	1815
Maillet, John W., assignor to F. M. Whiting & Co., North Attleborough, Mass. Spoon	22,318	Apr. 4	63	143
Maillet, John W., assignor to F. M. Whiting & Co., North Attleborough, Mass. Spoon	22,916	Nov. 28	65	1395
Malloch, Andrew M. (See Brogan and Malloch.)				
Malloy, William F., Allegheny, assignor to Pittsburg Brass Company, Pittsburg, Pa. Lavatory-support	22,465	May 23	63	1195
Malloy, William F., Allegheny, assignor to Pittsburg Brass Company, Pittsburg, Pa. Lavatory-table frame	22,466	May 23	63	1195
Marx, William, Wauwatosa, Wis. Pattern for chair-backs	22,327	Apr. 4	63	145
Marx, William, Wauwatosa, Wis. Pattern for chair-backs	22,328	Apr. 4	63	145
Masters, Mark J., Brooklyn, N. Y. Sign-letter	22,325	Apr. 4	63	144
Mather Manufacturing Company. (See Gnichwitz, Rudolph, assignor.)				
Matthews, John, Bridgenorth, England, assignor to Arnold, Constable & Co., New York, N. Y. Carpet	22,616	July 18	64	429
Matthews & Willard Manufacturing Company. (See Miller, John C., assignor.)				
Mayer, Joshua W. (See Powers and Mayer.)				
McCain, Charles W., Vancouver, Canada. Medal	22,300	Mar. 21	62	1815

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McCarter, Thomas. (See Starrett, Samuel, assignor.)				
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Socket-plate for coffin-handles	22,129	Jan. 10	62	311
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin-plate	22,217	Feb. 14	62	1058
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin-handle	22,535	June 13	63	1682
McDaniel, Homer, Canton, Ohio. Game-board	22,976	Dec. 19	65	1912
McEvoy, Edward J., New York, N. Y., assignor of one-half to William Cramp & Sons Ship and Engine Building Company, Philadelphia, Pa. Globe-holder	22,227	Feb. 21	62	1200
McGill, George W., New York, N. Y. Metallic fastener	22,653	Aug. 1	64	706
McGill, George W., New York, N. Y. Metallic fastener	22,654	Aug. 1	64	706
McGill, George W., New York, N. Y. Metallic fastener	22,655	Aug. 1	64	706
McGill, George W., New York, N. Y. Box	22,701	Aug. 15	64	999
McGill, George W., New York, N. Y. Drapery-hook	22,820	Oct. 3	65	130
McGill, George W., New York, N. Y. Metallic fastener	22,821	Oct. 3	65	130
McGill, George W., New York, N. Y. Metallic fastener	22,822	Oct. 3	65	130
McGill, George W., New York, N. Y. Metallic fastener	22,823	Oct. 3	65	130
McGill, George W., New York, N. Y. Metallic fastener	22,824	Oct. 3	65	130
McGuigan, Peter, Ashland, Wis. Table-knife	22,439	May 16	63	1052
McKenney, Franklin S., Detroit, Mich. Fastener	22,978	Dec. 19	65	1912
McKesson & Robbins. (See Evans William J., assignor.)				
McNeil, Alexander W., Chicago, Ill. Inkstand	22,773	Sept. 12	64	1527
Meisselbach, August F. and W., Newark, N. J. Can-opener	22,810	Sept. 26	64	1785
Meisselbach, William. (See Meisselbach, August F. and W.)				
Melavin, John H., Cambridgeport, assignor to Boston Woven Hose and Rubber Company, Boston, Mass. Nozzle for lawn-sprinklers	22,491	May 30	63	1375
Meriden Britannia Company. (See Hirschfeld, Henry W., assignor.)				
Meriden Britannia Company. (See McCarthy, Oliver, assignor.)				
Meriden Silver Plate Company. (See Hiller, Louis C., assignor.)				
Mersereau, William T., South Orange, N. J. Bedstead	22,864	Oct. 31	65	747
Mertz, Emil C. and T. C., Newark, N. J. Finger-ring	22,913	Nov. 21	65	1217
Mertz, Theo. C. (See Mertz, Emil C. and T. C.)				
Meaton, Alexander W., St. Louis, Mo. Frame for electric motors	22,277	Mar. 7	62	1505
Metzeler, Theodore, Brooklyn, N. Y. Motto	22,866	Nov. 7	65	885
Meyer-Sniffen Company. (See Bunting, William, Jr., assignor.)				
Meyer-Sniffen Company. (See Miller, Richard W., assignor.)				
Miller, Elizabeth, and C. Barton, Brooklyn, N. Y. Trimming	22,494	June 6	63	1522
Miller, John C., assignor to Matthews & Willard Manufacturing Company, Waterbury, Conn. Table	22,219	Feb. 14	62	1058
Miller, John C., assignor to Matthews & Willard Manufacturing Company, Waterbury, Conn. Lamp-fount holder	22,422	May 9	63	903
Miller, John E., Pittsburg, Pa. Vessel	22,114	Jan. 10	62	308
Miller, Richard W., Ruthertord, N. J., assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Lavatory-bracket	22,387	May 2	63	750
Miller, Samuel, Mohawk, N. Y., assignor of two-thirds to R. R. Wightman, Albion, Mich. Weather-board	22,795	Sept. 19	64	1645
Milliron, Samuel F., and J. Preiss, Baltimore, Md. Antirattler for whips	22,833	Oct. 10	65	292
Mills, Robert, Newton, assignor to D. Blanchard, Melrose, Mass. Case for vending-machines	22,126	Jan. 10	62	310
Mine, Charles D. (See Pritchard, Albert R., assignor.)				
Mitchell, William, Altoona, Pa. Washboiler-screen	22,923	Nov. 28	65	1396
Mohr, Peter G., Buffalo, N. Y. Card	22,695	Aug. 15	64	998
Montague, William A., Duluth, Minn. Spoon	22,660	Aug. 1	64	706
Montgomery, Harry C., Cleveland, Ohio. Sole for boots or shoes	22,326	Apr. 4	63	144
Moore, Alexander P., Chicago, Ill. Bottle	22,370	Apr. 25	63	605
Moore, Charles B., Yonkers, N. Y. Ornamentation of stationary wash-bowls	22,122	Jan. 10	62	309
Morgan, Hubert W., Beriden, Conn. Pencil	22,989	Dec. 26	65	2057
Morrison, John E., Baltimore, Md. Laundry-wax for sad-irons	22,925	Nov. 28	65	1397
Morrow, Charles B., assignor to Great Western Wire Works Company, Chicago, Ill. Display-stand	22,538	June 13	63	1682
Musher, Sylvanus D., Storm King, N. Y. Skate	22,951	Dec. 5	65	1587
Mosman, Charles F., Bridgeport, assignor to Landers, Frary & Clark, New Britain, Conn. Cutlery-handle	22,484	May 30	63	1374
Mount Washington Glass Company. (See Singleton, Thomas, Jr., assignor.)				
Mount Washington Glass Company. (See Steffin, Albert, assignor.)				
Mowry, Winsor, Bristol, R. I. Cabinet	22,707	Aug. 15	64	1000
Mulcahy, Andrew, Forsyth, Ga. Watch-charm	22,598	July 11	64	291
Myers, John F., San Francisco, Cal. Lamp-stove	22,540	June 13	63	1683
Myers, John F., San Francisco, Cal. Lamp-stove	22,911	Nov. 14	65	1061
Nacke, Arnold, Philadelphia, Pa. Table	22,539	June 13	63	1682
Naegele, Charles F., New York, N. Y. Medal	22,240	Feb. 28	62	1342
National Malleable Castings Company. (See Barnes, David L., assignor.)				
Neely, William A., Lynn, Mass. Stay-strip	22,269	Mar. 7	62	1504
Nellis, Emery D., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Stove	22,667	Aug. 1	64	708
New Haven Clock Company. (See Jennings, Arthur O., assignor.)				
Niagara Falls Power Company. (See MacMonnies, Frederick, assignor.)				
Norris, Alistair & Co., B. F. (See Jamounean, William H., assignor.)				
Norris, Herbert L., Providence, R. I. Badge-pin	22,638	July 18	64	433
North American Iron Works. (See Tweeddale, William, assignor.)				
North & Judd Manufacturing Company. (See Herrick, Frank J., assignor.)				
Nye, Martha A., Chicopee Falls, Mass. Breastpin, &c	22,150	Jan. 24	62	581
O'Brien, William S., San Francisco, Cal. Spoon	22,301	Mar. 21	62	1815
O'Brien, William S., San Francisco, Cal. Spoon-handle, &c	22,308	Mar. 28	62	1958
O'Brien, William S., San Francisco, Cal. Spoon, &c	22,408	May 9	63	901
O'Brien, William S., San Francisco, Cal. Cane	22,451	May 23	63	1193
O'Brien, William S., San Francisco, Cal. Spoon	22,561	June 27	63	1953
O'Connor, James J., assignor to C. Dorfinger & Sons, White Mills, Pa. Glass vessel	22,581	July 4	64	148
O'Reardon, Daniel, Jersey City, N. J. Bottle	12,380	May 2	63	749
Oakman, Richard N., Jr., assignor to A. F. Towle & Son Company, Greenfield, Mass. Spoon or fork handle	22,502	June 6	63	1523
Oldham, William G. (See Smith and Oldham.)				
Oldham, William G., and W. K. Smith, assignors to W. T. Smith & Son, Philadelphia, Pa. Woven fabric	22,159	Jan. 24	62	583
Onderdonk, Lansing, assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine frame	22,837	Oct. 17	65	437
Orsini, Cesar, Rome, Italy. Medal	22,335	Apr. 11	63	303
Osborn, Frederick A., San Francisco, Cal. Badge	22,985	Dec. 26	65	2056

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Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Spoon.....	22,243	Feb. 28	62	1343
Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Tea-pot.....	22,369	Apr. 25	63	604
Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Brush-back or similar article.....	22,627	July 18	64	431
Otero, Charles, Pueblo, Colo. Spoon.....	22,557	June 27	63	1953
Oudesluys, Louis, Baltimore, Md. Badge.....	22,239	Feb. 28	62	1342
Pabst & Co., Theo. (See Rauchfuss, Eugene J., assignor.)				
Packer, Charles W., Philadelphia, Pa. Cross-bar for ice-cream freezers.....	22,276	Mar. 7	62	1505
Pairpoint Manufacturing Company. (See Boutwell, George S., assignor.)				
Pairpoint Manufacturing Company. (See Bremer, Max, assignor.)				
Pairpoint Manufacturing Company. (See Ratcliff, Frederick, assignor.)				
Pairpoint Manufacturing Company. (See Thompson, Frederic L., assignor.)				
Pairpoint Manufacturing Company. (See Tolman, William Q., assignor.)				
Palmer, Francis I., Chicago, Ill. Badge.....	22,744	Aug. 29	64	1258
Panduro, Rudolph J., Milwaukee, Wis. Cigar and match case.....	22,488	May 30	63	1375
Parlin, Andrew J., Newport, Ky. Easel.....	22,244	Feb. 28	62	1343
Partridge & Richardson. (See Hook, Harry, assignor.)				
Pearce, Frank T., Providence, R. I. Tray.....	22,685	Aug. 8	64	852
Peet, William C. (See Hamman and Peet.)				
Penn, George, Syracuse, N. Y. Wagon-spring.....	22,632	July 18	64	432
Perkins, Robert, Rockaway, N. J. Rim for bicycle-wheels.....	22,732	Aug. 22	64	1124
Perry, Walter A., New Bedford, Mass. Hook for ropes.....	22,293	Mar. 14	62	1645
Perry, William H., Concord, N. H. Monument.....	22,372	May 2	63	748
Perry, William H., Concord, N. H. Monument.....	22,373	May 2	63	748
Perry, William H., Concord, N. H. Monument.....	22,374	May 2	63	748
Perry, William H., Concord, N. H. Monument.....	22,577	June 27	63	1955
Perry, William H., Concord, N. H. Monument.....	22,593	July 4	64	150
Perry, William H., Concord, N. H. Monument.....	22,856	Oct. 24	65	594
Peter, Francis A., Deibertsville, Pa. Cellar-grate.....	22,448	May 16	63	1053
Peter, Francis A., Washington, D. C. Cellar-grate.....	22,738	Aug. 22	64	1125
Petersen, Carl. (See Bernheim, Eugene C., assignor.)				
Peterson, Karl. (See Holmes and Peterson.)				
Petzold, Adolph, Philadelphia, Pa., assignor to J. H., J. H., and E. Bromley. Rug.....	22,472	May 30	63	1372
Petzold, Adolph, Philadelphia, Pa., assignor to J. H., J. H., and E. Bromley. Rug.....	22,578	July 4	64	147
Petzold, Adolph, Philadelphia, Pa., assignor to J. H., J. H., and E. Bromley. Table-cover.....	22,650	Aug. 1	64	705
Petzold, Adolph, Philadelphia, Pa., assignor to J. H., J. H., and E. Bromley. Table-cover.....	22,651	Aug. 1	64	705
Pfenninger, John J., St. Louis, Mo. Die for cutting dough.....	22,532	June 13	63	1681
Philip J. Ritter Conserve Company. (See Hofmann and Dillman, assignors.)				
Philippe & Co., Patek. (See Rouge, Gabriel M., assignor.)				
Philipsen, Philip, New York, N. Y. Medal.....	22,556	June 27	63	1952
Phillips, James T., assignor to Aldine Manufacturing Company, Grand Rapids, Mich. Frame for grates.....	22,634	July 18	64	432
Phillips, James T., assignor to Aldine Manufacturing Company, Grand Rapids, Mich. Fire-board.....	22,635	July 18	64	432
Pierce, James H., West Bay City, Mich. Valve-casing.....	22,865	Oct. 31	65	747
Pilkington Brothers. (See Pilkington, William L., assignor.)				
Pilkington, George H., et al. (See Pilkington, William L., assignor.)				
Pilkington, Richard, et al. (See Pilkington, William L., assignor.)				
Pilkington, Thomas, et al. (See Pilkington, William L., assignor.)				
Pilkington, William, et al. (See Pilkington, William L., assignor.)				
Pilkington, William L., assignor to Pilkington Brothers, St. Helen's, England. Pattern for plate-glass.....	22,753	Aug. 29	64	1258
Pilkington, William L., assignor to himself, W., T., W. W., R., and G. H. Pilkington, St. Helen's, England. Surface ornamentation of glass.....	22,099	Jan. 3	62	155
Pilkington, William L., assignor to himself, W., T., W. W., R., and G. H. Pilkington, St. Helen's, England. Ornamentation of glass.....	22,173	Jan. 31	62	734
Pilkington, William W., et al. (See Pilkington, William L., assignor.)				
Pinkham, Frederick S., Everett, Mass. Arm-badge.....	22,261	Mar. 7	62	1503
Pitchers, William T., Godalming, England. Sweater.....	22,877	Nov. 7	65	887
Pitchers, William T., Godalming, England. Sweater.....	22,878	Nov. 7	65	887
Pitchers, William T., Godalming, England. Sweater.....	22,879	Nov. 7	65	888
Pitchers, William T., Godalming, England. Sweater.....	22,880	Nov. 7	65	888
Pitchers, William T., Godalming, England. Sweater.....	22,881	Nov. 7	65	888
Pittsburg Brass Company. (See Malloy, William F., assignor.)				
Plant, Edgar C., Mokenca, Ill., assignor to A. A. Fordon, Buffalo, N. Y. Alto-rilievo.....	22,145	Jan. 24	62	580
Pope, Alfred A., Cleveland, Ohio. Vehicle-step.....	22,404	May 2	63	752
Porteous, George, assignor to J. W. Lyon, Guelph, Canada. Music-rack.....	22,249	Feb. 28	62	1343
Potts, Albert E. (See Brower, John B., assignor.)				
Powers, Maurice L., New York, N. Y. Finger-ring.....	22,676	Aug. 8	64	851
Powers, Maurice L., and J. W. Mayer, New York, N. Y. Jewel-setting.....	22,797	Sept. 26	64	1783
Preiss, Jacob. (See Milliron and Preiss.)				
Prélat, Charles E., Waterbury, Conn. Spoon.....	22,527	June 13	63	1681
Prélat, Charles E., assignor to Rogers & Hamilton Company, Waterbury, Conn. Spoon.....	22,661	Aug. 1	64	707
Pretat, Frederick E., assignor to Rogers & Hamilton Company, Waterbury, Conn. Handle for spoons, &c.....	22,747	Aug. 29	64	1258
Pries, Albert, St. Louis, Mo. Bath-tub foot.....	22,330	Apr. 4	63	145
Pries, Albert, St. Louis, Mo. Bath-tub foot.....	22,331	Apr. 4	63	145
Pritchard, Albert R., Rochester, N. Y. Coffee or tea pot.....	22,793	Sept. 19	64	1645
Pritchard, Albert R., assignor to one-half to C. D. Milne, Rochester, N. Y. Bail-ear for vessels.....	22,426	May 9	63	903
Quick, William H. H., et al. (See Dwiggin, John W., assignor.)				
R. T. Barton Company. (See Barton, Richard T., assignor.)				
R. Wallace & Sons Manufacturing Company. (See Tomey, William H., assignor.)				
Racine, Ulysses, Providence, R. I., assignor to Watson, Newell & Co., Attleborough, Mass. Bowl for spoons.....	22,699	Aug. 15	64	999
Rankin, Thomas I., assignor to Abram Cox Stove Company, Philadelphia, Pa. Fireplace-stove.....	22,541	June 13	63	1683
Rankin, Thomas I., assignor to Abram Cox Stove Company, Philadelphia, Pa. Furnace-front.....	22,571	June 27	63	1954
Rankin, Thomas I., assignor to Abram Cox Stove Company, Philadelphia, Pa. Furnace-front.....	22,572	June 27	63	1954
Ratcliff, Frederick, assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Dish.....	22,172	Jan. 31	62	734
Ratcliff, Frederick, assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Coffin-plate.....	22,506	June 6	63	1524
Ratcliff, Frederick, assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Coffin-plate.....	22,507	June 6	63	1524
Ratcliff, Frederick, assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Pin-cushion.....	22,776	Sept. 12	64	1527
Rauchfuss, Eugene J., assignor to T. Pabst & Co., New York, N. Y. Drinking-glass.....	22,497	June 6	63	1523

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Ray, Wayne S., Asheville, N. C. Horse-boot.....	22,955	Dec. 5	65	1587
Rayner, Lewis D., Dayton, assignor to C. Emrich, Columbus, Ohio. Heating-stove.....	22,952	Dec. 5	65	1587
Redon, Marcial, Limoges, France. Covered dish.....	22,379	May 2	63	749
Reed & Barton Corporation. (See Jackson, Austin F., assignor.)				
Reed, John R., Westfield, Mass. Furnace.....	22,519	June 6	63	1526
Rees, Joseph, New York, N. Y. Finger-ring.....	22,193	Feb. 7	62	892
Rees, Joseph, New York, N. Y. Tray.....	22,215	Feb. 14	62	1058
Reese, Mame C., Oxford, Pa. Rosette.....	22,754	Aug. 29	64	1259
Reynold, John M., Englewood, Ill. Door-key securer.....	22,386	May 2	63	750
Reinfeld, Mayer, St. Louis, Mo. Looking-glass frame.....	22,392	May 2	63	750
Renniman, William J., and W. C. Carey, Avoca, Pa. Chimney-cap.....	22,914	Nov. 21	65	1217
Rey, V. J. A. (See Schroeder, Gustave F., assignor.)				
Rhodes, Rowland, New York, N. Y., assignor to W. H. Durgire, Concord, N. H. Handle for spoons, &c.....	22,779	Sept. 12	64	1528
Richards, Frank A., Valley Falls, R. I. Foot-stool.....	22,549	June 20	63	1812
Richards, Zachary T., assignor to Fulton & Walker Company, Philadelphia, Pa. Wagon-body.....	22,470	May 23	63	1196
Ricketts, Thomas W., Whitehall, Mich. Lamp-stand.....	22,550	June 20	63	1812
Rieper, John A., New York, N. Y. Billiard-cue handle.....	22,972	Dec. 19	65	1911
Rieper, John A., New York, N. Y. Billiard-cue handle.....	22,973	Dec. 19	65	1911
Rieper, John A., New York, N. Y. Billiard-cue handle.....	22,974	Dec. 19	65	1911
Rieper, John A., New York, N. Y. Billiard-cue handle.....	22,975	Dec. 19	65	1912
Riggs, Roselma C. (See Bradfield and Riggs.)				
Rischmüller, George, San Francisco, Cal. Thimble-plate.....	22,917	Nov. 28	65	1395
Roberts, George I., New York, N. Y. Casing for pump-governors.....	22,953	Dec. 5	65	1587
Roberts, Marshall O., Washington, D. C. Spoon.....	22,212	Feb. 14	62	1057
Roberts, Marshall O., Washington, D. C. Scarf.....	22,495	June 6	63	1522
Rockwell, George, Meriden, assignor to Rogers & Brother, Waterbury, Conn. Spoon, &c.....	22,409	May 9	63	901
Roes Brothers. (See Roes, Christian C., assignor.)				
Roes, Christian C., assignor to Roes Brothers, Baltimore, Md. Bread-loaf.....	22,882	Nov. 14	65	1057
Rogers, Arthur G., assignor to C. Rogers & Bros., Meriden, Conn. Spoon.....	22,560	June 27	63	1953
Rogers & Brother. (See Rockwell, George, assignor.)				
Rogers & Bros. C. (See Rogers, Arthur G., assignor.)				
Rogers & Hamilton Company. (See Gaines, Wilbur C., assignor.)				
Rogers & Hamilton Company. (See Prétat, Charles E., assignor.)				
Rogers & Hamilton Company. (See Pretat, Frederick E., assignor.)				
Rogers, Orville D., Shoals, Ind. Box.....	22,462	May 23	63	1194
Rogers, Thomas J., Marnesville, Ohio. Table.....	22,993	Dec. 26	65	2057
Roos, Edward, Chicago, Ill. Pole-bracket.....	22,142	Jan. 17	62	446
Rothschild, David, Cincinnati, Ohio. Wall-fixture for counters.....	22,162	Jan. 24	62	583
Rothschild, David, Cincinnati, Ohio. Wall-fixture for counters.....	22,163	Jan. 24	62	583
Rothschild, David, Cincinnati, Ohio. Saloon fixture.....	22,222	Feb. 14	62	1059
Rouge, Gabriel M., assignor to P. Philippe & Co., Geneva, Switzerland. Watch-bridge.....	22,365	Apr. 25	63	604
Rouse, Albion M., Boulder, assignor to Boss-Grip Lock-Nut Company, Denver, Colo. Lock-nut.....	22,813	Sept. 26	64	1785
Rowe, Alfred L., Chicago, Ill. Sheet-glass.....	22,097	Jan. 3	62	154
Rowlands, John R., assignor of two-thirds to W. H. Boles and W. H. Wales, Syracuse, N. Y. Cas- ing for vending machines.....	22,666	Aug. 1	64	708
Royal Metal Manufacturing Co. (See Golde, Robert, assignor.)				
Russell & Erwin Manufacturing Company. (See Russell, Henry E., assignor.)				
Russell, Henry E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Door-knob.....	22,755	Aug. 29	64	1259
Russell, Henry E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Es- cutcheon-plate.....	22,756	Aug. 29	64	1259
Russell, William T., Worcester, Mass. Plate-lifter.....	22,534	June 13	63	1682
Ruxton, Benjamin H., assignor to Toledo Moulding Company, Toledo, Ohio. Curtain-pole.....	22,271	Mar. 7	62	1504
Sachs, Morris, New York, N. Y. Leggin.....	22,603	July 11	64	292
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Ceiling-plate.....	22,874	Nov. 7	65	887
Sale, John L., San Francisco, Cal. Souvenir badge.....	22,964	Dec. 12	65	1761
Saltzburg Bottle Works Company. (See Beach, Clifton H., assignor.)				
Sametz, Adolph, Brooklyn, N. Y. Picture-frame.....	22,146	Jan. 24	62	580
Sanders, Albert D., Evanston, Ill. Flushing-tank.....	22,209	Feb. 7	62	894
Sapties, Etienne de, New York, N. Y. Monument.....	22,612	July 11	64	294
Sauer, Emil G., Brooklyn, N. Y., assignor to Lowell Manufacturing Company, Boston, Mass. Car- pet.....	22,333	Apr. 11	63	302
Sauer, Emil G., Brooklyn, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Car- pet.....	22,694	Aug. 15	64	998
Scales, William S., Everett, assignor of two-thirds to J. B. Humphrey and J. H. Clarke, Somerville, Mass. Frame for raisin-seeders.....	22,393	May 2	63	750
Schade, Edmund A., assignor to Stanley Rule and Level Company, New Britain, Conn. Frame for circular planes.....	22,208	Feb. 7	62	894
Scheerer, Wilhelm, Tuttlinger, Germany. Handle for surgical instruments.....	22,134	Jan. 17	62	444
Scherer, Maria C., Bayonne, N. J. Thimble.....	22,106	Jan. 10	62	307
Scherer, Maria C., Bayonne, N. J. Chatelaine.....	22,107	Jan. 10	62	307
Schermerhorn, Rodney F., and F. S. Weller, assignors to Thomas White Stove Company, Quincy, Ill. Heating-stove.....	22,446	May 16	63	1053
Schener, Charles, New York, N. Y. Pocket-book, case, or wallet.....	22,362	Apr. 25	63	603
Schener, Isaac, New York, N. Y. Pocket-book.....	22,417	May 9	63	902
Schlechter, Gustavus A., Reading, Pa. Badge.....	22,777	Sept. 12	64	1527
Schleicher, William A., Cleveland, Ohio. Toe-rail for vehicles.....	22,771	Sept. 5	64	1391
Schloss, Joseph W., New York, N. Y. Braid.....	22,424	May 9	63	903
Schmitz, Theodore H., Philadelphia, Pa. Gas-burner.....	22,711	Aug. 15	64	1001
Schoen, Charles T., Allegheny, Pa. Post for letter-boxes.....	22,432	May 9	63	904
Schofield, John, assignor to Chadwick Plush Company, Holyoke, Mass. Plush fabric.....	22,233	Feb. 21	62	1201
Schopbach, Charles H., Aurora, Ill. Textile fabric.....	22,693	Aug. 15	64	998
Schroeder, Gustave F., Mill Valley, assignor to V. J. A. Rey, San Francisco, Cal. Font of type.....	22,104	Jan. 10	62	307
Schroeder, Gustave F., Mill Valley, assignor to V. J. A. Rey, San Francisco, Cal. Font of printing type.....	22,263	Mar. 7	62	1503
Schuck, Valentine G., assignor to Sutro Bros. Braid, Company, New York, N. Y. Braid.....	22,614	July 18	64	428
Scovill Manufacturing Company. (See Lines, John, assignor.)				
Seher, Henry, New York, N. Y. Candle-cuff.....	22,368	Apr. 25	63	604
Seifert, Frank A., assignor to Western Stove Manufacturing Company, St. Louis, Mo. Cooking stove.....	22,608	July 11	64	293
Seligner, Alfred E., Newark, N. J. Box.....	22,113	Jan. 10	62	308
Senenbaugh, Samuel S., and A. J. Ives, Aurora, Ill. Umbrella-stand.....	22,568	June 27	63	1953
Shaw, William, Ballard Vale, Mass. Badge.....	22,745	Aug. 29	64	1258

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Shellhorn, George B., Montgomery, Ala. Rug-fastener	22,288	Mar. 14	62	1644
Shiebler, George W., Brooklyn, N. Y. Handle for spoons or forks	22,149	Jan. 24	62	581
Shiebler, George W., Brooklyn, N. Y. Spoon	22,363	Apr. 25	63	604
Shimer, Milton J., Freemansburg, Pa. Toy money-safe	22,291	Mar. 14	62	1645
Shoudy, Fred G., Rockford, Ill. Grocer's cabinet	22,730	Aug. 22	64	1124
Shoudy, Fred G., Rockford, Ill. Grocer's cabinet	22,731	Aug. 22	64	1124
Simons, Edwin S., <i>et al.</i> (See Walter, Joseph, assignor.)				
Simons, Edwin S., <i>et al.</i> (See Weihman, Henry A., assignor.)				
Simons, Frederick M., <i>et al.</i> (See Walter, Joseph, assignor.)				
Simons, Frederick M., <i>et al.</i> (See Weihman, Henry A., assignor.)				
Simons, John F., <i>et al.</i> (See Walter, Joseph, assignor.)				
Simons, John F., <i>et al.</i> (See Weihman, Henry A., assignor.)				
Simpson, Crawford & Simpson. (See Verschuur, Justus, assignor.)				
Simpson, Hall, Miller & Company. (See Glahn, George A., assignor.)				
Singleton, Thomas, Jr., New Bedford, Mass. Glass dish	22,203	Feb. 7	62	893
Singleton, Thomas, Jr., assignor to Mount Washington Glass Company, New Bedford, Mass. Ornamental glass dish	22,169	Jan. 31	62	733
Singleton, Thomas, Jr., assignor to Mount Washington Glass Company, New Bedford, Mass. Ornamental glass dish	22,170	Jan. 31	62	734
Smallwood, Della G., Washington, D. C. Spoon	22,287	Mar. 14	62	1644
Smith, Addison T., Washington, D. C. Paper-weight	22,559	June 27	63	1953
Smith, Alfred E. and H. A., New Bedford, Mass. Salt-holder	22,774	Sept. 12	64	1527
Smith, Anthony W., Pittsburg, Pa. Plant-support	22,342	Apr. 11	63	304
Smith, Celia M., Ithaca, N. Y. Pattern for printed fabrics	22,206	Feb. 7	62	893
Smith, Celia M., Ithaca, N. Y. Statuette	22,178	Jan. 31	62	735
Smith, Charles F., assignor to Landers, Frary & Clark, New Britain, Conn. Knife-blade	22,867	Nov. 7	65	886
Smith, Charles F., assignor to Landers, Frary & Clark, New Britain, Conn. Cutlery-handle	22,482	May 30	63	1374
Smith, Charles F., assignor to Landers, Frary & Clark, New Britain, Conn. Cutlery-handle	22,483	May 30	63	1374
Smith, Charles F., assignor to Landers, Frary & Clark, New Britain, Conn. Cutlery-handle	22,503	June 6	63	1524
Smith, Charles F., assignor to Landers, Frary & Clark, New Britain, Conn. Knife	22,700	Aug. 15	64	999
Smith, Charles W., Norwalk, Ohio. Curtain-pole bracket	22,296	Mar. 14	62	1645
Smith, George B., Chicago, Ill., assignor to J. M. Kelly, trustee, Pittsburg, Pa. Badge	22,259	Mar. 7	62	1503
Smith, Harry A. (See Smith, Alfred E. and H. A.)				
Smith, Hugh L. (See Boeck, Charles H., assignor.)				
Smith, Hugh L. (See Cope, George W., assignor.)				
Smith, James A., Sr., St. Louis, Mo. Ice-mold	22,298	Mar. 14	62	1646
Smith, Kline & French Company. (See Cave, Joseph, assignor.)				
Smith, Lincoln G., Flemington, N. J. Money-receptacle	22,323	Apr. 4	63	144
Smith, Sidney, assignor to Holmes & Edwards Silver Company, Bridgeport, Conn. Fork, &c	22,680	Aug. 8	64	852
Smith & Son, William T. (See Oldham and Smith, assignors.)				
Smith & Son, William T. (See Smith and Oldham, assignors.)				
Smith, William K. (See Oldham and Smith.)				
Smith, William T., Philadelphia, Pa. Woven fabric	22,158	Jan. 24	62	582
Smith, William T., Philadelphia, Pa. Woven fabric	22,234	Feb. 21	62	1201
Smith, William T., Philadelphia, Pa. Rug	22,285	Mar. 14	62	1643
Smith, William T., and W. G. Oldham, assignors to W. T. Smith & Son, Philadelphia, Pa. Woven fabric	22,160	Jan. 24	62	583
Snyder, Harry B., Chicago, Ill. Cane-handle	22,339	Apr. 11	63	304
Snyder, Harry B., Chicago, Ill. Cane-handle	22,340	Apr. 11	63	304
Somerville, A. J. (See Adler, Victor, assignor.)				
Southard, Robertson & Co. (See Southard, William D., assignor.)				
Southard, William D., Peekskill, assignor to Southard, Robertson & Co., New York, N. Y. Stove	22,464	May 23	63	1195
Spalding, Charles W., assignor to Globe Savings Bank, Chicago, Ill. Sign	22,585	July 4	64	148
Spear, James O., Baltimore, Md., assignor to Dressing Cabinet Supply Company of Baltimore City, of Maryland. Toilet cabinet-case	22,786	Sept. 12	64	1529
Spencer, William, Brooklyn, assignor to W. W. Farmer, New York, N. Y. Printer's border	22,806	Sept. 26	64	1785
Spencer, William, Brooklyn, assignor to W. W. Farmer, New York, N. Y. Printer's border	22,807	Sept. 26	64	1785
Spencer, William, Brooklyn, assignor to W. W. Farmer, New York, N. Y. Printer's border	22,808	Sept. 26	64	1785
Spratley, Albert G., <i>et al.</i> (See Davison, George J., assignor.)				
Stange, John D., San Francisco, Cal. Lady's hat	22,766	Sept. 5	64	1390
Stanley Rule and Level Company. (See Schade, Edmund A., assignor.)				
Starrett, Samuel, assignor to T. McCarter, Londonderry, Ireland. Printer's side-stick	22,965	Dec. 12	65	1761
Steele, George N., Hamilton, R. I. Tape	22,119	Jan. 10	62	309
Steffin, Albert, assignor to Mount Washington Glass Company, New Bedford, Mass. Vessel	22,171	Jan. 31	62	734
Steffin, Albert, assignor to Mount Washington Glass Company, New Bedford, Mass. Vessel	22,367	Apr. 25	63	604
Steffin, Albert, assignor to Mount Washington Glass Company, New Bedford, Mass. Condiment-holder	22,781	Sept. 12	64	1528
Stein, Edward, New York, N. Y. Umbrella-handle	22,310	Mar. 28	62	1958
Stockstrom, Charles A. (See Stockstrom, Louis, assignor.)				
Stockstrom, Louis, assignor of one-half to C. A. Stockstrom, St. Louis, Mo. Vapor-stove	22,551	June 20	63	1812
Stone, Frank P., Chicago, Ill. Brougham-body	22,855	Oct. 24	65	594
Stone, Thomson M., assignor to J. L. Armitage, Newark, N. J. Sheet metal	22,567	June 27	63	1953
Straus & Sons, L. (See Davies, Benjamin, assignor.)				
Streeter, Nelson R. (See Austice, Warner, and Streeter.)				
Sullivan, Patrick J., New York, N. Y. Horseshoe	22,794	Sept. 19	64	1645
Sutro Bros. Braid Company. (See Kleinhans, Louis, assignor.)				
Sutro Bros. Braid Company. (See Schuck, Valentine G., assignor.)				
Swain, Henry C., New York, N. Y. Dressing-case	22,687	Aug. 8	64	852
Swan, Henry C., Oshkosh, Wis. Whiffletree-clip	22,670	Aug. 1	64	708
Swapp, Charles W., New York, N. Y., assignor to Lowell Manufacturing Company, Boston, Mass. Carpet	22,474	May 30	63	1373
Tams, William H., assignor to Greenwood Pottery Company, Trenton, N. J. Dish	22,644	July 25	64	554
Tarbell, John H., New York, N. Y., assignor to Cheney Brothers, South Manchester, Conn. Handkerchief	22,234	Apr. 11	63	303
Taylor, Vincent A., Bedford, Ohio. Seat	22,396	May 2	63	751
Terhune, John, Hackensack, N. J. Flag	22,496	June 6	63	1522
Terry, Eugene, Ithaca, N. Y. Finger-guide for type-writers	22,971	Dec. 19	65	1911
Thomas, Chauncey, Boston, Mass. Carriage-spring	22,814	Sept. 26	64	1786
Thomas, Evan, Milwaukee, Wis. Inkstand	22,416	May 9	63	902
Thomas White Stove Company. (See Schermerhorn and Weller, assignors.)				
Thompson, Frederic L., New Bedford, Mass. Brush-handle	22,665	Aug. 1	64	707
Thompson, Frederic L., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Metallic rosette	22,733	Aug. 22	64	1124

Alphabetical list of patentees of designs—Continued.

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Thompson, Frederic L., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Metallic pattern-strip.	22,734	Aug. 22	64	1124
Thompson, Frederic L., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Metallic pattern-strip.	22,735	Aug. 22	64	1124
Thompson, Frederic L., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Metallic pattern-strip.	22,736	Aug. 22	64	1125
Thompson, Frederic L., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Metallic pattern-strip.	22,737	Aug. 22	64	1125
Thompson, Frederic L., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Metallic pattern-strip.	22,919	Nov. 28	65	1395
Thrush, Frederick T., Milwaukee, Wis. Head for a toy windmill.	22,164	Jan. 24	62	583
Tiffany & Co. (See Curran, John T., assignor.)				
Todd, Marquis J., Buffalo, N. Y. Harrow-frame.	22,692	Aug. 8	64	853
Toledo Moulding Company. (See Ruxton, Benjamin H., assignor.)				
Tolman, William Q., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Box-cover.	22,725	Aug. 22	64	1123
Tolman, William Q., assignor to Pairpoint Manufacturing Company, New Bedford, Mass. Box-cover.	22,818	Oct. 3	65	129
Tomey, William H., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Metal border.	22,485	May 30	63	1375
Tomey, William H., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon.	22,498	June 6	63	1523
Tomey, William H., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon, &c.	22,501	June 6	63	1523
Tonetti, Louis, Paris, France, assignor to L. Hausmann, Niagara Falls, N. Y. Plaque.	22,522	June 13	63	1680
Tooker, Edmund C., Larchmont, N. Y. Clasp-loop.	22,677	Aug. 8	64	851
Torsch & Lee. (See Lee, James R., assignor.)				
Townsend, John J., Portsmouth, Va. Compass-card.	22,723	Aug. 22	64	1122
Tracy, Harriet R., New Brighton, N. Y. Sewing-machine frame.	22,544	June 13	63	1683
Traut & Hine Company. (See Adams, George E., assignor.)				
Treverton, Charles W., Scranton, Pa. Syringe.	22,669	Aug. 1	64	708
Truesdell, Carrie P., Cleveland, Ohio. Spoon.	22,364	Apr. 25	63	604
Truesdell, Carrie P., Cleveland, Ohio. Spoon.	22,643	July 25	64	554
Tweeddale, William, Brooklyn, assignor to North American Iron Works, New York, N. Y. Drinking-fountain.	22,141	Jan. 17	62	445
Twyman Decorating Company. (See Twyman, Joseph, assignor.)				
Twyman, Joseph, assignor to Twyman Decorating Company, Chicago, Ill. Wall-paper.	22,103	Jan. 10	62	306
Union Special Sewing Machine Company. (See Onderdonk, Lansing, assignor.)				
United States Baking Company. (See Mackey, Thomas R., assignor.)				
United States Metallic Packing Company. (See Hill, Thomas R., assignor.)				
Van Derveer, Benjamin B., New York, N. Y. Sheet of wrapping-paper.	22,184	Jan. 31	62	736
Varnum, Robert T., New York, N. Y. Inflated cushion.	22,121	Jan. 10	62	309
Verschuur, Justus. (See Jamouneau and Verschuur.)				
Verschuur, Justus, Jersey City, N. J. Spoon.	22,679	Aug. 8	64	851
Verschuur, Justus, Jersey City, N. J., assignor to Simpson, Crawford & Simpson, New York, N. Y. Spoon.	22,195	Feb. 7	62	892
Verschuur, Justus, Jersey City, N. J., assignor to J. H. Johnston & Company, New York, N. Y. Spoon.	22,196	Feb. 7	62	892
W. B. Conkey Company. (See Conkey, Walter B., assignor.)				
Wahler, Carl, Philadelphia, Pa. Teething-plate.	22,987	Dec. 26	65	2056
Wahlers, Charles, New York, assignor to A. M. Herron, Palisades, N. Y. Jar.	22,157	Jan. 24	62	582
Wales, Walter H., et al. (See Rowlands, John R., assignor.)				
Walker, Arthur W., Malden, Mass. Stove-lid.	22,740	Aug. 22	64	1125
Walker, David, and R. H. Warren, Newark, N. J. Stair-carpet button.	22,425	May 9	63	903
Walker, David N., Sylvan, Wis. Lid-lifter.	22,529	Apr. 4	63	145
Walsh, Dormer, San Francisco, Cal. Shovel.	22,834	Oct. 10	65	292
Walsh, Edward, Jr. (See Hartung, Charles C., assignor.)				
Walsh, Robert, Philadelphia, Pa. Combined spool-stand and pincushion.	22,791	Sept. 19	64	1644
Walter, Joseph, New York, N. Y. Napkin-holder.	22,454	May 23	63	1193
Walter, Joseph, New York, N. Y. Pepper or salt box.	22,486	May 30	63	1375
Walter, Joseph, New York, N. Y. Pepper or salt box.	22,487	May 30	63	1375
Walter, Jos-ph, New York, N. Y., assignor to J. F., F. M., and E. S. Simons, Philadelphia, Pa. Back for brushes or hand-mirrors.	22,704	Aug. 15	64	999
Wardwell, Simon W., Jr., Boston, Mass. Cop.	22,690	Aug. 8	64	853
Warner Brothers Corset Company. (See Gould, Wallace W., assignor.)				
Warner, De Ver H., Bridgeport, Conn. Dress-stay.	22,283	Mar. 14	62	1643
Warner, De Ver H., Bridgeport, Conn. Dress-stay.	22,458	May 23	63	1194
Warner, De Ver H., Bridgeport, Conn. Corset.	22,673	Aug. 8	64	851
Warner, De Ver H., Bridgeport, Conn. Corset.	22,884	Nov. 14	65	1057
Warner, Warren E. (See Austice, Warner, and Streeter.)				
Warner, Warren E., assignor to Weaver, Palmer & Richmond, Rochester, N. Y. Planting-dibble.	22,315	Mar. 28	62	1960
Warren, John D., Burlington, Iowa. Wall-fixture for stores.	22,962	Dec. 12	65	1761
Warren, John D., Burlington, Iowa. Show-case counter.	22,963	Dec. 12	65	1761
Warren, Robert H. (See Walker and Warren.)				
Warren, Robert H., Newark, N. J. Stair-carpet button.	22,382	May 2	63	749
Warren, Robert H., Newark, N. J. Stair-carpet grip.	22,509	June 6	63	1524
Watson, Newell & Co. (See Racine, Ulysses, assignor.)				
Weaver, Palmer & Richmond. (See Warner, Warren E., assignor.)				
Weihman, Henry A., Philadelphia, Pa. Handle for spoons.	22,252	Mar. 7	62	1502
Weihman, Henry A., assignor to J. F., F. M., and E. S. Simons, Philadelphia, Pa. Thimble.	22,547	June 20	63	1811
Weil, Leonard H., Baltimore, Md. Cape.	22,521	June 13	63	1680
Weimer, Walter, Chicago, Ill. Condiment-holder.	22,623	July 18	64	430
Weinberg, Charles, assignor to C. Weinberg & Co., New York, N. Y. Gimp.	22,379	July 4	64	148
Weinberg & Co., C. (See Weinberg, Charles, assignor.)				
Weller, Ferdinand S. (See Schermerhorn and Weller.)				
West, Augustine C., Boston, Mass. Gas or oil stove.	22,445	May 16	63	1053
Western Stove Manufacturing Company. (See Seifert, Frank A., assignor.)				
Weston, Edward, Newark, N. J. Case for electrical measuring-instruments.	22,101	Jan. 3	62	155
Weston, Edward, Newark, N. J. Resistance-box.	22,207	Feb. 7	62	893
Wheaton, Theodore C., Millville, N. J. Bottle.	22,354	Apr. 18	63	456
Wheeling Corrugating Company. (See Grafton, Ewing, and Glass, assignors.)				
Whitcomb, Ellen, Boston, Mass., assignor to Brainerd & Armstrong Company, New London, Conn. Textile fabric.	22,554	June 27	63	1952
Whiting & Co., Frank M. (See Maillot, John W., assignor.)				
Whiting Manufacturing Company. (See Osborne, Charles, assignor.)				
Wiederer, Peter, Stapleton, N. Y. Picture-frame.	22,459	May 23	63	1194

Alphabetical list of patentees of designs—Continued.

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Wientge, Charles C., Providence, R. I. Handle for spoons, &c	22,719	Aug. 22	64	1122
Wientge, Charles C., Providence, R. I. Bowl	22,752	Aug. 29	64	1258
Wientge, Charles C., assignor to Howard Sterling Company, Providence, R. I. Back for toilet brushes	22,355	Apr. 18	63	456
Wightman, R. R. (See Miller, Samuel, assignor.)				
Wilder, William H., Northampton, Mass. Stove	22,143	Jan. 17	62	446
Wilkinson, George, Providence, R. I. Handle for spoons, &c	22,748	Aug. 29	64	1258
Wilkinson, George, Providence, R. I. Handle for spoons, &c	22,749	Aug. 29	64	1258
Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Spoon or fork	22,320	Apr. 4	63	144
Willi, William G., Sacramento, Cal. Book-holder, &c	22,669	Nov. 7	65	886
William Cramp & Sons Ship and Engine Building Company. (See McEvoy, Edward J., assignor.)				
Williams, Daniel. (See Jacobs, George T., assignor.)				
Williams, Thomas H., Jersey City, N. J., and E. Ambrose, Troy, N. Y., assignors to A. A. Griffing Iron Company, Jersey City, N. J. Radiator	22,787	Sept. 12	64	1529
Williams, Walter B., Stamford, Conn. Fan	22,452	May 23	63	1193
Willingham, Jesse J. (See Campbell and Willingham.)				
Willson, Charles G., Reading, Pa. Badge	22,659	Aug. 1	64	706
Wilmot, John F., assignor to A. H. Andrews & Company, Chicago, Ill. Handle for furniture	22,161	Jan. 24	62	583
Winfield Manufacturing Company. (See Winfield, William C., assignor.)				
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Bail-car	22,236	Feb. 21	62	1201
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Oil-can	22,428	May 9	63	903
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Can	22,515	June 6	63	1525
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Can	22,516	June 6	63	1525
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Can	22,517	June 6	63	1526
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Faucet	22,570	June 27	63	1954
Winn, Frank M., Salem, Mass. Bottle	22,441	May 16	63	1052
Winslow, Charles E., Fort Robinson, Nebr. Spoon	22,562	June 27	63	1953
Winterbottom, George H., assignor to A. Winterbottom & Sons, Manchester, England. Book-binders' cloth	22,182	Jan. 31	62	736
Winterbottom, George H., assignor to A. Winterbottom & Sons, Manchester, England. Book-binders' cloth	22,183	Jan. 31	62	736
Winterbottom & Sons, Archibald. (See Winterbottom, George H., assignor.)				
Wipfler, Charles, assignor to Art Stove Company, Detroit, Mich. Cooking-stove	22,447	May 16	63	1053
Wipfler, Charles W., Detroit, Mich. Oil-stove	22,710	Aug. 15	64	1000
Wipfler, Charles W., Detroit, Mich., assignor to Joliet Stove Works, Joliet, Ill. Cooking-stove	22,770	Sept. 5	64	1391
Witteck, Paul, Butler, N. J., assignor to Butler Hard Rubber Company, New York, N. Y. Comb	22,151	Jan. 24	62	581
Witteck, Paul, Butler, N. J., assignor to Butler Hard Rubber Company, New York, N. Y. Comb	22,152	Jan. 24	62	581
Witteck, Paul, Butler, N. J., assignor to Butler Hard Rubber Company, New York, N. Y. Comb	22,153	Jan. 24	62	582
Wood, John, Washington, D. C. Spoon	22,092	Jan. 3	62	153
Wood, Martin D., Kansas City, Mo. Badge	22,796	Sept. 26	64	1783
Wood, Noah S., Roachdale, Ind. Cabinet	22,648	July 25	64	555
Wood, Robert, Syracuse, N. Y. Deflector	22,630	July 18	64	432
Woodward, Thomas J., assignor to Chance Brothers & Company, Limited, West Bromwich, England. Plate-glass	22,566	June 27	63	1953
Wright, Augustus, Providence, R. I. Insulator	22,876	Nov. 7	65	887
Wright, James A., Rockford, Ill. Horseshoe	22,450	May 16	63	1053
Wrought Iron Range Company. (See Culver, William W., assignor.)				
Yale & Towne Manufacturing Company. (See Ditmars, William B., assignor.)				
Yealous, Alben L., Eagle Grove, Iowa. Show-stand	22,569	June 27	63	1954
Yerge, Charles E., Detroit, Mich. Casing for flush-tanks	22,360	Apr. 18	63	457
Yount, Joseph A., Laclede, Mo. Medal	22,241	Feb. 28	62	1342
Zellin, John H., Philadelphia, Pa. Clock-case	22,783	Sept. 12	64	1528
Zeller, Melancthon E., Bluffton, Ohio. Loop for harness	22,383	May 2	63	749
Zeller, Melancthon E., Bluffton, assignor to Eberhard Manufacturing Company, Cleveland, Ohio. Trace-carrier	22,427	May 9	63	903
Ziegler, Charles L., Boston, Mass. Buckle	22,504	June 6	63	1534

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

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A. A. Griffing Iron Company, Jersey City, N. J., and Chicago, Ill. Steam and hot-water radiators.	23,545	Aug. 22	64	1130
A. A. Griffing Iron Company, Jersey City, N. J., and Chicago, Ill. Steam and hot-water radiators.	23,546	Aug. 22	64	1130
A. A. Griffing Iron Company, Jersey City, N. J., and Chicago, Ill. Radiators.	23,637	Sept. 19	64	1648
A. A. Griffing Iron Company, Jersey City, N. J., and Chicago, Ill. Steam and hot-water radiators.	23,887	Nov. 28	65	1402
A. C. Simmons Jr. Medicine Company, Sherman, Tex. Liver-purifier.	23,494	Aug. 15	64	1003
A. F. Paint and Color Company, Milwaukee, Wis. Mineral paints, pigments, and oxides.	23,361	July 11	64	293
A. & F. Pears, Limited, London, England. Certain named toilet articles and preparations.	22,843	Apr. 18	63	461
A. G. Spalding & Bros., New York, N. Y. Bicycles and their parts.	22,754	Apr. 4	63	150
A. G. Spalding & Bros., New York, N. Y. Bicycles and their parts.	22,755	Apr. 4	63	150
Abadie & Company, Paris, France. Cigarette-paper.	23,306	July 4	64	154
Abegg & Rusch, New York, N. Y. Carpets.	22,278	Jan. 3	62	156
Abbott Cylinder Oil Company, Jersey City, N. J. Lubricating-oils.	23,289	July 4	64	151
Ackley, Griffin S. (See Manners, Downing, and Ackley.)				
Acme Harvester Company, Pekin, Ill. Grain-headers.	23,476	Aug. 8	64	856
Adams, Bryant K., Point Deluce, Ark. Condition powders for sick animals.	22,993	May 9	63	907
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mülhausen, Germany, and Bel- fort and Paris, France. Cotton, linen, silk, woolen, and hair yarns and thread.	22,384	Jan. 31	62	738
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mülhausen, Germany, and Bel- fort and Paris, France. Cotton, linen, silk, woolen, and hair yarns and thread.	22,385	Jan. 31	62	738
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mülhausen, Germany, and Bel- fort and Paris, France. Cotton, linen, silk, woolen, and hair yarns and thread.	22,386	Jan. 31	62	738
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mülhausen, Germany, and Bel- fort and Paris, France. Cotton, linen, silk, woolen, and hair yarns and thread.	22,387	Jan. 31	62	738
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mülhausen, Germany, and Bel- fort and Paris, France. Cotton, linen, silk, woolen, and hair yarns and thread.	22,388	Jan. 31	62	738
Aktieselskabet Aalborg Portland-Cement-Fabrik, Aalborg, Denmark. Portland cement.	22,278	June 27	63	1959
Alber, George, Lansingburg, N. Y. Bread.	22,432	Feb. 7	62	896
Albert Dickinson Company, Chicago, Ill. Shelled pop-corn.	22,343	Jan. 17	62	447
Albert Dickinson Company, Chicago, Ill. Shelled pop-corn.	22,250	June 27	63	1957
Albert Dickinson Company, Chicago, Ill. Farm or agricultural seeds.	23,347	July 11	64	296
Albertson, William R., Worcester, Mass. Blacking and burnishing compounds for boots and shoes.	23,143	May 30	63	1379
Alexander, Lawrence, St. Augustine, Fla. Liver-powders.	23,750	Oct. 24	65	596
Allaire, Woodward & Company, Peoria, Ill. Cathartics.	22,571	Feb. 28	62	1350
Allaire, Woodward & Company, Peoria, Ill. Medicinal tonic.	22,683	Mar. 21	62	1818
Allen, Bradley & Co., Boston, Mass. Lubricating-oils.	22,565	Feb. 23	62	1349
Allen & Co., Thos., New York, N. Y. Whisky, brandy, gin, rum, sherry, port, madeira, and liqueurs.	23,169	June 6	63	1527
Allen, Drew B., New York, N. Y. Remedy for nervous disorders.	23,758	Nov. 7	65	890
Allen, Field & Lawrence, Boston, Mass. Glove-grain leather.	23,336	July 11	64	295
Allen, Horace R., Indianapolis, Ind. Printed publications treating on orthopedic surgery.	23,939	Dec. 19	65	1914
Altman, William F., Hartford, Conn. Compound for hardening and tempering steel.	22,657	Mar. 14	62	1649
Alton Manufacturing Company, Chicago, Ill. Toys.	22,900	May 2	63	753
Amalga Soap Company, Brooklyn, N. Y. Toilet and laundry soap.	22,691	Mar. 21	62	1819
American Biscuit and Manufacturing Company, Chicago, Ill. Certain named bakers' products and confectionery.	23,552	Aug. 29	64	1261
American Buttonhole, Overseaming and Sewing Machine Company, Philadelphia, Pa. Sewing-ma- chines and attachments.	23,161	May 30	63	1380
American Chemical Company, Minneapolis, Minn. Plastic soap or cleaning compound.	22,469	Feb. 14	62	1061
American Cotton Oil Company, New York, N. Y. Cotton-seed oils for mechanical and for food pur- poses.	23,776	Oct. 31	65	750
American Powder Mills, Boston, Mass. Sporting-gunpowder.	23,458	Aug. 8	64	854
American Screw Company, Providence, R. I. Screws, bolts, nuts, rivets, burrs, washers, wire nails, and kindred articles.	22,709	Mar. 28	62	1962
American Shaft Holder Co., Wabash, Ind. Antirattlers for thill-couplings.	23,856	Nov. 21	65	1220
American Shearer Manufacturing Company, Nashua, N. H. Hair-clippers.	23,733	Oct. 24	65	595
American Tobacco Company, Newark, N. J., and New York, N. Y. Tobacco, cigars, and cigar- ettes, cheroots, and snuff.	23,133	May 30	63	1378
American Tobacco Company, Newark, N. J., and New York, N. Y. Cigarettes.	23,580	Sept. 5	64	1392
American Tobacco Company, Newark, N. J., and New York, N. Y. Cigarettes.	23,581	Sept. 5	64	1392
American Tobacco Company, Newark, N. J., and New York, N. Y. Cigarettes.	23,602	Sept. 12	64	1531
American Tobacco Company, Newark, N. J., and New York, N. Y. Cigarettes.	23,740	Oct. 24	65	595
American Waltham Watch Company, Boston and Waltham, Mass., and New York, N. Y. Watches and their parts.	22,276	Jan. 3	62	156
American Waltham Watch Company, Boston and Waltham, Mass., and New York, N. Y. Watches and parts thereof.	22,859	Apr. 25	63	606
American Water Purifying Company, Portland, Me., Worcester, Mass., and New York, N. Y. Port- able still and water-condenser for the distillation of pure water.	22,300	Jan. 3	62	158
American Wringer Company, Providence, R. I. Clothes-wringers.	23,635	Sept. 19	64	1948
American Wringer Company, Providence, R. I. Clothes wringers and driers.	23,636	Sept. 19	64	1648
American Wringer Company, Providence, R. I., New York and Auburn, N. Y. Wringers.	23,011	May 9	63	908
Amieux & Cie, M., Chantenay-les-Nantes, France. Sardines.	23,739	Oct. 24	65	595
"Amines" Syndicate, Limited, London, England. Disinfectant and sterilizing compounds.	22,789	Apr. 11	63	309
Amoskeag Manufacturing Company, Manchester, N. H. Cotton fabrics.	22,817	Apr. 18	63	459
Amoskeag Manufacturing Company, Manchester, N. H. Cotton fabrics.	22,902	May 2	63	753
Anglo-American Provision Company, Chicago, Ill. Substitute for lard.	22,537	Feb. 28	62	1348
Anglo-American Provision Company, Chicago, Ill. Lard.	22,705	Mar. 28	62	1961
Anglo-American Provision Company, Chicago, Ill. Lard.	22,706	Mar. 28	62	1961
Anglo-American Provision Company, Chicago, Ill. Lard.	22,796	Apr. 11	63	309
Anglo-American Provision Company, Chicago, Ill. Lard.	23,526	Aug. 22	64	1128
Anglo-American Provision Company, Chicago, Ill. Substitute for lard.	23,527	Aug. 22	64	1128
Anti-Poison Medicine Company, Springfield, Mo. Antidote for poison and remedies for blood and liver diseases.	22,994	May 9	63	907

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Aparicio & Co., J., New York, N. Y. Coffee	22,635	Mar. 14	62	1647
Appleton, Ruel E., New York, N. Y. Stays or corsets	22,485	Feb. 21	62	1203
Arcand Brothers, Montreal, Canada. Hygienic coffee	23,768	Oct. 31	65	749
Archer, Daniel W., Blair, Nebr. Canned corn, fruits, and vegetables	23,679	Oct. 3	65	132
Archer, Daniel W., Blair, Nebr. Canned vegetables and fruits	23,905	Dec. 5	65	1590
Armitage, James, G. C. and A. Herschell, North Tonawanda, N. Y. Portable steam riding-galleries or merry-go-rounds	22,756	Apr. 4	63	150
Armour & Co., Chicago, Ill. Substitute for lard and butter	23,291	July 4	64	151
Army and Navy Register Publishing Company, Washington, D. C. Newspapers	22,896	May 2	63	753
Arnold Print Works, North Adams, Mass. Prints and cotton piece goods	23,020	May 16	63	1054
Arnold Print Works, North Adams, Mass. Printed and dyed fabrics	23,021	May 16	63	1054
Arnold Print Works, North Adams, Mass. Satins, prints, and cotton piece goods	23,071	May 23	63	1197
Art Stove Company, Detroit, Mich. Stoves and ranges	22,958	May 2	63	758
As-Ker-Shaw Manufacturing Company, Oakland, Cal., and Buffalo, N. Y. Ointment	23,488	Aug. 15	64	1003
Athlophoros Company, New Haven, Conn. Medicinal plasters	23,145	May 30	63	1379
Athlophoros Company, New Haven, Conn. Lotion for external use as a cosmetic, dentifrice, hair-tonic, and remedy for skin diseases, &c.	23,146	May 30	63	1379
Atlas Tack Corporation, Boston, Mass. Nails	22,855	Apr. 18	63	462
Atlas Tack Corporation, Boston, Mass. Tacks	23,102	May 23	63	1200
Avery Lactart Company, Boston, Mass. Flavoring extracts and compositions for flavoring purposes	23,000	May 9	63	907
Ayling Brothers, Chicago, Ill. Stove-polish	23,725	Oct. 17	65	439
B. Cohen & Son, New York, N. Y. Ladies' carriage-boots	23,327	July 11	64	295
Babcock & Wilcox Company, Elizabethport, N. J., and New York, N. Y. Steam-generators	23,692	Oct. 10	65	293
Baer Brothers, Cleveland, Ohio. Cigars, stogies, cheroots, and cigarettes, and smoking and chewing tobacco	23,198	June 13	63	1684
Baerter & Meyerstein, New York, N. Y. Portland and other stone cements	22,790	Apr. 11	63	309
Bagley Dandelion Compound Company, St. Johnsbury, Vt. Tonics and blood-purifiers	23,532	Aug. 22	64	1128
Bailey & Co., F. O., Portland, Me. Harness for horses and other draft animals	23,186	June 6	63	1528
Bailey & Co., John T., Philadelphia, Pa. Burlaps	23,671	Mar. 21	62	1817
Bailey & Co., John T., Philadelphia, Pa. Burlaps and buckram	22,672	Mar. 21	62	1817
Bailey & Co., John T., Philadelphia, Pa. Binder-twine	22,673	Mar. 21	62	1817
Bailey & Co., John T., Philadelphia, Pa. Burlaps and buckram	22,963	May 9	63	906
Bailey & Co., John T., Philadelphia, Pa. Burlaps and buckram	22,984	May 9	63	906
Bailey & Co., John T., Philadelphia, Pa. Burlaps	22,985	May 9	63	906
Bailey & Co., John T., Philadelphia, Pa. Burlaps	22,986	May 9	63	906
Bailey, Josiah S., Bonham, Texas. Tonic medicine	23,717	Oct. 17	65	439
Baird, Thomas E. and W. V., Toledo, Ohio. Cleansing mixture for horses and other animals	23,359	July 11	64	298
Baird, William V. (See Baird, Thomas E. and W. V.)				
Baiter, Jacob P., New York, N. Y. Whisky	22,769	Apr. 11	63	307
Baiter, Jacob P., New York, N. Y. Whisky	22,770	Apr. 11	63	307
Baker Castor Oil Company, Jersey City, N. J., and New York, N. Y. Castor-oil	23,895	Dec. 5	65	1589
Baker Castor Oil Company, Jersey City, N. J., and New York, N. Y. Castor-oil	23,896	Dec. 5	65	1589
Barker & Co., J. H., New York, N. Y. Chocolate for use in beverages, ice-cream, cakes, and the like	23,790	Nov. 7	65	890
Baldauf & Co., Geo. L., Milwaukee, Wis. Salve	22,446	Feb. 7	62	897
Baldwin & Nalley, Appleton City, Mo. Salves and ointments	23,097	May 23	63	1199
Ball & Cheyne Company, New York, N. Y. Prune-juice	22,429	Feb. 7	62	896
Bamford, George, Sacramento, Cal. Medicines for internal and external use	22,882	Apr. 25	63	608
Banaszynski, Joseph C., Milwaukee, Wis. Medicines for coughs, colds, rheumatism, sprains, bruises, and healing purposes	22,836	Apr. 18	63	460
Barber, Amzi L., New York, N. Y. Asphaltum	22,954	May 2	63	757
Bartels Manufacturing Co., Milwaukee, Wis. Liniments, hair restoratives and removers, medicated soap, and embrocations	23,092	May 23	63	1199
Bartles, George S., Caribou, Colo. Remedies for cholera morbus and similar diseases	23,702	Oct. 10	65	294
Bartholomay Brewery Company, Rochester, N. Y. Lager-beer	22,825	Apr. 18	63	459
Bartholomay Brewery Company, Rochester, N. Y. Lager-beer	23,039	May 16	63	1056
Bartholomay Brewery Company, Rochester, N. Y. Lager-beer	23,209	June 13	63	1685
Bassett, Charles E., Pennsville, N. J. Canned fruit and vegetables	23,431	Aug. 1	64	710
Batchelder, Edward S., Springfield, Mass. Blood-purifying medicine	23,469	Aug. 8	64	855
Batchelder & Lincoln, Boston, Mass. Leather-dressing	23,374	July 18	64	435
Batcheller, George E. (See Langdon and Batcheller.)				
Bate, Newton, and H. C. Enos, Cleveland, Ohio. Chewing-gum	22,592	Mar. 7	62	1507
Bates, Thomas H., Fresno, Cal. Cosmetics	22,541	Feb. 28	62	1348
Batterson, William T., Springfield, Ohio. Syphilitic specifics	23,151	May 30	63	1379
Bauer, Anton, Constance, Germany. Lager-beer	23,287	Jan. 3	62	157
Baxter, Stoner & Schenkelberger, Boston, Mass. Cut-leather boot and shoe bottom stock	23,337	July 11	64	296
Bay State Belting Company, Boston, Mass. Belt and lace leather	23,185	June 6	63	1528
Beadleston & Woerz, New York, N. Y. Beer and ale	22,322	Jan. 10	62	313
Beadleston & Woerz, New York, N. Y. Bottled lager-beer	22,604	Mar. 7	62	1508
Beadleston & Woerz, New York, N. Y. Draft lager-beer	22,605	Mar. 7	62	1508
Beals, Edward M., New York, N. Y. Medicine to prevent leanness	22,881	Apr. 25	63	608
Beals, Edward M., New York, N. Y. Certain named remedies	23,821	Nov. 14	65	1063
Becker, Ulrich W., Stapleton, N. Y. Healing-powders	23,584	Sept. 5	64	1393
Beecher, Henry W., Winsted, Conn. Certain named remedies	23,851	Nov. 21	65	1320
Bell, George. (See Rand and Bell.)				
Bell, Thomas H., W. T. Dickinson, and N. A. Pollock, Cleveland, Ohio. Engraving-plates for making relief-cuts	22,660	Mar. 14	62	1649
Benger Soehne, Wilhelm, Stuttgart, Germany. Underwear	22,488	Feb. 21	62	1203
Benger Soehne, Wilhelm, Stuttgart, Germany. Underwear	22,520	Feb. 28	62	1346
Benger Soehne, Wilhelm, Stuttgart, Germany. Knit underwear	23,654	Oct. 10	65	293
Benger Soehne, Wilhelm, Stuttgart, Germany. Knit underwear	23,685	Oct. 10	65	293
Bengtson, Edward, Chicago, Ill. Washing-powder	21,918	Dec. 12	65	1764
Benjamin & Co., Alfred, New York, N. Y. Overcoats	23,454	Aug. 8	64	854
Benson, George P., New Orleans, La. Salve	23,232	June 20	63	1813
Beniz & Sons, George, St. Paul, Minn. Whisky	23,744	Oct. 24	65	596
Beniz & Sons, George, St. Paul, Minn. Whisky	23,745	Oct. 24	65	596
Bergfelds, William H., Newark, N. J. Medicinal inhaler in the form of a bottle provided with tubes	22,371	Jan. 24	62	585
Bernheim Bros., Louisville, Ky. Whisky	23,913	Dec. 12	65	1763
Bernheimer Bros., Baltimore, Md. Toilet, shaving, and laundry soaps	22,842	Apr. 18	63	461
Berninger Bros., Allentown, Pa. Cigars	23,741	Oct. 24	65	596
Berry Brothers, Limited, Detroit, Mich. Varnish	22,894	Apr. 25	63	610
Bethesda Mineral Spring Company, Waukesha, Wis. Carbonated and natural mineral water and ginger ale	22,405	Jan. 31	62	710

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Bettes, Albert O., Holden, Mo. Compound for polishing metal	22,788	Apr. 11	63	309
Betts, Arlington U., Toledo, Ohio. Certain named rubber goods	22,674	Mar. 21	62	1817
Bjgbie Bros. & Co., Lynchburg, Va. Whisky	22,529	Feb. 28	62	1347
Bird & Co., Wm. M., Charleston, S. C. Illuminating-oil	23,946	Dec. 26	65	2058
Bird & Son, F. W., Walpole, Mass. Waterproof papers	22,490	Feb. 21	62	1203
Bird & Son, F. W., Walpole, Mass. Waterproof paper	22,516	Feb. 28	62	1346
Bissell Carpet Sweeper Company, Grand Rapids, Mich. Clothes-wringers	23,054	May 16	63	1057
Black Manufacturing Company, Erie, Pa. Bicycles and tricycles and parts thereof	22,324	July 4	64	154
Blackstone, Moses, Annapolis, Md. Liniment for the cure of rheumatism	22,307	Jan. 10	62	312
Blackmore, James E., Newark, N. J. Optical instruments	22,860	Apr. 25	63	606
Blanc, Frederic N., New York, N. Y. Polishing preparation for silk hats	22,555	Feb. 22	62	1349
Blanchard, Charles M., Philadelphia, Pa. Honey	22,290	Jan. 3	62	156
Blau, Charles, Burlington, Iowa. Tea, coffee, and spices	23,001	May 9	63	907
Bleyer & Co., D. L., New York, N. Y. Whisky	22,641	Mar. 14	62	1648
Bliss Syrup Refining Company, Kansas City, Mo. Sirup	23,046	May 16	63	1057
Bliss Syrup Refining Company, Kansas City, Mo. Sorghum	23,085	May 23	63	1199
Bliss Syrup Refining Company, Kansas City, Mo. Maple-sirup	23,767	Oct. 31	65	749
Blondeau et Cie., London, England, and New York, N. Y. Perfumery, toilet soaps, and cosmetics	23,283	July 4	64	151
Blondeau et Cie., London, England, and New York, N. Y. Perfumery, toilet soaps, and cosmetics	23,284	July 4	64	151
Blood & Co., John, Philadelphia, Pa. Hosiery	23,426	Aug. 1	64	709
Blooker, Dirk. (See Blooker, Johannes and D.)				
Blooker, Johannes and D., Amsterdam, Netherlands. Prepared cocoa and cocoa butter	23,807	Nov. 14	65	1062
Blumenberg, Jean R., St. Louis, Mo. Medicinal mixture for certain named diseases	23,924	Dec. 12	65	1764
Blumenthal, Sigmund, New York, N. Y. Harmonicas	23,888	Dec. 5	65	1589
Bohemian Brewing Company of Chicago, Chicago, Ill. Lager-beer	23,040	May 16	63	1056
Boies Steel Wheel Company, Scranton, Pa. Car and locomotive wheels	22,802	Apr. 11	63	310
Bond, John, Lexington, Ky. Whisky	22,929	May 9	63	907
Bordeaux Prune Company, Louisville, Ky. Laxative	23,214	June 13	63	1685
Bortree Manufacturing Company, Jackson, Mich. Corsets	23,938	Dec. 19	65	1914
Boss & Hoover Co., Elkhart, Ind. Chewing-gum	22,305	Jan. 10	62	312
Boss & Hoover Company, Elkhart, Ind. Chewing-gum	22,726	Apr. 4	63	147
Boston Woven Hose and Rubber Company, Boston, Mass. Rubber and textile hose and belting	23,598	Sept. 12	64	1530
Botany Worsted Mills, Passaic, N. J., and New York, N. Y. Woolen dress goods	23,936	Dec. 19	65	1913
Boulanger, Emil, St. Louis, Mo. Drum heads, strings, and materials	22,585	Mar. 7	62	1506
Bowler, David A., Cowansville, Canada. Lotions for remedial purposes	22,646	Mar. 14	62	1648
Boyce, Arthur, St. Louis, Mo. Steam and hot-water boilers	22,963	May 2	63	758
Bradt, Peter P., Worcester, Mass. Medicine for the cure of liver and kidney diseases	23,933	Dec. 19	65	1913
Brahma Medicine Company, Limited, Pittsburg, Pa. Medicine for the cure of rheumatism	22,306	Jan. 10	62	312
Brainerd & Armstrong Company, New York, N. Y., Philadelphia, Pa., and Boston, Mass. Sewing, knitting, and embroidery silk threads and silk fabrics	22,694	Mar. 21	62	1819
Brand Stove Company, (Limited,) Milwaukee, Wis. Cooking stoves and ranges and heating stoves	22,757	Apr. 4	63	150
Breidenbach & Marshall, Dayton, Ohio. Toilet preparations	22,758	Apr. 11	63	306
Bridgeport Brass Company, Bridgeport, Conn., and New York, N. Y. Lamps and lamp-burners	22,693	Mar. 21	62	1819
Brigham, Arthur A., Boston, Mass. Cones for receiving masses of yarn or thread wound thereon	22,450	Feb. 7	62	898
Brizard & Roger, M. B., Glotin, Achard & Glotin, Les Héritiers de Marie, Bordeaux, France. Orange bitters	22,922	May 2	63	755
Brizard & Roger, M. B., Glotin, Achard & Glotin, Les Héritiers de Marie, Bordeaux, France. Liqueur crème de cacao-chouao à la vanille	22,924	May 2	63	755
Brizard & Roger, M. B., Glotin, Achard & Glotin, Les Héritiers de Marie, Bordeaux, France. Brandy	22,926	May 2	63	755
Brizard & Roger, M. B., Glotin, Achard & Glotin, Les Héritiers de Marie, Bordeaux, France. Brandy	22,927	May 2	63	755
Brookbank & Mellor, Liverpool, England. Fermented and spirituous liquors	22,501	Feb. 21	62	1204
Broderick, John F., St. Paul, Minn. Medicinal whisky for lung diseases and debility	23,746	Oct. 24	65	596
Brooks, Franklin. (See Munsell, Kingsley, and Brooks.)				
Brossault & Co., Bordeaux, France. Wines	22,349	Jan. 17	62	448
Brossault & Co., Bordeaux, France. Cognac brandy	22,366	Jan. 24	62	585
Brossault & Co., Bordeaux, France. Bordeaux wine	22,426	Feb. 7	62	895
Brossault & Co., Bordeaux, France. Brandy	22,462	Feb. 14	62	1062
Brown & Co., B. F., Boston, Mass. Boot and shoe dressing	22,890	Apr. 25	63	609
Brown, Durrell & Co., Boston, Mass. Knit underwear	23,863	Nov. 28	65	1401
Brown, Maxwell D., Glasgow, Scotland. Proprietary medicine for the cure of nervous diseases	22,995	May 9	63	907
Brown & Sharpe Manufacturing Company, Providence, R. I. Hair-clippers	23,726	Oct. 17	65	440
Brown, William T., Winston, N. C. Chewing and smoking tobacco	23,916	Dec. 12	65	1764
Brunning, Charles E., Indianapolis, Ind. Certain named medicines	23,658	Sept. 26	64	1788
Brunswick-Balke-Collender Company, Chicago, Ill. Billiard-tables	23,238	June 20	63	1814
Brussels Tapestry Company, Chaucey and New York, N. Y. Woven woolen fabrics used mainly for shades for vehicle-windows	23,340	July 11	64	296
Brussels Tapestry Company, Chaucey and New York, N. Y. Woven woolen fabrics used mainly for shades for vehicle-windows	23,341	July 11	64	296
Bryan, Miner & Read, New Haven, Conn. Wheat-flour	22,358	Jan. 24	62	581
Bryden Horse Shoe Company, Catsauqua, Pa. Animal-shoes	22,964	May 2	63	758
Buchanan, James, London, England, and Leith and Glasgow, Scotland. Whisky	23,743	Oct. 24	65	596
Buchanan, Robert J., Pittsburg, Pa. Publications	22,457	Feb. 14	62	1060
Buck, Charles, Millbury, Mass. Chisels, gouges, plane-irons, and hand-tools for carpenters, builders, and woodworkers	23,105	May 23	63	1200
Buck, George N., Mattoon, Ill. Certain garment supporters	23,452	Aug. 8	64	854
Buck, George N., Mattoon, Ill. Certain garment-supporters	23,453	Aug. 8	64	854
Budde, Gustav, Radevormwald, Germany. Cordials	23,718	Oct. 17	65	439
Buker Pill Company, Bangor, Me. Remedies for diseases of the kidneys, bladder, and urinary organs	23,439	Aug. 1	64	710
Buning, Frederick W., New York, N. Y. Lamp-chimneys	23,218	June 13	63	1686
Burger, Adam, Toledo, Ohio. Liniment	23,366	July 18	64	434
Birk Brothers, Philadelphia, Pa. Calf, kid, and goat skins	23,226	June 20	63	1813
Birkhardt Brewing Co., Boston, Mass. Ale and lager-beer	22,987	May 9	63	906
Borlingham, Charles S., Baltimore Md. Wood pumps	22,664	Mar. 14	62	1650
Burns, Peter C., Peru, Ind. Open-circuit electric battery	23,219	June 13	63	1686
Burns, Peter C., Peru, Ind. Open-circuit electric battery	23,220	June 13	63	1686
Burroughs, Louisa I., Bismarck, Ark. Soap	23,818	Nov. 14	65	1063
Butler & Clarridge, Washington, D. C. Remedies for rheumatism, gout, neuralgia, sciatica, and kindred ailments	23,797	Nov. 7	65	890
Butler, James, New York, N. Y. Tea	23,941	Dec. 19	65	1914
Butler, James, New York, N. Y. Coffee	23,944	Dec. 26	65	2058
Butts, Edward A., Washington, D. C. Headache remedy and tonic	22,929	May 2	63	755
Butts, Edward A., Washington, D. C. Headache cures	23,147	May 30	63	1379
Byck Bros., New York, N. Y. Overcoats	23,753	Oct. 31	65	748

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Byck Bros., New York, N. Y. Overcoats	23,754	Oct. 31	65	748
Bye, David M., Kansas City, Kans. Medicated oils	23,099	May 23	63	1200
Byrne, Lee M., Kansas City, Mo. Blood-purifier and remedy for gonorrhea and gleet	23,354	July 11	64	297
C. A. Taylor Trunk Works, Chicago, Ill., and New York, N. Y. Professional, theatrical, and commercial travelers' trunks	23,221	June 13	63	1686
C. G. Clark Company, New Haven, Conn. Remedies for worms, coughs, catarrh, and dyspepsia, and a liniment	23,714	Oct. 17	65	438
C. W. Hunt Company, New York, N. Y. Dressing or filling for rope	22,344	Jan. 17	62	447
C. W. Hunt Company, New York, N. Y. Railway iron, switches, frogs, and car wheels and trucks	22,893	Apr. 25	63	609
C. W. Hunt Company, New York, N. Y. Rails, switches, metal cars, wheels, and trucks	22,959	May 2	63	752
Ceballos & Co., J. M., New York, N. Y. Lard	23,738	Oct. 24	65	595
Ceballos & Co., J. M., New York, N. Y. Lard	23,912	Dec. 12	65	1763
Cabana, Oliver, Jr., Buffalo, N. Y. Glue for mending china, glass, leather, &c.	23,406	July 25	64	557
Cabot, Samuel, Boston, Mass. Builders' sheathing, packing, or filling paper	23,778	Oct. 31	65	750
Caffe, Adèle M., New York, N. Y., and Paris, France. Olive oil, French peas, mushrooms, haricots verts, flageolets, macedoines, truffes, sardines, prunes d'ente, and similar articles	22,677	Mar. 21	62	1818
Caffe, Adèle M., New York, N. Y., and Paris, France. Macaroni, vermicelli, egg-noodles, and similar compounds	22,677	Mar. 21	62	1818
California Vintage Company, New York, N. Y. California wines and liquors	22,606	Mar. 7	62	1508
Callahan, Cornelius, Canton, Mass. Rubber-lined hose	23,428	Aug. 1	64	709
Cameron, Ella V., New York, N. Y. Certain named proprietary remedies	22,996	May 9	63	907
Campbell, David, and J. F. Harris, De Kalb, Ill. Medicine for hog-cholera	22,787	Apr. 11	63	308
Carleton & Co., Malden, Mass. Chewing-gum	22,357	Jan. 24	62	584
Carlisle, Robert, Cincinnati, Ohio. Water-closets and urinals	23,638	Sept. 19	64	1648
Carnrick & Company, Limited, London, England. Oxidized oil for inhalation purposes	23,095	May 23	63	1200
Carpenter, William D., Chicago, Ill. Food for horses, cattle, sheep, swine, and fowl	23,235	June 20	63	1814
Carpenter, William D., Chicago, Ill. Food for horses, cattle, sheep, swine, and fowl	23,236	June 20	63	1814
Carpenter, William D., Chicago, Ill. Food for horses, cattle, sheep, swine, and fowl	23,237	June 20	63	1814
Carpenter, William D., Chicago, Ill. Foods for horses, cattle, sheep, swine, and fowl	23,529	Aug. 22	64	1128
Carter & Churchill, Lebanon, N. H., and Boston, Mass. Men's overalls and colored and white shirts	23,423	Aug. 1	64	709
Cascaden, Thomas, Jr., Waterloo, Iowa. Caldron-furnaces or agricultural boilers	22,961	May 2	63	758
Case Brothers, Highland Park, Conn. Moth-proof fabric	22,822	Apr. 18	63	459
Cash Buyers' Union, Chicago, Ill. Sewing-machines	22,353	Jan. 17	62	448
Cassetty Oil Company, Nashville, Tenn. Axle-grease for vehicles	23,360	July 11	64	298
Central Cycle Manufacturing Company, Indianapolis, Ind. Bicycles and sulkies	23,162	May 30	63	1380
Century Manufacturing Company, Warren, Pa. Catarrh cure	22,348	Jan. 17	62	447
Chadwick Lead Works, Boston, Mass. Lead	23,511	Aug. 15	64	1004
Chambers, Bro. & Co., Detroit, Mich. Suspensories	22,491	Feb. 21	62	1203
Chambers Glass Company, New Kensington, Pa. Sheet-glass known as picture, window, coffin, car, coach, store, and show-case glass	22,324	Jan. 10	62	314
Chapman, John M., New York, N. Y. Chocolate	22,389	Jan. 31	62	738
Chapman, John M., New York, N. Y. Canned and preserved fish	23,370	July 18	64	434
Chas. Munson Belting Company, Chicago, Ill., Pittsburg, Pa., New York, N. Y., and San Francisco, Cal. Leather belting	23,779	Nov. 7	65	889
Chase & Sanborn, Boston, Mass. Teas and coffees	22,827	Apr. 18	63	460
Chattanooga Brewing Company, Chattanooga, Tenn. Lager-beer	22,680	Mar. 21	62	1818
Chemische Fabrik auf Actien, vormals E. Schering, Berlin, Germany. Therapeutic remedies	23,533	Aug. 22	64	1128
Chemische Fabrik auf Actien, vormals E. Schering, Berlin, Germany. Germicides, disinfectants, and other deodorizing preparations	23,629	Sept. 19	64	1647
Chemische Fabrik, vormals Hofmann & Schoetensack, Ludwigshafen-on-the-Rhine, Germany. Remedies for diarrhea and gouty rheumatism	23,927	Dec. 19	69	1913
Cheney, Frank J., Toledo, Ohio. Pills	23,950	Dec. 26	65	2058
Chester, George T., Buffalo, N. Y. Flour	22,534	Feb. 28	62	1347
Chicago Sewing Machine Company, Chicago, Ill. Sewing-machines	22,662	Mar. 14	62	1650
Chicago Varnish Company, Chicago, Ill. Varnishes, stains, driers, japans, and kindred goods	22,394	Jan. 31	62	739
Chicago Varnish Company, Chicago, Ill. Paints, varnishes, stains, driers, japans, and kindred goods	22,395	Jan. 31	62	739
Chickasaw Saddlery Company, Memphis, Tenn. Saddles, harness, robes, blankets, horse-clothing, and like goods	23,053	May 16	63	1057
Chrisman, Burko, Harrisonburg, Va. Mineral water	23,742	Oct. 24	65	596
Christian Feigenspan, Newark, N. J. Ale	22,498	Feb. 21	62	1204
Christian Union Company, New York, N. Y. Printed publications and periodicals	22,338	Jan. 17	62	447
Christy Knife Company, Fremont, Ohio. Knives, scissors, pocket implements and tools, and the like	23,501	Aug. 15	64	1004
Clark, Ralph B., Anderson, Ind. Metal-polish for gold, silver, nickel, brass, copper, zinc, and tin	23,920	Dec. 12	65	1764
Clark, Robert I., London, England. Varnish	23,860	Nov. 21	65	1820
Clark, William, Montreal, Canada. Milk product in the form of a prepared food for invalids and infants	23,252	June 27	63	1957
Clark's Son & Co., William, Pittsburg, Pa. Cotton-bale ties	22,590	Mar. 7	62	1507
Cleensor Manufacturing Co., New York, N. Y. Cleanser for white gloves and shoes and white goods of all descriptions	23,519	Aug. 22	64	1127
Cleveland & Co., Wm. D., Houston, Galveston, and Velasco, Tex. Canned fruit, oysters, vegetables, and fish	22,831	Apr. 18	63	460
Cleveland & Co., Wm. D., Houston, Galveston, and Velasco, Tex. Condensed milk	23,165	June 6	63	1527
Cleveland & Co., Wm. D., Houston, Galveston, and Velasco, Tex. Baking-powder	23,166	June 6	63	1527
Cleveland Linseed Oil Company, Cleveland, Ohio. Fodder for animals	23,263	June 27	63	1958
Cleveland Linseed Oil Company, Cleveland, Ohio. Fertilizers	23,279	June 27	63	1959
Cleveland Linseed Oil Company, Cleveland, Ohio. Fertilizers	23,633	Sept. 19	64	1648
Cleveland Pill Company, New York, N. Y. Certain pills and wafers	23,095	May 23	63	1199
Clinton Wire Cloth Company, Clinton, Mass. Wire-netting and wire-cloth	22,524	Feb. 28	62	1347
Clover Leaf Wine Co., New York, N. Y. Whisky, wines, champagnes, and liquors	22,866	Apr. 25	63	606
Cockley, Walter L., Fort Sheridan, Ill. Remedy for bronchial diseases	22,346	Jan. 17	62	447
Coburn & Co., George M., Boston, Mass. Children's boots and shoes	22,814	Apr. 18	63	458
Coca Cola Company, Atlanta, Ga. Nutrient or tonic beverages	22,406	Jan. 31	62	740
Cody-Powell Coffee Company, La Crosse, Wis. Composition coffee	23,868	Nov. 28	65	1401
Cogan & Son, P., Stoneham, Mass. School shoes	22,815	Apr. 18	63	458
Coleman & Company, Limited, Norwich, England. Liquid prepared food for medicinal purposes	23,437	Aug. 1	64	710
Colgate & Co., New York, N. Y. Soap, perfumery, and toilet preparations	22,546	Feb. 28	62	1348
Colgate & Co., New York, N. Y. Soap, perfumery, and toilet preparations	22,547	Feb. 28	62	1348
Colgate & Co., New York, N. Y. Soap, perfumery, and toilet preparations	22,548	Feb. 28	62	1348
Colgate & Co., New York, N. Y. Toilet soap	23,632	Sept. 19	64	1647
Collins, Lydia M., Philadelphia, Pa. Remedy for chills and fever	22,347	Jan. 17	62	447
Columbian Chemical Co., Marshalltown, Iowa. Dandruff cure	22,936	May 2	63	756
Concord Axle Company, Penacook, N. H. Wagon and carriage axles	23,691	Oct. 10	65	293

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Condensed Coffee Company, Jersey City, N. J., and New York, N. Y. Condensed coffee	22,590	Mar. 7	62	1507
Conity, James, New York, N. Y. Cocks and faucets	23,191	June 6	63	1528
Connecticut Lake Stone Company, Pittsburg, N. H. Scythe-stones	23,801	Nov. 7	65	890
Connor & Co., E., New York, N. Y. Irish frieze and cheviot cloths	23,922	Dec. 12	65	1764
Conrad Seipp Brewing Company, Chicago, Ill. Lager-beer	22,774	Apr. 11	63	307
Conroe, Augustus J., Savannah, N. Y. Laundry bluing	23,446	Aug. 1	64	711
Consolidated Fastener Company, Portland, Me. Buttons, clasps, and spring-fasteners for wearing-apparel and gloves	23,184	June 6	63	1528
Contencin & Son, Louis, New York, N. Y. Oranges and lemons	23,601	Sept. 12	64	1530
Corner, William J., St. Louis, Mo. Cake-yeast	23,392	July 25	64	556
Corning & Co., Peoria Ill. Whisky	23,248	June 27	63	1956
Cotton, Cyrus L., Earlville, N. Y. Perfumery	23,285	July 4	64	151
Cotton, Cyrus L., Earlville, N. Y. Perfumery	23,286	July 4	64	151
Cowen & Co., Joseph, Blaydon-on-Tyne, England. Bricks, retorts, tiles, quarles, pipes, lumps, and other articles made of fire-clay	23,653	Sept. 26	64	1788
Cradock & Co., George, Wakefield, England. Wire rope and chain	23,103	May 23	63	1200
Craemer & Heron, Sonneberg, Germany. Dolls	23,543	Aug. 29	64	1261
Craft, George R. (See Wells and Craft.)				
Crawford, Robert W., Fort Dodge, Iowa, Chicago, Ill., and Louisville, Ky. Whisky	23,915	Dec. 12	65	1763
Crescent Watch Case Company, Newark, N. J. Watchcases	22,382	Jan. 31	62	738
Crescent Watch Case Company, Newark, N. J. Watchcases	22,383	Jan. 31	62	738
Criswell, Francis M., Washington, D. C. Remedy for certain named diseases	22,612	Mar. 7	62	1509
Criswell, Francis M., Washington, D. C. Remedy for certain named diseases	23,154	May 30	63	1380
Criswell, Francis M., Washington, D. C. Remedy for corns, warts, bunions, and callouses	23,775	Oct. 31	65	750
Crolley, Harry W., Cincinnati, Ohio. Preparations for diseases and blemishes of the skin	23,091	May 23	63	1199
Crooks, Samuel S. (See Sharood and Crooks.)				
Crossman & Bro., W. H., New York, N. Y. Curry powder	23,917	Dec. 12	65	1764
Crowell, Rufus, Jr., Boston, Mass. Extract of meat	22,912	May 2	63	754
Crowley, Charles H., New York, N. Y. Gold-eyed needles	23,628	Oct. 10	65	293
Crystal Spring Bottling Company, Barnet, Vt. Soda-water and other carbonated beverages	23,699	Oct. 10	65	294
Culbert & Co., New York, N. Y. Whisky	23,304	July 4	64	153
Cummings, Francis P., Pocahontas, Va. Certain named remedies	23,822	Nov. 14	65	1063
Cura Chemical Co., Springfield, Mo. Remedies for headache, neuralgia, and rheumatism	23,535	Aug. 22	64	1129
Curtis & Spindell, Lynn, Mass. Suspensories of all kinds	23,227	June 20	63	1813
Curtiss, Waldo L., Winsted, Conn. Remedies for rheumatic, venereal, and nervous diseases; and other disorders of the skin and blood	23,749	Oct. 24	65	596
Cyoma Company, Limited, London, England. Liquid medicine for external use	22,678	Mar. 21	62	1819
D. Ritchie & Co., Montreal, Canada. Tobacco, cigars, cigarettes, and cheroots	23,348	July 11	64	297
D. Ritchie & Co., Montreal, Canada. Tobacco, cigars, cigarettes, and cheroots	23,349	July 11	64	297
D'Ormidor & Co., New York, N. Y. Toilet-water	22,311	Jan. 10	62	312
Daisy Roller Mill Company, Milwaukee and Superior, Wis. Wheat-flour	22,535	Feb. 28	62	1347
Daniel, John B., Atlanta, Ga. Remedy for kidney diseases, general debility, and liver troubles	23,434	Aug. 1	64	710
David Bros. & Rose, New York, N. Y. Boys' and children's clothing	23,504	Aug. 15	64	1004
Davis & Galt, Philadelphia, Pa. Jewelry and silverware	22,275	Jan. 3	62	156
Davis, William A., Jr., Macon, Ga. Remedies for toothache, headache, neuralgia, and rheumatism	22,877	Apr. 25	63	608
Davidson, Henry C., New York, N. Y. Copying press, bath, or moistening apparatus	22,810	Apr. 18	63	458
Day, Lyman H., New York, N. Y. Suspenders, belts, shirts, and drawers	23,183	June 6	63	1528
Day, Theodore W. (See Smith and Day.)				
De Bante & Co., L. P., New Orleans, La. Medicinal bitters	22,732	Apr. 4	63	147
De Lissa, Alpha S., Philadelphia, Pa. Whisky, manhattan, and other cocktails	22,679	Mar. 21	62	1818
De Roubaix, Oedenkoven & Co., Borgerhout, near Antwerp, Belgium. Candles, stearine or stearic acid, oleine, and glycerine	23,528	Aug. 22	64	1128
De Tar, Monroe, Kinsley, Kans. Pills	23,028	May 16	63	1055
Decker, William M., Kingston, N. Y. Nursing-bottles	23,734	Oct. 24	65	595
DeLafield, McGovern & Co., New York, N. Y. Canned fish, fruits, and vegetables	23,087	May 23	63	1199
DeLafield, McGovern & Co., New York, N. Y. Canned fish, fruits, and vegetables	23,088	May 23	63	1199
DeLafield, McGovern & Co., New York, N. Y. Canned vegetables, including corn	23,164	June 6	63	1527
Delano, George S., Medford, Mass. Mattresses and mattress-ticks	23,891	Dec. 5	65	1589
Derby Cycle Company, Chicago, Ill. Bicycles	22,801	Apr. 11	63	310
Detroit Fly Paper Company, Detroit, Mich. Adhesive fly-paper	23,225	June 20	63	1813
Dewson & Son, Edward H., Boston, Mass. Leather	23,123	May 30	63	1377
Dayo, John, Newburg, N. Y. Lubricating compounds	22,850	Apr. 18	63	462
Diamond Aristotype Co., Jamestown, N. Y. Artists' paper used for photographing	23,180	June 6	63	1528
Dickinson, William T. (See Bell, Dickinson, and Pollock.)				
Diffusible Tonic Company, Sturgis, Mich. Tonic medicine for use in fevers	23,211	June 13	63	1685
Distillers Company, Limited, Edinburgh, Scotland. Whisky	22,771	Apr. 11	63	307
Distilling and Cattle Feeding Company, Peoria, Ill. Compressed yeast	22,596	Mar. 7	62	1507
Dobie, William G., Pittsburg, Pa. Remedies for nervous debility and other named diseases	22,472	Feb. 14	62	1061
Dodge, Joseph S., Lincoln, Vt. Tonic and pills	22,613	Mar. 7	62	1509
Doherty, Patrick, Boston, Mass. Whisky	23,434	Aug. 1	64	710
Domestic Sewing Machine Company, New York, N. Y. Sewing-machines and their attachments	22,327	Jan. 10	62	314
Domestic Sewing Machine Company, New York, N. Y. Sewing-machines and their attachments	22,328	Jan. 10	62	314
Domestic Sewing Machine Company, New York, N. Y. Type-writers and parts thereof	22,624	Mar. 7	62	1510
Domestic Sewing Machine Company, New York, N. Y. Sewing-machines and sewing-machine attachments	23,735	Oct. 24	65	595
Donaldson, Edward A., Galesburg, Ill. Lye and washing-powders	23,634	Sept. 19	64	1648
Dorffinger & Sons, C., White Mills, Pa., and New York, N. Y. Cut glassware	22,761	Apr. 11	63	306
Dorr & Son, Cornelius, Boston, Mass. Wheat-flour	23,429	Aug. 1	64	709
Dorrance, George M., Philadelphia, Pa. Medicinal plasters	22,652	Mar. 14	62	1649
Dort, Elizabeth, Buffalo, N. Y. Salves, liniments, plasters, and bitters	22,444	Feb. 7	62	897
Douds, Byron J., Canton, Ohio. Medicated soap	23,270	June 27	63	1958
Dougall, James L., Oil City, Pa. Shelled pop-corn	23,047	May 16	63	1057
Dowd, Virginia D., Peoria, Ill. Herb tonic	23,352	July 11	64	297
Downing, George H. (See Manners, Downing, and Ackley.)				
Dr. Jaeger's Sanitary Woollen System Co., Limited, London, England. Piece fabrics of wool, worsted, hair, silk, linen, hemp, and cotton	23,196	June 13	63	1684
Dr. Jaeger's Sanitary Woollen System Co., Limited, London, England. All garments worn by men, women, and children	23,477	Aug. 8	64	856
Dreyfuss & Toff, New York, N. Y. Dress-trimmings	23,282	July 4	64	151
Duluth Imperial Mill Company, Duluth, Minn. Wheat-flour	23,695	Oct. 10	65	293
Dunlevy & Bro., Pittsburg, Pa. Cured pork	23,090	May 23	63	1199
Dunwoody Bros., Denver, Colo. Toilet and laundry soap	22,470	Feb. 14	62	1061
Duplex Printing Press Company, Battle Creek, Mich. Perfecting printing-presses	23,192	June 6	63	1528
Dupont & Co., Evriste, Bordeaux, France. Wine, brandy, spirits, and liqueur	22,925	May 2	63	755

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Duret & Co., J. L., Bordeaux, France. Olive-oil.	22,916	May 2	63	754
Duret & Co., J. L., Bordeaux, France. Olive-oil.	22,917	May 2	63	754
Durgin, William B., Concord, N. H. Gold, silver, and plated flat and table ware and jewelry	23,326	July 11	64	295
Durham, James E. (See Stevens and Durham.)				
Dyer & Bro., W. J., St. Paul and Minneapolis, Minn. Guitars, mandolins, banjos, and zithers.	23,193	June 13	63	1684
E. & T. Fairbanks & Company, St. Johnsbury, Vt. Weighing-scales	23,592	Sept. 5	64	1393
E. & T. Fairbanks & Company, St. Johnsbury, Vt. Weighing-scales.	23,593	Sept. 5	64	1393
E. Tosetti Brewing Company, Chicago, Ill. Lager-beer	22,500	Feb. 21	62	1204
Eacrett, William, London, Canada. Game played with a board and pieces of wood or other suitable material.	22,897	May 2	63	753
Eagle Bicycle Manufacturing Company, Torrington, Conn. Bicycles	22,960	May 2	63	758
Eagle Pencil Company, New York, N. Y. Lead-pencils	23,784	Nov. 7	65	889
Eastern Rubber Manufacturing Company, Trenton, N. J., and New York, N. Y. Rubber goods	23,023	May 16	63	1054
Eastman Kodak Company, Rochester, N. Y. Photographic-printing paper	23,065	May 23	63	1197
Eclipse Carbonating Co., St. Louis, Mo. Certain carbonated beverage	22,430	Feb. 7	62	896
Edison & Swan United Electric Light Company, Limited, London, England. Lamps, holders, switches, and appliances for electrical illumination.	23,365	July 11	64	298
Edison United Phonograph Company, New York, N. Y. Phonographs	22,898	May 2	63	753
Edward Heitzberg Packing and Provision Company, St. Louis, Mo. Hams and pork meat.	23,292	July 4	64	152
Edward Miller & Company, Meriden, Conn. Oil-burning lamps	23,008	May 9	63	908
Edward Miller & Company, Meriden, Conn. Oil-burning lamps	23,009	May 9	63	908
Edward Miller & Company, Meriden, Conn. Oil-burning lamps	23,010	May 9	63	908
Egeman, Duguid & Co., Toledo, Ohio. Trunks.	23,549	Aug. 29	64	1261
Ehret-Warren Manufacturing Company, St. Louis, Mo. Tarred felt for roofing purposes.	23,859	Nov. 21	65	1320
Eising & Co., E., New York, N. Y. Whisky	23,305	July 4	64	153
Eisner & Mendelson Company, New York, N. Y. Mineral-spring water	23,520	Aug. 22	64	1127
Electric Cleanser Company, Canton, Ohio. Soap for cleaning carpets, rugs, and similar articles.	23,269	June 27	63	1958
Electric Manufacturing Company, Oconto, Wis. Incandescent electric lamps	22,412	Jan. 31	62	740
Electrical Reminder Company, Chicago, Ill. Alarm-clocks	23,470	Aug. 8	64	855
Electrolibration Company, Birmingham, Ala. Certain electrical instrument employed in the treatment of disease.	22,617	Mar. 7	62	1509
Eli Lilly & Company, Indianapolis, Ind. Preparation for disguising the bitter or disagreeable taste of medicine.	22,609	Mar. 7	62	1508
Eli Lilly & Company, Indianapolis, Ind. Cathartic.	22,650	Mar. 14	62	1649
Eli Lilly & Company, Indianapolis, Ind. Suppositories.	22,786	Apr. 11	63	308
Ellis & Co., Wm. L., Baltimore, Md. Oysters	22,640	Mar. 14	62	1648
Elmendorf, George, Elmira, N. Y. Chewing-gum	22,390	Jan. 31	62	738
Elsworth & Co., Edward, New York and Buffalo, N. Y. Flour, meal, and crushed cereals	23,910	Dec. 12	65	1763
Elton, Maria J., Dublin, Ireland. Medicinal lotion for human and animal use.	23,497	Aug. 15	64	1003
Ely, Caroline S., Champlain, N. Y. Powdered washing compound.	22,744	Apr. 4	63	149
Eman, Charles W., and J. S. Powley, Toronto, Canada. Antiseptic compound for purifying the blood	22,686	Mar. 21	62	1819
Embalmers' Supply Company, Newark, N. J., New York, N. Y., and Westport, Conn. Antiseptics and embalming fluids.	22,367	Jan. 24	62	585
Embalmers' Supply Company, Newark, N. J., New York, N. Y., and Westport, Conn. Disinfectants.	22,368	Jan. 24	62	585
Emich & Co., Geo. W., Baltimore, Md. Cigars and cigarettes	22,824	Apr. 18	63	459
Empire Cure Company, Jersey City, N. J. Medical compounds for the treatment of nervous diseases.	23,774	Oct. 31	65	750
Empire Cure Company, Jersey City, N. J. Medical compounds for the treatment of nervous diseases.	23,796	Nov. 7	65	890
Empire Drill Company, Shortsville, N. Y., Jackson, Mich., Baltimore, Md., Allegheny, Pa., and Louisville, Ky. Machine for distributing grains, seeds, fertilizers, and the like.	23,570	Aug. 29	64	1262
Empire Mill Co., New Ulm, Minn. Wheat-flour	22,282	Jan. 3	62	156
Enfajian, Harootune, Denver, Colo. Embroidered rugs and carpets	23,338	July 11	64	296
Englehart, John M., Somerset, Ky. Liniment	23,879	Nov. 28	65	1402
English, Belcher & Co., Martinsville, Va. Smoking-tobacco	23,199	June 13	63	1684
Engs & Sons, P. W., New York, N. Y. Cordials	23,521	Aug. 22	64	1127
Engstrom, Johan, Eskilstuna, Sweden. Knives and razors	22,852	Apr. 18	63	462
Enos, Henry C. (See Bate and Enos.)				
Enterprise Soap Works, Nashville, Tenn. Soap	23,140	May 30	63	1379
Epstein, Pollitz & Co., Philadelphia, Pa. Momie cloth and linen lap dusters	22,981	May 9	63	906
Erb & Co., D. S., Boyertown, Pa. Cigars and cigarettes	23,668	Oct. 3	65	131
Essbach, Carl, Brunnödra, Germany, and New York, N. Y. Harmonicas, accordions, and similar musical instruments	23,614	Sept. 19	64	1646
Estabrook & Eaton, Boston, Mass. Cigars	23,948	Dec. 26	65	2058
Eureka Fire Hose Company, New York, N. Y. Hydraulic and fire hose	23,616	Sept. 19	64	1646
Eureka Fire Hose Company, New York, N. Y. Hydraulic and fire hose	23,617	Sept. 19	64	1646
Eureka Fire Hose Company, New York, N. Y. Hydraulic and fire hose	23,618	Sept. 19	64	1646
Evans, George B., Philadelphia, Pa. Toilet powders and dentifrices	23,445	Aug. 1	61	711
Everard, James, New York, N. Y. Lager-beer	22,481	Feb. 14	62	1062
Everhart & Co., R., Arnold, N. C. Chewing-tobacco	23,582	Sept. 5	64	1393
Excelsior Disinfecter Co., Baltimore, Md. Certain named receptacle for disinfecting compounds.	22,574	Feb. 28	62	1350
Excelsior Needle Company, Torrington, Conn. Needles	23,649	Sept. 26	64	1737
F. A. Ringer Company, New York, N. Y. Stereotype and electrotype plates and blocks	22,974	May 9	63	905
F. Kroeber Clock Company, New York, N. Y. Clocks	22,718	Apr. 4	63	146
F. Kroeber Clock Company, New York, N. Y. Clocks	22,719	Apr. 4	63	146
Fahys Watch Case Company, Sag Harbor, N. Y. Watchcases	22,966	May 9	63	905
Fahys Watch Case Company, Sag Harbor, N. Y. Watchcases	22,967	May 9	63	905
Fahys Watch Case Company, Sag Harbor, N. Y. Watchcases	22,968	May 9	63	905
Fairbank Canning Company, Chicago, Ill. Beef and pork products, including lard and tallow	23,771	Oct. 31	65	759
Fairbanks Company, New York, N. Y. Bearing metal	23,190	June 6	63	1528
Fairchild Bros. & Foster, New York, N. Y. Artificially-digested food or peptone	23,467	Aug. 8	64	855
Famous Stove Co., Indianapolis, Ind. Stoves and ranges	22,695	Mar. 21	62	1819
Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany, and New York, N. Y. Antiseptic for destroying insects, fungi, and the like	23,606	Sept. 12	64	1531
Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Pharmaceutical or dietetical compounds	23,823	Nov. 14	65	1063
Farcy & Oppenheim, Paris, France. Corsets	22,811	Apr. 18	63	458
Farrand, William H., Rochester, N. Y. Dentifrice	22,441	Feb. 7	62	897
Fashion Company, New York, N. Y. Printed periodical	22,419	Feb. 7	62	895
Faulkner, Clay, McMinnville, Tenn. Trousers	23,424	Aug. 1	64	709
Favorite Stove and Range Company, Piqua, Ohio. Stoves and ranges	23,886	Nov. 28	65	1402
Fearey, William H., Albany, N. Y. Boots and shoes	23,113	May 30	63	1377
Fearey, William H., Albany, N. Y. Boots and shoes	23,114	May 30	63	1377
Fearey, William H., Albany, N. Y. Boots and shoes	23,115	May 30	63	1377

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Fearey, William H., Albany, N. Y. Boots and shoes	23,116	May 30	63	1377
Featherbone Corset Company, Kalamazoo, Mich. Women's underwear, including corsets	22,762	Apr. 11	63	306
Federmeyer, Leon P., Chicago, Ill. Hair tonics	23,882	Nov. 28	65	1402
Feidt, George D., Philadelphia, Pa. Cough drops	23,847	Nov. 21	65	1219
Feigenspan, Christian, Newark, N. J. Lager-beer	23,902	Dec. 5	65	1540
Felix & Marston, Chicago, Ill. Pails, tubs, and analogous wooden receptacles	22,748	Apr. 4	63	149
Fellheimer & Lindauer, New York, N. Y. Corsets	23,755	Oct. 31	65	748
Fenn, Frederick, Rutland, Vt. Remedies for diseases of the bowels	23,496	Aug. 15	64	1003
Fenn, Frederick, Rutland, Vt. Remedy for diseases of the kidneys and liver	23,611	Sept. 12	64	1532
Fernine Tablet Co., St. Louis, Mo. Medicinal tablets	23,932	Dec. 19	65	1913
Fig Honey Company, Chicago, Ill. Laxative or cathartic sirup	23,490	Aug. 15	64	1003
Fishel & Levy, New York, N. Y. Whisky	23,990	May 9	63	907
Fishel, Nessler & Co., New York, N. Y. Ornamental jewelry formed of artificial flowers	23,016	May 16	63	1054
Fisher, Bernhard, Logansport, Ind. Certain named remedies	23,212	June 13	63	1685
Fisher, Hart C., Chicago, Ill. Tea	23,918	May 2	63	754
Fitch, Benjamin, New York, N. Y. Woven-wire bed-springs	23,515	Aug. 15	64	1004
Five Points Chemical Co., Rolla, Mo. Certain named line of proprietary remedies	22,373	Jan. 24	62	585
Florence Manufacturing Company, Florence, Mass., New York, N. Y., and Chicago, Ill. Tooth-brushes	23,179	June 6	63	1522
Flubrer, Frank F., Philadelphia, Pa. Furniture-polish	22,313	Jan. 10	62	313
Flubrer, Frank F., Philadelphia, Pa. Furniture-polish	23,620	Mar. 7	62	1509
Flynt, Olivia P., Boston, Mass. Corset-waists	22,420	Feb. 7	62	895
Floot, Schulze & Co., St. Paul, Minn. Boots, shoes, and leather	23,643	Sept. 26	64	1787
Foote, Charles E., and C. C. Jenks, Jackson, Mich. Perfumery, soaps, and cosmetics	23,178	June 6	63	1528
Forbes Manufacturing Company, Limited, Halifax, Canada. Skates	23,652	Sept. 26	64	177
Forney, Matthias N., New York, N. Y. Magazines	23,759	Oct. 31	65	749
Forsyth, William, Fresno, Cal. Raisins	23,576	Sept. 5	64	1392
Fortin, Catherine F., Springfield, Mass. Medical compound containing golden-rod	22,835	Apr. 18	63	460
Fountain, Edmund J., Bryan, Tex. Internal and external remedy for diseases of the stomach, blood, and liver, and cure for bites, stings, burns, and sprains	23,153	May 30	63	1380
Fowler, Frank C., Moodus, Conn. Certain named remedies	22,870	Apr. 25	63	607
Fowler, Frank C., Moodus, Conn. Remedy for catarrh	23,175	June 6	63	1527
Fownes Brothers & Co., London, England. Gloves	23,017	May 16	63	1054
Fox, Emanuel E., New York, N. Y. Soap-powder	23,785	Nov. 7	65	889
Fox, Jav E., Columbus, Ohio. Certain named medical compounds	23,659	Sept. 26	64	1788
Fox River Butter Company, Aurora and Oswego, Ill. Butter	23,257	June 27	63	1957
Fraim, Edward T., Lancaster, Pa. Padlocks	23,364	July 11	64	298
Frank Sohné, Heinrich, Ludwigsburg, Germany. Chicory and other coffee substitutes	23,623	Sept. 19	64	1647
Frank Sohné, Heinrich, Ludwigsburg, Germany. Chicory and other coffee substitutes	23,624	Sept. 19	64	1647
Franklin Type Writer Company, Portland, Me., and Boston, Mass. Type-writers	22,905	Apr. 11	63	310
Franklin Type Writer Company, Saco, Me., and Boston, Mass. Type-writing machines	22,975	May 9	63	905
Frantz, Mary K. B., Lancaster, Pa. Wood-fillers	23,362	July 11	64	298
Frederick Stearns & Company, Detroit, Mich. Medicinal pills and tablets	22,884	Apr. 25	63	608
Fredrickson & Fredrickson, South Bend, Ind. Liquid cosmetic	23,358	July 11	64	298
Freeman, Oliver J., Chicago, Ill. Toilet wash	22,700	Mar. 28	62	1961
Friends Herbal Association, St. Louis, Mo. Remedies for neuralgia, rheumatism, and like ailments	22,876	Apr. 25	63	607
Frier, Adolphus S., Cambridge, Mass. Skin cleanser and healer	22,846	Apr. 18	63	461
Frisby, Hattie W., Taunton, Mass. Cosmetic	22,804	Apr. 11	63	310
G. F. Harvey Company, Saratoga Springs, N. Y. Anodyne and antifebrile preparations	23,772	Oct. 31	65	750
Gage-Downs Company, Chicago, Ill. Corsets	22,519	Feb. 28	62	1346
Gaillard, Ella N., New York, N. Y. Eyebrow-pencils	22,543	Feb. 28	62	1348
Gambrell, George T., Baltimore and Hagerstown, Md. Whisky	22,407	Jan. 31	62	740
Garcia & Co., Fernandez, Havana, Cuba. Lard	23,911	Dec. 12	65	1763
Garlock Packing Co., Palmyra, N. Y. Packing for machinery	23,420	July 25	64	558
Garney & Son, J. W., Scranton, Pa. Liniments and croup tinctures	23,703	Oct. 10	65	294
Geary Drug Co., Brooklyn, N. Y. Effervescent fruit salts	22,532	Feb. 28	62	1347
Geigan, Joseph E., Baltimore, Md. Bicycles	22,697	Mar. 21	62	1820
Geminder & Sons, August, New York, N. Y. Guitars	22,759	Apr. 11	63	306
Geminder & Sons, August, New York, N. Y. Stringed instruments, such as violins, guitars, and their accessories	22,760	Apr. 11	63	306
Geminder & Sons, August, New York, N. Y. Mandolins and accessories	23,060	May 23	63	1197
George & Barker, Astoria, Oreg. Canned salmon	23,346	July 11	64	296
George & Barker, Astoria, Oreg. Canned salmon	23,371	July 18	64	434
Gerhard, Philip H., Austin, Tex. Oils and other wood-preserving compounds	22,396	Jan. 31	62	739
German American Drug Company, Ohio City, Ohio. Face-wash and curling-fluid	23,417	July 25	64	558
Germain Fruit Company, Los Angeles, San Francisco, Riverside, and Santa Ana, Cal. Wines and brandies	22,642	Mar. 14	62	1648
Gerst, William, Nashville, Tenn. Lager-beer	23,433	Aug. 1	64	710
Gerstle, Leopold, Chattanooga, Tenn. Remedy for diseases of the liver, for dropsy, costiveness, and dyspepsia	23,715	Oct. 17	65	439
Gerstner, August, Brooklyn, N. Y. Harness grease and blacking	22,315	Jan. 10	62	314
Gibson & Prentiss, Buffalo, N. Y. Bicycles	23,108	May 23	63	1200
Giesecke Boot and Shoe Manufacturing Company, Jefferson City and St. Louis, Mo. School-shoes	22,901	May 2	63	753
Giesecke, Sophia, St. Louis, Mo. Brushes	22,411	Jan. 31	62	740
Gilbert, John P., New York, N. Y. Medical tonic	22,566	Feb. 28	62	1350
Gillon & Co., John, Leith, Scotland. Whisky	22,580	Feb. 28	62	1347
Gilpin, Langdon & Co., Baltimore, Md. Ground or powdered spices	23,129	May 30	63	1378
Gladstone Manufacturing Co., New York, N. Y. Cotton, wool, and silk fabrics	22,304	Jan. 10	62	312
Glenck, Marguerite, Chicago, Ill. Hair-invigorator	22,998	May 9	63	907
Globe Chemical Company, Cleveland, Ohio. Soap and washing powder	22,847	Apr. 18	63	461
Godwin & Co., John V., Bradford, England. Serges	22,890	Dec. 5	65	1529
Goebel Brewing Company, Detroit, Mich. Beer, ale, porter, and stout	23,762	Oct. 31	65	749
Goldaine, James F., Pittsburg, Pa. Remedy for throat and lung troubles	23,265	June 27	63	1958
Goldberg, Abraham, Louisville, Ky. Whisky	23,379	July 18	64	435
Goldschmidt, Firm of Th., Essen-on-the-Ruhr, Germany. Mordants	23,707	Oct. 10	65	294
Gooderham & Worts, Limited, Toronto and Montreal, Canada. Whisky	23,764	Oct. 31	65	749
Goodrich, Herbert E., Yankton, S. D. Liniment and remedies for diseases of the blood, skin, lungs, and throat	23,795	Nov. 7	65	890
Goodrich & Jennings, Anoka, Minn. Liniment	22,849	Nov. 21	65	1219
Goodrich, Simeon D., Des Moines, Iowa. Food for animals	22,317	Jan. 10	62	313
Goodyear Rubber Company, New York, N. Y. Rubber goods, leather goods, and waterproof oiled fabrics	23,455	Aug. 8	64	854
Goodyear Rubber Company, New York, N. Y. Rubber goods, leather goods, and waterproof oiled fabrics	23,456	Aug. 8	64	854

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Gottfried Brewing Company, Chicago, Ill. Lager-beer.....	22,775	Apr. 11	63	307
Gottfried Brewing Company, Chicago, Ill. Lager-beer.....	22,776	Apr. 11	63	307
Gottschall, Amos H., Harrisburg, Pa. Salves, pills, vermifuge, liniment, and cough balm.....	22,471	Feb. 14	62	1061
Goudy, Lewis A., Portland, Me. Biscuit and crackers.....	22,634	Mar. 14	62	1647
Grant Anti-Friction Ball Company, Fitchburg, Mass. Steel balls for bearings and antifriction purposes.....	22,750	Apr. 4	63	149
Grant Anti-Friction Ball Company, Fitchburg, Mass. Steel balls for bearings and antifriction purposes.....	22,751	Apr. 4	63	149
Graydon, Thomas W., Cincinnati, Ohio. Remedy for mucous and cutaneous diseases.....	22,730	Apr. 4	63	147
Graydon, Thomas W., Cincinnati, Ohio. Remedy for diseases of the blood and excretory organs.....	22,930	May 2	63	755
Green, Shipton, New York, N. Y. Wheat and rye flour.....	22,284	Jan. 3	62	157
Green, Shipton, New York, N. Y. Fishing-lines and twine.....	23,884	Nov. 28	65	1402
Greene, Joseph P., San Antonio, Tex. Remedy for rheumatism.....	23,928	Dec. 19	65	1913
Greenleaf, Franklin L., Minneapolis and Stillwater, Minn. Wheat-flour.....	23,002	May 9	63	907
Greer, Benjamin, Philadelphia, Pa. Woolen, worsted, and cotton cloths for outer garments.....	23,121	May 30	63	1377
Greer, Benjamin, Philadelphia, Pa. Woolen, worsted, and cotton cloths for outer garments.....	23,122	May 30	63	1377
Greer, Benjamin W., Philadelphia, Pa. Worsted and cotton cloths for outer garments.....	22,980	May 9	63	906
Grier, Garrett L., Dover, Del. Preparation for the painless extraction of teeth.....	23,609	Sept. 12	64	1531
Griffing, Philander, New York, N. Y. Cocoa and chocolate.....	23,080	May 23	63	1198
Griggs, Cooper & Co., St. Paul, Minn. Preserved fruits and vegetables.....	22,829	Apr. 18	63	460
Grossman, Jacob, New Orleans, La. Bitters.....	22,921	May 2	63	755
Grossman, Michaelsohn & Co., Chicago, Ill. Clothing for men and boys.....	23,329	July 11	64	295
Grossmith, John L., London, England. Perfumery and perfumed soap.....	23,025	May 16	63	1055
Guilford, William, Glasgow, Scotland. Flavoring sirups and carbonated and effervescing beverages.....	23,766	Oct. 31	65	749
Gunder, Samuel H., Fairmount, Ill. Medicated plasters.....	23,443	Aug. 1	64	711
Gurney Hot Water Heater Company, Boston, Mass. Heat-radiators.....	23,473	Aug. 8	64	855
H. B. Clafin Company, New York, N. Y., Manchester, England, and Paris, France. Corsets.....	22,628	Mar. 14	62	1647
H. E. Bucklen & Company, Chicago, Ill. Remedies for diseases of the head, throat, chest, and lungs.....	23,491	Aug. 15	64	1003
H. M. Silverman Company, New York, N. Y. Hats and caps.....	22,483	Feb. 21	62	1203
H—O (Hornby's Oatmeal) Company, New York, N. Y. Oatmeal and similar oat foods.....	23,770	Oct. 31	65	749
H. T. Cottam & Company, Limited, New Orleans, La. Molasses.....	22,915	May 2	63	754
Haar Mercantile Company, Kansas City, Mo. Certain named wearing-apparel.....	23,547	Aug. 22	64	1130
Hache & Co., Alfred, Vierzon, France, and New York, N. Y. China-ware and faience.....	23,935	Dec. 19	65	1913
Haesaert & Buysse & Theo. D. Floto, Jersey City, N. J., and Brooklyn, N. Y. Chicory or a substitute for coffee.....	22,895	Apr. 25	63	610
Haesaert & Buysse & Theo. D. Floto, Jersey City, N. J., and Brooklyn, N. Y. Chicory or a coffee substitute.....	23,789	Nov. 7	65	890
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Sifting-machines.....	23,654	Sept. 26	64	1788
Hahn, Marie P., Philadelphia, Pa. Sirup remedy for coughs, colds, catarrh, &c.....	23,312	July 4	64	153
Hahn, Marie P., Philadelphia, Pa. Salve.....	23,319	July 4	64	154
Hahn & Son, J., New Haven, Conn. Pies.....	22,799	Apr. 11	63	309
Halcrow, James B., London, England. Chemical substances prepared for use in medicine and pharmacy.....	23,172	June 6	63	1527
Hale, Charles E., Boston, Mass. Anæsthetics.....	23,402	July 25	64	557
Hale Dental Co., Boston, Mass. Anæsthetic.....	23,176	June 6	63	1527
Hall & Brown Wood Working Machine Company, St. Louis, Mo. Woodworking-machine.....	23,055	May 16	63	1057
Hall & Brown Wood Working Machine Company, St. Louis, Mo. Woodworking-machine.....	23,107	May 23	63	1200
Hall & Garrison, Philadelphia, Pa., and New York, N. Y. Certain named decorative work.....	23,613	Sept. 19	64	1646
Hall, Thomas, Edinburgh, Scotland. Wall-paper.....	22,714	Apr. 4	63	146
Hall, William A., Bellows Falls, Vt. Calcimine.....	22,562	Feb. 28	62	1349
Hamilton & Whittin, Chicago, Ill. Remedies for piles.....	23,931	Dec. 19	65	1913
Hampden Watch Company, Canton, Ohio. Watches.....	22,506	Feb. 28	62	1345
Hampden Watch Company, Canton, Ohio. Watches.....	22,507	Feb. 28	62	1345
Hampden Watch Company, Canton, Ohio. Watches.....	22,508	Feb. 28	62	1345
Hampden Watch Company, Canton, Ohio. Watches.....	22,509	Feb. 28	62	1345
Hampden Watch Company, Canton, Ohio. Watches.....	22,510	Feb. 28	62	1345
Hampden Watch Company, Canton, Ohio. Watches.....	22,511	Feb. 28	62	1345
Hampden Watch Company, Canton, Ohio. Watches.....	22,512	Feb. 28	62	1346
Hampden Watch Company, Canton, Ohio. Watches.....	22,513	Feb. 28	62	1346
Hampden Watch Company, Canton, Ohio. Watches.....	22,514	Feb. 28	62	1346
Hampden Watch Company, Canton, Ohio. Watches.....	22,806	Apr. 18	63	458
Hampden Watch Company, Canton, Ohio. Watches.....	22,969	May 9	63	905
Hampden Watch Company, Canton, Ohio. Watches.....	22,970	May 9	63	905
Hampden Watch Company, Canton, Ohio. Watches.....	22,971	May 9	63	905
Hampden Watch Company, Canton, Ohio. Watches.....	23,063	May 23	63	1197
Hampden Watch Company, Canton, Ohio. Watches.....	23,064	May 23	63	1197
Hampden Watch Company, Canton, Ohio. Watches.....	23,892	Dec. 5	65	1589
Hanan & Son, New York, N. Y. Boots and shoes for men, boys, and youths.....	22,587	Mar. 7	62	1506
Hance Bros. & White, Philadelphia, Pa. Confectionery in the form of flavored tablets.....	22,725	Apr. 4	63	147
Hance Bros. & White, Philadelphia, Pa. Flavored or medicated tablets.....	22,728	Apr. 4	63	147
Hanchett, Fred, Binghamton, N. Y. Cigars.....	22,402	Jan. 31	62	739
Hanney, Patrick M., Chicago, Ill. Medicated beverage containing wild cherry.....	22,533	Feb. 28	62	1347
Hardtmuth, L. & C., London, England. Lead-pencils.....	22,973	May 9	63	905
Harper, Thomas, Redditch, England. Needles.....	23,390	July 18	64	436
Harris & Co., R. E., San Angelo, Tex. Suppositories.....	23,227	Nov. 14	65	1064
Harris, John F. (See Campbell and Harris.).....				
Harris, Richard D., New York, N. Y. Coffee, cocoa, and chocolate.....	23,678	Oct. 3	65	132
Harrison Bros. & Co., Philadelphia, Pa. Paints, stains, varnishes, and similar articles.....	22,656	Mar. 14	62	1649
Harrison & Co., Louis R., New York, N. Y. Florida water.....	23,557	Aug. 29	64	1261
Harter, Helen G., Helena, Ohio. Sirup remedy for diseases of the throat, lungs, and mucous membrane.....	23,149	May 30	63	1379
Harvard Baby Food Co., Chelsea, Mass. Food for infants and invalids.....	23,125	May 30	63	1378
Hauff, Julius, Feuerbach, Germany. Photographic preparations.....	22,274	Jan. 3	62	156
Hanthaway & Sons, C. L., Boston, Mass. Liquid shoe-dressing.....	23,560	Aug. 29	64	1262
Hawes, Charlotte W., Boston, Mass. Liniment.....	23,440	Aug. 1	64	711
Hawker Medicine Company, Limited, Rotheray, Canada. Tonics, pills, balsam, ointment, and remedies for neuralgia and catarrh.....	23,094	May 23	63	1199
Hawley & Hoops, New York, N. Y. Candies.....	23,478	Aug. 15	64	1002
Hawley, Mary A., Dixon, Ill. Insect-powder.....	22,316	Jan. 10	62	313
Hayden, Guardenier & Co., Boston, Mass. Boots and shoes.....	22,669	Mar. 21	62	1817
Hayman, John J., Robberson, Indian Ter. Ointment or salve.....	22,997	May 9	63	907
Hazleton, Frank L., Boston, Mass. Certain named beverages.....	23,350	July 11	64	297

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Hedger, Harry D., Boston, Mass. Safety-bicycles.....	22,858	Apr. 18	63	462
Heering, Peter N., Copenhagen, Denmark. Cherry brandy or cordial.....	22,923	May 2	63	755
Heller & Bros., Newark, N. J. Horse-rasps.....	23,188	June 6	63	1528
Henn & Gabler Brewing Company, Chicago, Ill. Lager-beer.....	22,499	Feb. 21	62	1204
Henn & Gabler Brewing Company, Chicago, Ill. Lager-beer.....	23,303	July 4	64	152
Hennessy, Thomas R., Northampton, Mass. Cigars.....	22,424	Feb. 7	62	895
Hentz & Co., Percy R., Philadelphia, Pa. Whisky.....	23,206	Nov. 14	65	1062
Herbaline Medicine Co., Springfield, Ill. Remedy for kidney and liver complaints.....	23,315	July 4	64	153
Herbert & Co., H. L., New York, N. Y. Coal and wood.....	23,007	May 9	63	908
Herberts & Dax, Newark, N. J. Japans and varnishes.....	22,563	Feb. 28	62	1349
Herr, Charles C., Lancaster, Pa. Manufactured smoking and chewing tobacco.....	22,768	Apr. 11	63	307
Herschell, Allan. (See Armitage and Herschell.)				
Herschell, George C. (See Armitage and Herschell.)				
Hertsch, Bernhard A., Philadelphia, Pa. Pills, plasters, lozenges, and a remedy for coughs.....	23,324	Nov. 14	65	1063
Heymann, Seymour E., New York, N. Y. Lubricating-oils.....	22,621	Mar. 7	62	1509
Hibbard, Will A. (See Tinker and Hibbard.)				
Hickey, Martha T., Troy, N. Y. Hair dressing.....	22,645	Mar. 14	62	1648
Hickok & Co., J. J., Richmond, Va. Plug-tobacco.....	22,593	Mar. 7	62	1507
Hicks, Charles S., London, England. Tea.....	23,412	July 25	64	558
Hicks, Richard L., Thomasville, Ga. Remedy for diseases of the throat and lungs.....	23,229	June 20	63	1813
Hiertz & Son, Theodore, St. Louis, Mo. Babbitt-metal and antifriction journal-bearings.....	22,658	Mar. 14	62	1649
Higdon, Gilman H., New Castle, Ind. Ready-made paste or composition for lemon pie.....	23,253	June 27	63	1957
Higgin & Co., Thomas, Liverpool, England. Chloride of sodium or common salt.....	23,675	Oct. 3	65	132
Higley, Christina J., and E. C. Tooker, New York, N. Y. Hose-supporters.....	23,756	Oct. 31	65	748
Hinck & Ould, New York, N. Y. Worsted piece goods.....	23,241	June 27	63	1956
Hinckel, Frederick, Worcester, Mass. Dress-stays.....	23,195	June 13	63	1684
Hino & Lynch, New York, N. Y. Boots and shoes.....	22,301	Jan. 10	62	312
Hoagland, Cornelius N., New York, N. Y. Baking-powder.....	22,798	Apr. 11	63	309
Hodgman Rubber Company, New York, N. Y. All manufactured rubber goods.....	23,376	July 18	64	435
Hofbauer Bros., Hannibal, Mo. Liniment.....	22,687	Mar. 21	62	1819
Hofbauer Bros., Hannibal, Mo. Medicinal herb sirups.....	22,731	Apr. 4	63	147
Holgate Brothers Company, Kane, Pa. Currycombs.....	22,505	Feb. 21	62	1204
Holmberg, Eric, Södertelge, Sweden. Friction, parlor, safety, and wax matches.....	23,415	July 25	64	558
Holmfeld, John D. D. de, Paris, France. Antiseptics.....	23,773	Oct. 31	65	750
Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Bearings, commutator-brushes, and electrical conductors.....	23,240	June 20	63	1814
Holzman, Benjamin M., New York, N. Y. Boys' knee-pants.....	23,889	Dec. 5	65	1589
Home Medical Company, Chicago, Ill. Powder to be used as a remedy for female diseases.....	22,308	Jan. 10	62	312
Home Medical Company, Chicago, Ill. Powder used as a remedy for dyspepsia and other stomach troubles.....	22,372	Jan. 24	62	585
Hood, Charles I., Lowell, Mass. Sarsaparilla compound.....	22,779	Apr. 11	63	308
Hood, Charles I., Lowell, Mass. External and internal remedies for certain named diseases.....	23,331	June 20	63	1813
Hood, Charles I., Lowell, Mass. Compound of sarsaparilla.....	23,253	July 11	64	297
Hoopeston Canning Co., Hoopeston, Ill. Canned fruits and vegetables.....	22,497	Feb. 21	62	1204
Hooton, George W., Creedmoor, Tex. Oil extracts for use as internal and external remedies for disease.....	22,445	Feb. 7	62	897
Horlicks Food Company, Racine, Wis. Malt extract and other food for infants and invalids.....	23,791	Nov. 7	65	890
Hospital Tonic Co., Milwaukee, Wis. Tonic of malt and hops.....	23,603	Sept. 12	64	1531
Hough, Azel C., South Butler, N. Y. Cash-recorders and cash-registers.....	22,474	Feb. 14	62	1061
Hough & Co., Lynde, San Francisco, Cal. Whole, cut, and boneless fish.....	22,538	Feb. 28	62	1348
Houghton & Co., E. F., Philadelphia, Pa. Unguents.....	22,443	Feb. 7	62	897
Howe & Co., C. H., Denver, Colo. Unfermented wines.....	23,761	Oct. 31	65	749
Howley & Co., P. J., New York, N. Y. Sheet-music.....	23,830	Nov. 21	65	1218
Hoyt, Edward E., New York, N. Y. Spring and mineral waters, both plain and aerated.....	23,208	June 13	63	1685
Hudnut, Richard, New York, N. Y. Collyrium employed as a remedy for the eyes.....	23,310	July 4	64	153
Hudnut, Richard, New York, N. Y. Toilet preparations.....	23,368	July 18	64	434
Hulbert Bros. & Co., New York, N. Y. Bicycles, velocipedes, and articles accessory thereto.....	22,454	Feb. 7	62	898
Hull, John F., Jr., Poughkeepsie, N. Y. Trousers.....	22,764	Apr. 11	63	306
Hull, John F., Jr., Poughkeepsie, N. Y. Trousers.....	22,765	Apr. 11	63	306
Hull, John F., Jr., Poughkeepsie, N. Y. Trousers.....	23,551	Aug. 29	64	1261
Hunsicker & Co., I. C., Reading, Pa. Hosiery.....	22,341	Jan. 17	62	447
Hunsicker & Co., I. C., Reading, Pa. Hosiery.....	22,342	Jan. 17	62	447
Hunt, Elisha H., Chicago, Ill. Seeds, bulbs, plants, and flowers.....	22,448	Feb. 7	62	898
Hunt, Russell E., Boston, Mass. Candied pop corn and other candied goods.....	23,867	Nov. 28	65	1401
Hurd & Co., George B., New York, N. Y. Writing-paper and envelopes.....	23,500	Aug. 15	64	1003
Hurd & Co., George B., New York, N. Y. Writing-paper and envelopes.....	23,708	Oct. 17	65	458
Hurd & Co., George B., New York, N. Y. Writing-paper and envelopes.....	23,758	Oct. 31	65	748
Hurt, John B., Baltimore, Md. Remedy for coughs and colds and all inflamed conditions of the lungs and air-passages.....	23,492	Aug. 15	64	1003
Hutchinson, John D., Hahira, Ga. Alternative sirup.....	22,885	Apr. 25	63	609
Hyatt, Henry O., Kingston, N. C. Remedy for indigestion.....	23,398	July 25	64	556
Hyatt School Slate Company, Limited, Bethlehem, Pa. Slates.....	22,410	Jan. 31	62	740
Hyde Brothers & Co., Pittsburg, Pa. Antifriction metal.....	22,892	Apr. 25	63	609
I. B. Kleintert Rubber Company, New York, N. Y. Seamless stockinet dress-shields.....	22,812	Apr. 18	63	458
I. B. Kleintert Rubber Company, New York, N. Y. Dental dams.....	23,276	June 27	63	1959
Ichthylol Gesellschaft Cordes, Hermann & Co., Hamburg, Germany. Certain named disinfecting and therapeutical preparations.....	23,561	Aug. 29	64	1262
Illinois Canning Co., Hoopeston, Ill. Canned corn.....	23,463	Aug. 8	64	855
Illinois Canning Co., Hoopeston, Ill. Canned corn.....	23,464	Aug. 8	64	855
Illinois Canning Co., Hoopeston, Ill. Canned vegetables.....	23,465	Aug. 8	64	855
Illinois Canning Co., Hoopeston, Ill. Canned corn.....	23,481	Aug. 15	64	1002
Illinois Canning Co., Hoopeston, Ill. Canned vegetables.....	23,621	Sept. 19	64	1646
Illinois Watch Case Company, Elgin, Ill. Composition watchcase.....	23,418	Feb. 7	62	895
Illinois Watch Case Company, Elgin, Ill. Cases for watches.....	23,893	Dec. 5	65	1589
Imperial Granum Company, New Haven, Conn. Prepared food for infants and invalids.....	23,909	Dec. 12	65	1763
Imperial Pine Product Company, New York, N. Y. Distilled products of pine wood.....	22,312	Jan. 10	62	313
Independent Biscuit and Cracker Company, Peoria and Pekin, Ill. Crackers, cakes, and biscuits.....	23,251	June 27	63	1957
Independent Biscuit and Cracker Company, Peoria and Pekin, Ill. Crackers, cakes, and biscuits.....	23,343	July 11	64	296
Indianapolis Homin Mills, Indianapolis, Ind. Alimentary products from corn in the form of flakes.....	22,637	Mar. 14	62	1618
Indianapolis Homin Mills, Indianapolis, Ind. Alimentary products from corn having a flaky form.....	23,787	Nov. 7	65	889
Ingham, Thomas, Rockhampton, Inghamstown and Wallaroo, Queensland. Eucalyptus-oil for medicinal and other uses.....	23,630	Sept. 19	64	1647
International Water and Sewage Purification Company, Limited, London, England. Material for use in purifying water and sewage.....	23,676	Oct. 3	65	132

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Ippich & Treffinger, Fred, New York, N. Y. Moving-vans and other heavy wagons	23,106	May 23	63	1200
Isaacsen & Son, Adolph, New York, N. Y. Insect and vermin destroying preparations	23,498	Aug. 15	64	1003
J. B. Pace Tobacco Company, Richmond, Va. Plug or chewing, twist, and smoking tobacco and cigarettes	23,308	July 4	64	153
J. P. Hull Horse, Cattie, and Poultry Powder Company, Westminster, Md. Veterinary powders	23,215	June 13	63	1685
J. S. Nelson & Son Shoe Company, North Grafton, Mass. Boots and shoes	22,302	Jan. 10	62	312
Jacobson & Bro., A., New York, N. Y. Furs	22,589	Mar. 7	62	1507
Jacques, Eugene L., Waterbury, Conn. Medicinal mineral water	22,465	Feb. 14	62	1060
Jacques, Eugene L., Waterbury, Conn. Certain carbonated beverages and waters	22,466	Feb. 14	62	1061
Jaggar, Amanda L., Wellesley, Mass. Compound for polishing metal	22,494	Feb. 21	62	1204
James & Co., J. W., East Brady, Pa. Tonics, bitters, liniments, and sirups	22,567	Feb. 28	62	1350
James, Henry W., Birmingham, England. Bicycles, tricycles, and parts thereof	23,450	Aug. 1	64	712
James Lefell & Company, Springfield, Ohio, and New York, N. Y. Water-wheels	22,857	Apr. 18	63	462
Janney & Co., B. S., Jr., Philadelphia, Pa. Sirup and molasses	23,082	May 23	63	1198
Janney & Co., B. S., Jr., Philadelphia, Pa. Sirup and molasses	23,083	May 23	63	1198
Janney & Co., B. S., Jr., Philadelphia, Pa. Canned vegetables and fruits	23,130	May 30	63	1378
Janney & Co., B. S., Jr., Philadelphia, Pa. Canned vegetables and fruits	23,163	June 6	63	1527
Janney & Co., B. S., Jr., Philadelphia, Pa. Cheese	23,202	June 13	63	1684
Janowitz, Julius, New York, N. Y. Dress and corset stays	23,328	July 11	64	295
Jaros, Isidore, New York, N. Y. Underwear made of a knit fabric having a smooth face and a plush back	22,588	Mar. 7	62	1507
Jaros, Isidore, New York, N. Y. Clothing made from a knit fabric having a smooth face and a plush back	23,615	Sept. 19	64	1646
Jellico and Bird-Eye Coal Company, Louisville and Halsey, Ky. Mineral coal	22,438	Feb. 7	62	897
Jenkins Bros., Boston, Mass., New York, N. Y., and Chicago, Ill. Valves and steam-packing	22,335	Jan. 10	62	314
Jenks, Charles C. (See Foote and Jenks.)				
Jersey City Packing Company, Jersey City, N. J. Sugar-cured hams	22,400	Jan. 31	62	739
Jersey City Packing Company, Jersey City, N. J. Hams, bacon, smoked meats, and shoulders	22,595	Mar. 7	62	1507
Jno. Peard Vermouth Company, New York, N. Y. Vermouth wine	23,462	Aug. 8	64	855
Johann, Mathew L., Milwaukee, Wis. Preparations for the skin and complexion	22,442	Feb. 7	62	897
John C. Grafflin Company, Baltimore, Md. Burlap bags	22,489	Feb. 21	62	1203
John Dickinson & Company, Limited, London, England. Paper	23,516	Aug. 22	64	1127
John Good Cordage and Machine Company, Jersey City, N. J., and New York, N. Y. Rope, cord, and twine	23,858	Nov. 21	65	1220
Johnson, James W., New York, N. Y. Tooth-wash	23,558	Aug. 29	64	1261
Johnson & Johnson, New Brunswick, N. J., and New York, N. Y. Medical plasters	22,932	Apr. 18	63	460
Johnston, Michael H. (See Pease and Johnston.)				
Jolly & Son, Limited, London, England. Pills	23,608	Sept. 12	64	1531
Jonas & Colver, Limited, Sheffield, England. Tool-steel suitable for files and other tools	23,058	May 16	63	1058
Jones Brothers & Co., Manchester, England. Cotton pile fabrics	22,982	May 9	63	900
Jones, McDuffee & Stratton, Boston, Mass. Dishes for table and toilet use	23,646	Sept. 26	64	1787
Jones, McDuffee & Stratton, Boston, Mass. Dishes for table and toilet use	23,647	Sept. 26	61	1787
Jones Remedy Co., Fredericktown, Mo. Remedies for epileptic fits and other named diseases	22,783	Apr. 11	63	308
Jorgensen, Charles J., Milwaukee, Wis. Composition for cleaning wood, marble, tilings, ceilings, &c.	22,655	Mar. 14	62	1649
Joseph Kohnle Brewing Company, Philadelphia, Pa. Lager-beer	22,427	Feb. 7	62	896
Judge Publishing Company, New York, N. Y. Printed publications	22,579	Mar. 7	62	1506
Judson L. Thomson Manufacturing Company, Waltham and Boston, Mass., New York, N. Y., London, England, and St. Petersburg, Russia. Metallic fastenings for leather belting	22,376	Jan. 24	62	536
Junge & Co., Wm., New York, N. Y. Extract of malt for brewing purposes	23,871	Nov. 28	65	1401
Jureidini, Nasib, Sheffield, England. Razors	22,972	May 9	63	905
Jureidini, Said K., New York, N. Y. Razors	22,730	Apr. 4	63	146
Kastner & Williams Paper Co., Holyoke, Mass., and New York, N. Y. Writing-paper	23,571	Sept. 5	64	1392
Kaufmann Milling Company, St. Louis, Mo., and Bethalto, Ill. Wheat-flour	23,381	July 18	64	435
Kaufmann Bros. & Co., Toledo, Ohio. Whisky	22,675	Mar. 21	62	1818
Ke-Li Manufacturing Company, New York, N. Y. Toilet, laundry, and scouring soap	23,203	June 13	63	1684
Keidel, Henry, Baltimore, Md. Fowling pieces and other small firearms	22,965	May 2	63	758
Keizer, Cornelius, Chicago, Ill. Medicated oils for external and internal use	23,487	Aug. 15	64	1002
Kelley, Ezra, New Bedford, Mass. Clock and watch oil	23,894	Dec. 5	65	1589
Kellogg, Spencer, Buffalo, N. Y. Linseed-oil	23,052	May 16	63	1057
Kelso, Meta S., Stamford, Conn. Preparation for the hair	23,747	Oct. 24	65	596
Kennedy, Emily J., Boston, Mass. Tonic bitters	22,992	May 9	63	907
Kennedy Valve Manufacturing Company, New York, N. Y. Valves and hydrants	22,416	Jan. 31	62	740
Kenosha Crib Company, Kenosha, Wis. Cribs, cradles, and children's beds	23,451	Aug. 1	64	712
Kenyon Bicycle Manufacturing Company, Des Moines, Iowa. Bicycles	22,661	Mar. 14	62	1650
Kerr Thread Company, Harrison, N. J. Threads for machine and hand sewing	23,181	June 6	63	1528
Keuffel & Esser Company, Hoboken, N. J., and New York, N. Y. Proportional dividers	23,640	Sept. 19	64	1648
Keyser, John S., Buena Vista, Colo. Liquid blacking for polishing leather	23,168	June 6	63	1527
King Co., J. B., New York, N. Y. Plaster-of-paris	22,561	Feb. 28	62	1349
King, Robert E., Richmond, Va. Insecticide	23,391	July 18	64	436
Kingsland & Douglas Manufacturing Company, St. Louis, Mo. Corn-shellers	22,336	Jan. 10	62	314
Kingsley, Lewis W. (See Munsell, Kingsley, and Brooks.)				
Kirk & Sons, Samuel, Leeds, England. Certain named stuffs for linings for clothing	22,699	Mar. 28	62	1961
Kirkham, Hulett & Chandler, Limited, London, England. Washer-scrubbers for gas purification	22,415	Jan. 31	62	740
Kittredge Company, Newark, N. J., and New York, N. Y. Periodical journal	23,410	July 25	64	557
Kittredge Company, Newark, N. J., and New York, N. Y. Periodical journal	23,411	July 25	64	557
Klaine, Frank A., Cincinnati, Ohio. Cooking, heating, and gas stoves	23,474	Aug. 8	64	856
Klotz, Victor, Paris, France, and New York, N. Y. Perfumed toilet preparations, including soap	22,690	Mar. 21	62	1819
Klotz, Victor, Paris, France, and New York, N. Y. Perfumed toilet articles and preparations, including soap	23,599	Sept. 12	64	1530
Klotz, Victor, Paris, France, and New York, N. Y. Perfumed articles for the toilet that are consumed in use	23,844	Nov. 21	65	1219
Klotz, Victor, Paris, France, and New York, N. Y. Soaps, powders, lotions, dentifrice, and other perfumed preparations for the toilet	23,845	Nov. 21	65	1219
Knickerbocker Brace Company, Easton, Pa. Shoulder-braces and suspenders	23,427	Aug. 1	64	709
Knight & Sons, W. W., Denver, Colo. Banjos, guitars, and mandolins	23,061	May 23	63	1197
Knollenberg & Son, H. H., Jacksonville, Ill. Cigars	22,823	Apr. 18	63	459
Koebler & Hinrichs, St. Paul, Minn. Cheese	23,344	July 11	64	296
Kohnstamm & Co., H., New York, N. Y. Wheat-starch	22,434	Feb. 7	62	896
Kohnstamm & Co., H., New York, N. Y. Washing fluid	22,436	Feb. 7	62	897
Kohnstamm & Co., H., New York, N. Y. Soap in chips and bars	22,618	Mar. 7	62	1509
Kohnstamm & Co., H., New York, N. Y. Bleaching fluid	22,619	Mar. 7	62	1509
Kops Brewery, London, England. Aerated and non-alcoholic ale and stout	23,793	Nov. 7	65	890
Kops Brewery, London, England. Ale, aerated and non-alcoholic	23,872	Nov. 28	65	1402

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Kremer, John, New York, N. Y. Remedies for gonorrhea.....	23,213	June 13	63	1685
Kunkelmann & Co., Rheims, France. Champagne.....	23,626	Sept. 19	64	1647
Kunkelmann & Co., Rheims, France. Champagne.....	23,627	Sept. 19	64	1647
Kunkelmann & Co., Rheims, France. Champagne.....	23,628	Sept. 19	64	1647
L. M. Rumsey Manufacturing Company, St. Louis, Mo. Water-closets.....	22,712	Mar. 28	62	1962
L. M. Rumsey Manufacturing Company, St. Louis, Mo. Water-closets.....	22,713	Mar. 28	62	1962
La Fayette Cracker and Confectionery Company, Lafayette, Ind. Cakes and crackers.....	23,866	Nov. 28	65	1401
Lady Grey Perfumery Company, Boston, Mass. Soaps, perfumery, and lotions.....	22,840	Apr. 18	63	461
Lady Grey Perfumery Company, Boston, Mass. Soaps, perfumery, and lotions.....	22,841	Apr. 18	63	461
Lafferty, Shepherd B., Akron, Ohio. Chewing-gum.....	22,633	Mar. 14	62	1647
Lambert, Daniel J., Warwick, R. I. Insecticides.....	23,705	Oct. 10	65	294
Langdon, Charles H., and G. C. Batcheller, New York, N. Y. Corsets.....	22,777	Jan. 3	62	156
Lappe, Firm of Th., Neudietendorf, Germany. Stomach bitters.....	23,489	Aug. 15	64	1003
Larcom, Rufus E., Beverly, Mass. Boots, shoes, and slippers.....	23,728	Oct. 24	65	595
Lariat Manufacturing Company, Jersey City, N. J. Game implements consisting of lariats and targets.....	23,539	Aug. 22	64	1129
Lauder, Archibald, Chicago, Ill. Apparatus for outdoor games.....	23,363	July 11	64	298
Lauder, Archibald, Chicago, Ill. Apparatus for outdoor games.....	23,385	July 18	64	436
Lauder, Archibald, Chicago, Ill. Apparatus for outdoor games.....	23,386	July 18	64	436
Lauder, Archibald, Chicago, Ill. Apparatus for outdoor games.....	23,387	July 18	64	436
Lauer Brewing Company, Limited, Reading, Pa. Lager-beer.....	23,792	Nov. 7	65	890
Laumeister, Charles S., San Francisco, Cal. Rolled or crushed wheat.....	23,620	Sept. 19	64	1646
Lautz Bros. & Co., Buffalo, N. Y. Laundry soap.....	23,947	Dec. 26	65	2058
Lavoie, Joseph P., Quebec, Canada. Certain named remedies.....	23,266	June 27	63	1958
Law, Edwin F., Lancaster, Pa. Cigars.....	23,874	Nov. 28	65	1402
Lazell, Dalley & Company, New York, N. Y. Perfumery.....	23,272	June 27	63	1959
Lazell, Dalley & Company, New York, N. Y. Perfumery.....	23,273	June 27	63	1959
Leach, Edwin T., Taunton, Mass. Pills for sick and nervous headaches.....	22,570	Feb. 28	62	1350
Leaycraft & Co., New York, N. Y. Flour.....	23,259	June 27	63	1957
Leaycraft & Co., New York, N. Y. Flour and meal.....	23,372	July 18	64	435
Leaycraft & Co., New York, N. Y. Flour and meal.....	23,373	July 18	64	435
Lee & Smith, Boston, Mass. Certain named chemical substances and mixtures.....	22,493	Feb. 21	62	1204
Leeson & Co., J. R., Boston, Mass. Yarns and threads.....	23,073	May 23	63	1198
Leeson & Co., J. R., Boston, Mass. Yarns and threads.....	23,074	May 23	63	1198
Leeson & Co., J. R., Boston, Mass. Yarns and threads.....	23,117	May 30	63	1377
Leeson & Co., J. R., Boston, Mass. Yarns and threads.....	23,118	May 30	63	1377
Leeson & Co., J. R., Boston, Mass. Yarns and threads.....	23,119	May 30	63	1377
Leeson & Co., J. R., Boston, Mass. Yarns and threads.....	23,244	June 27	63	1956
Lehmair, Louis A., New York, N. Y. Writing-paper.....	23,644	Sept. 26	64	1787
Lehman, J. & M., New York, N. Y. Gloves.....	22,484	Feb. 21	62	1203
Lehn & Fink, New York, N. Y. Medicinal agents derived from hydrocarbon compounds.....	22,293	Jan. 3	62	157
Lehnau, Gustav A., Philadelphia, Pa. Remedy for rheumatism.....	23,313	July 4	64	153
Lemm, Marion A., Weehawken, N. J. Cough elixir.....	23,631	Sept. 19	64	1647
Lemmon, James Q., Latrobe, Pa. Disinfecting chemical compound for purifying water.....	23,217	June 13	63	1686
Lenck, Samuel, Odenburg, Austria-Hungary. Hungarian wines.....	22,773	Apr. 11	63	307
Les Fils de A. Guillaumet & G. Maes, Paris, France. Wool and silk and wool black dress goods.....	22,421	Feb. 7	62	895
Levy & Son, D., Baltimore, Md. Shirt-waists, blouses, ladies' wrappers, and gowns.....	23,111	May 30	63	1377
Lewis Clothing Manufacturing Co., Charles R., Jefferson City, Mo. Men's coats, pantaloons, and vests.....	22,813	Apr. 18	63	458
Lewis Knitting Company, Janesville, Wis., and Chicago, Ill. Ribbed underwear.....	23,182	June 6	63	1528
Lhowe, Joseph, New York, N. Y. Cigarettes.....	23,132	May 30	63	1378
Liberty Machine Works, New York, N. Y. Printing-presses.....	23,628	Nov. 14	65	1064
Lieberthal, Elias H., Mansfield, Ohio. Suspenders and braces.....	22,763	Apr. 11	63	306
Lienau & Co., M., New York, N. Y. Wines and brandies.....	23,772	Apr. 11	63	307
Lifton, Charles A., Montreal, Canada. Coffee and its substitutes.....	22,460	Feb. 14	62	1060
Lighthouse, Charles H., Baltimore, Md. Raw oysters in cans and wood packages.....	23,256	June 27	63	1957
Lincoln Pill Company, New York, N. Y. Liver and kidney medicines and pills.....	23,316	July 4	64	153
Lindner & Remig Manufacturing Company, New York, N. Y. Brass articles for trimming and decoration, including screws and electric gas fittings.....	23,380	July 18	64	435
Lipton, Thomas J., London, England, Colombo, Ceylon, and Calcutta, India. Coffee and tea.....	23,837	Nov. 21	65	1218
Lipton, Thomas J., London, England, Colombo, Ceylon, and Calcutta, India. Coffee and tea.....	23,838	Nov. 21	65	1218
Lissauer & Co., New York, N. Y. Watchcases and jewelry.....	22,698	Mar. 28	62	1961
Locke Brothers, Salem, Mass. Pressure reducing valves and pump-governors.....	22,451	Feb. 7	62	898
Lockwood, Frederick J., Bridgeport, Conn. Salve or ointment for the skin.....	22,616	Mar. 7	62	1509
Lockwood, William H., St. Paul, Minn. Salves and ointments.....	23,607	Sept. 12	64	1531
Loeb & Co., A. N., New York, N. Y. Undergarments.....	22,486	Feb. 21	62	1203
Loeb & Co., A. N., New York, N. Y. Knitted undergarments.....	22,487	Feb. 21	62	1203
Loewenthal, William A., Evansville, Ind. Chemical compound used as a preservative.....	22,345	Jan. 17	62	447
Long, Charles T., Hamilton, Ohio. Flour.....	22,708	Mar. 24	62	1962
López, Ramón, Havana, Cuba. Cigarettes and cut tobacco.....	22,404	Jan. 31	62	740
Lorenzi, Albert de. (See Schweickhardt & Lorenzi.)				
Lounsbury, Edwin H., Coxsackie, N. Y. Canned sweet corn.....	23,736	Oct. 24	65	595
Lovecraft, Frederick A., New York, N. Y. Liquid food and systemic tonic and restorative.....	23,210	June 13	63	1685
Lowe Brothers, Dayton, Ohio. Prepared paints.....	23,205	June 13	63	1685
Lublin, Hannah, New York, N. Y. Dress-stays.....	22,354	Jan. 24	62	584
Luburg Manufacturing Company, Philadelphia, Pa. Velocipedes, bicycles, and parts thereof.....	23,109	May 23	63	1200
Lueders, George, New York, N. Y. Oil of roses.....	23,883	Nov. 28	65	1402
Lundin & Co., Chicago, Ill. Medicated beverage.....	23,035	May 16	63	1055
Lyman Smith's Sons Company, Norwood and Boston, Mass. Combination leather for boots and shoes and similar articles.....	23,506	Aug. 15	64	1004
Lyman Smith's Sons Company, Norwood and Boston, Mass. Combination leather for boots and shoes and similar articles.....	23,507	Aug. 15	64	1004
Lyon, Dupuy & Co., Boston, Mass. Wheat-flour.....	23,906	Dec. 5	65	1590
Lyon, Hall & Co., Baltimore, Md. Linoleums and window-shades.....	23,339	July 11	64	296
Lyon, Henry W., Bridgeport, Conn. Corset-waists.....	22,976	May 9	63	905
Lyon, Henry W., Bridgeport, Conn. Corset-waists.....	22,977	May 9	63	905
Lyon, Henry W., Bridgeport, Conn. Corset-waists.....	22,978	May 9	63	905
Lyon, John L., New Haven, Conn. Fluid compound for female disorders.....	23,876	Nov. 28	65	1402
Lyons, Joseph, Manchester, England. Writing and copying and all kinds of inks.....	22,715	Apr. 4	63	146
M. B. Foster & Sons, Limited, London, England. Spirituous liquors and wines.....	23,836	Nov. 21	65	1218
M. Werk Company, Cincinnati, Ohio. Soap powder.....	23,394	July 25	64	556
M. Werk Company, Cincinnati, Ohio. Soap powder.....	23,395	July 25	64	556
MacNamara, Patrick B., Brockville, Canada. Medicinal pills.....	23,020	May 16	63	1055
Macher, Jacob, New York, N. Y. Watchcases.....	22,667	Mar. 21	62	1817
Mack, Robert W., Boston, Mass. Boiler-tubing.....	23,802	Nov. 7	65	890

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Name, residence, and title.	No.	Date.	Official Gazette.	
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Macura Drug Co., Binghamton, N. Y. Remedy for certain named diseases	22,685	Mar. 21	62	1819
Maddocks, John, Bradford, England. Wearing-apparel	23,502	Aug. 15	64	1003
Maddocks, John, Bradford, England. Hats, caps, and bonnets	23,503	Aug. 15	64	1004
Maddocks, John, Bradford, England. Boots, shoes, and lasts	23,505	Aug. 15	64	1004
Maddocks, John, Bradford, England. Umbrellas, parasols, and canes	23,508	Aug. 15	64	1004
Maddocks, John, Bradford, England. Cotton, wool, silk, and worsted or hair piece goods	23,713	Oct. 17	65	438
Manganese Bronze and Brass Company, Limited, London, England. Ingots or other castings of bronze	23,731	Oct. 24	65	595
Manganese Bronze and Brass Company, Limited, London, England. Ingots or other castings of brass	23,732	Oct. 24	65	595
Mann Bros., Milwaukee, Wis. Tubs, pails, buckets, keelers, measures, and kanakins	22,504	Feb. 21	62	1204
Mann, William D., Chicago, Ill. Wash for the prevention and cure of sexual diseases	23,173	June 6	63	1527
Manners, William R., G. H. Downing, and G. S. Ackley, Binghamton, N. Y. Compound of sarsaparilla	22,701	Mar. 23	62	1961
Mansfield, Lott, Boston, Mass. Medicinal tonic	22,290	Jan. 2	62	157
Manwaring, Charles W., Chicago, Ill. Substance for exterminating rats, roaches, and like animals and insects	23,961	Nov. 21	65	1220
Marble Head Lime Company, Sandusky and Cleveland, Ohio. Manufactured lime	23,101	May 23	63	1200
Marcus, William M., Talladega, Ala. Toilet and laundry soaps	23,271	June 27	63	1959
Markendorf, Martin, Louisville, Ky. Preparation for the cure of venereal diseases	22,463	Feb. 14	62	1060
Markt & Company, New York, N. Y. Agricultural implements and handles for same	23,014	May 9	63	908
Marline Manufacturing Company, Minneapolis, Minn. Artificial fertilizers	22,467	Feb. 14	62	1061
Marquez, Miguel J., Havana, Cuba. Magnesia	23,397	July 25	64	556
Marshall, Kennedy Milling Company, Allegheny, Pa. Wheat-flour	23,421	July 25	64	558
Marshall, Samuel L., Allegheny and Pittsburgh, Pa. Tea	22,792	Apr. 11	63	309
Marshall, Samuel L., Allegheny and Pittsburgh, Pa. Tea	22,793	Apr. 11	63	309
Martell, Edouard, Cognac, France. Brandy	23,042	May 10	63	1056
Marvin & Co., William H. Urbana, Ohio. Pie fruit	23,808	Nov. 14	65	1062
Marx, George B., New York, N. Y. Carriages and wagons	22,856	Apr. 18	63	462
Mason, Charles H., Chatham, N. Y. Remedies for cancer and other blood diseases	23,033	May 16	63	1055
Mason & Co., L., Chicago, Ill. Cleaning and polishing preparation	23,880	Nov. 28	65	1402
Mason & Co., Marcus, New York, N. Y. Coffee classifiers, hullers, polishers, power-screens, pulpers, and elevators	22,676	Mar. 21	62	1818
Mason & Co., Marcus, New York, N. Y. Coffee machinery, including hullers, classifiers, polishers, screens, pulpers, engines, elevators, and boilers	22,803	Apr. 11	63	310
Mason Electric Company, New York, N. Y. Batteries and battery-motors	22,749	Apr. 4	63	149
Mason Regulator Company, Boston, Mass. Valves for machinery	22,696	Mar. 21	62	1820
Mason & Sons, I. B., Providence, R. I. Lard, sausage, hams, bacon, salt pork, dried beef, and beef-tongues	22,401	Jan. 31	62	739
Massachusetts Chemical Company, Boston, Mass. Insulating-varnish	23,051	May 16	63	1057
Massachusetts Cotton Mills, Lowell, Mass. Woven cotton goods	23,710	Oct. 17	65	438
Massachusetts Cotton Mills, Lowell, Mass. Woven cotton goods	23,711	Oct. 17	65	438
Massachusetts Cotton Mills, Lowell, Mass. Blue denims	23,752	Oct. 31	65	748
Massachusetts Cotton Mills, Lowell, Mass. Woven cotton goods	23,780	Nov. 7	65	889
Massachusetts Cotton Mills, Lowell, Mass. and New York, N. Y. Cotton goods	23,019	May 16	63	1054
Mather, Hannah, St. Helen's, England. Pills, tinctures, cough remedies, and medicinal powders and plasters	23,416	July 25	64	558
Maulbetsch & Whittemore, Newark, N. J. Leather for satchels and for cases for musical instruments, &c	23,375	July 18	64	435
Maxim, Jennie A., Pittsfield, Mass. Dermal toilet preparations	22,689	Mar. 21	62	1819
May, Dominique, New Orleans, La. Liniment	23,671	Oct. 3	65	131
Mayer Sons & Co., Philadelphia, Pa. Rye whisky	22,323	Jan. 10	62	314
Mayers, Henry J., Oakland, Md. Remedy for catarrh	23,093	May 23	63	1199
McCall Company, New York, N. Y. Printed periodicals	23,862	Nov. 28	65	1401
McCaumton Piano Company, Oneonta, N. Y. Pianos	23,322	July 4	64	154
McCaw, Stevenson & Orr, Limited, Belfast, Ireland. Translucent material in sheets for decorating window glass	22,791	Apr. 11	63	309
McConnell, S. R. & I. C., Burlington, Iowa. Harness, saddles, and collars	23,418	July 25	64	558
McCord, Brady Company, Omaha, Nebr. Tea	23,388	July 18	64	436
McCormick, Edward J., New York, N. Y. Dental rubber	23,067	May 23	63	1197
McCusker, Thomas H., Providence, R. I. Carbonated beverages	23,835	Nov. 21	65	1218
McDowell Packing Company, Oconomowoc, Wis. Pig-pork products	22,639	Mar. 14	62	1048
McDonald & Co., John P., Niagara Falls, N. Y. Whisky	23,763	Oct. 31	65	749
McKay Metallic Fastening Association, Boston, Mass. Shoe-nails	23,012	May 9	63	908
McKay Metallic Fastening Association, Boston, Mass. Metallic nail-strip	23,104	May 23	63	1200
McKay Metallic Fastening Association, Boston, Mass. Wire nails	23,159	May 30	63	1380
McKellips, Stephen H., Antioch, Cal. Remedy for the cholera	23,673	Oct. 3	65	131
McKesson & Robbins, New York, N. Y. Medicinal and toilet powders	22,724	Apr. 4	63	147
McKesson & Robbins, New York, N. Y. Receptacles used for dispensing powders, liquids, and semi-liquids	22,873	Apr. 18	63	462
McKesson & Robbins, New York, N. Y. Remedy for internal and external use, and atomizers	22,872	Apr. 25	63	607
McKinley, Jeremiah S., Orient, Ohio. Grapes and grape-vines	23,760	Oct. 31	65	749
McLaughlin, William F., Chicago, Ill. Baking power	23,294	July 4	64	152
McMullin, William H., Houston, Tex. Laundry, toilet, and fancy soaps	23,396	July 25	64	556
McTaggart, Seymour W., Lancaster, Pa. Vermin-eradicators	23,704	Oct. 10	65	291
Meagher Bros. & Co., Montreal, Canada, and Rouse's Point, N. Y. Orange quinine-wine	22,681	Mar. 21	62	1818
Meinrath, Eli, Kansas City, Mo. Rolled white outs	23,086	May 23	63	1199
Melfi, Peppino, Syracuse, N. Y. Medicinal preparations of an antiseptic, deodorant, or germicide character	23,442	Aug. 1	64	711
Mellier Drug Company, St. Louis, Mo. Coal-tar products in the form of tablets for medical purposes	22,703	Mar. 28	62	1961
Melrose, Percy C., Columbus, Ohio. Celery tea for medicinal purposes	22,607	Mar. 7	62	1308
Melvale Distilling Co., Melvale, Md. Whisky	22,734	Apr. 4	63	148
Memphis Music Co., Memphis, Tenn. Pianos, organs, guitars, mandolins, and banjos	23,414	July 25	64	558
Menendez, Francisco, Havana, Cuba. Cigars	22,403	Jan. 31	62	739
Merchants and Planters Oil Company, Houston, Tex. Cooking-oil	22,698	Oct. 10	65	294
Merck, Firm of E., Darmstadt, Germany. Remedies for cancerous diseases	23,375	Jan. 24	62	585
Merck, Firm of E., Darmstadt, Germany. Preparations of iron derived from animal matter known as physiological iron preparations	23,530	Aug. 22	64	1128
Merck, Firm of E., Darmstadt, Germany. Preparations of iron derived from animal matter known as physiological iron preparations	23,531	Aug. 22	64	1128
Merck, Firm of E., Darmstadt, Germany. Medicinal agents for nervous diseases and a febrifuge	23,534	Aug. 22	64	1129
Merck, Firm of E., Darmstadt, Germany. Remedies for whooping-cough and asthmatic diseases	23,536	Aug. 22	64	1129
Merck, Firm of E., Darmstadt, Germany. Remedies for cancerous diseases	23,537	Aug. 22	64	1129

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Messenger & Co., T. H., New York, N. Y. Roasted coffee	22,598	Mar. 7	62	1507
Messenger & Co., T. H., New York, N. Y. Coffee	22,600	Mar. 7	62	1508
Messenger & Co., T. H., New York, N. Y. Coffee berries	22,736	Apr. 4	63	148
Messenger & Co., T. H., New York, N. Y. Coffee	22,919	May 2	63	755
Mexican Root Soap Co., Boston, Mass. Toilet soap	22,468	Feb. 14	62	1061
Meyer, Albert W., Chicago, Ill. Water coolers and urns	22,803	Nov. 7	65	890
Mica Roofing Co., New York, N. Y. Paints for roofs and other purposes	22,397	Jan. 31	62	739
Mica Roofing Co., New York, N. Y. Wood-preservative	22,495	Feb. 21	62	1204
Michael & Sons, J. C., Oakington, Md. Canned corn	22,707	Mar. 28	62	1961
Michael & Sons, J. C., Oakington, Md. Canned corn	22,913	May 2	63	754
Michigan Carbon Works, Detroit, Mich. Ammonia carbonate	22,233	June 20	63	1813
Michigan Chemical Co., Detroit, Mich. Liniment	22,401	July 25	64	557
Mick, Charles S., Chillicothe, Ohio. Remedy for diseases of the blood, kidneys, liver, stomach, and bowels	22,152	May 30	63	1380
Millen, Mary A. C., New York, N. Y. Remedy for cancers	22,748	Oct. 24	65	596
Miller, Conrad, Detroit, Mich. Toilet soap, lotions, cream, salve, and complexion powders	22,723	Apr. 4	63	147
Miller, Dubrul & Peters Manufacturing Co., Cincinnati, Ohio, and New York, N. Y. Cigar-molds	22,541	Aug. 22	64	1129
Miller, Dubrul & Peters Manufacturing Co., Cincinnati, Ohio, and New York, N. Y. Cigar-molds	22,542	Aug. 22	64	1129
Miller, Dubrul & Peters Manufacturing Co., Cincinnati, Ohio, and New York, N. Y. Cigar-molds	22,543	Aug. 22	64	1129
Miller, Dubrul & Peters Manufacturing Co., Cincinnati, Ohio, and New York, N. Y. Cigar-molds	22,544	Aug. 22	64	1129
Miller, John A., San Francisco, Cal. Vaginal capsules, antiseptic uterine lotions, and laxative tablets	22,318	July 4	64	154
Mills, Hattie B., New York, N. Y. Pickled and preserved fruits and vegetables	22,597	Mar. 7	62	1507
Mims, Sehorn B., Monroe, La. Cleansing compound for the removal of spots and stains from fabrics	22,268	June 27	63	1958
Minneapolis Grain and Feed Co., Minneapolis, Minn. Wheat, grabam, rye, and buckwheat flour, hominy, and cornmeal	22,320	Jan. 10	62	313
Minot, Hooper & Co., New York, N. Y. Drilling	22,630	Mar. 14	62	1647
Minot, Hooper & Co., New York, N. Y. Sheeting	22,631	Mar. 14	62	1647
Mississippi Glass Company, St. Louis, Mo. Rolled sheet-glass	22,510	Aug. 15	64	1004
Mitchell Bros., Aberdeen, Md. Canned corn	22,345	July 11	64	296
Mitchell Brothers, Limited, Glasgow, Scotland. Whisky	22,531	Feb. 28	62	1347
Mitchell, Firm of William, Birmingham and London, England. Pens of all kinds	22,515	Feb. 28	62	1346
Moline Plow Company, Moline, Ill. Plows and cultivators	22,641	Sept. 19	64	1648
Monarch Cycle Company, Chicago, Ill. Velocipedes and bicycles	22,711	Mar. 28	62	1962
Montén, Firm of Lars Stockholm, Sweden. Vinegar	22,523	Aug. 22	64	1127
Monterey Company, Florence, S. C. Remedy for indigestion	22,833	Apr. 18	63	460
Montgomerie, John, Partick, Scotland. Substitute for coffee	22,601	Mar. 7	62	1508
Montreal Silk Mills Company, Limited, Montreal, Canada. Medicated knit underwear	22,979	May 9	63	906
Moorhead & Co., R. L., Providence, R. I., and New York, N. Y. Lace-pins, scarf-pins, studs, ear-drops, and similar articles	22,627	Mar. 14	62	1647
Moran Bros., Minneapolis, Minn. Polishing substance for use on metal and glass	22,204	June 13	63	1624
Morris & Co., Nelson, Chicago, Ill. Extracts of beef and pork products, including lard	22,680	Oct. 3	65	132
Morris, George, London, England. Coloring-matter for use in confectionery	22,888	Apr. 25	63	609
Morrison & Banta, New York, N. Y. Remedies for nervous disorders	22,660	Sept. 26	64	1788
Morse Bros., Canton, Mass. Stove polish or blacking	22,622	Mar. 7	62	1309
Mound City Paint and Color Company, St. Louis, Mo. White lead	22,747	Apr. 4	63	149
Mound City Paint and Color Company, St. Louis, Mo. Compound of white lead and zinc	22,267	June 13	63	1655
Mount Washington Glass Company, New Bedford, Mass. Glassware, including tableware and fancy articles	22,408	Jan. 31	62	740
Mount Washington Glass Company, New Bedford, Mass. Glassware, including tableware and fancy articles	22,409	Jan. 31	62	740
Moyer, George F., Seattle, Wash. Flour and meal	22,398	Jan. 31	62	739
Mueller, Stephen, La Crosse, Wis. Insecticide	22,875	Nov. 28	65	1102
Müllens & Kropff, New York, N. Y. Toilet soap	22,357	July 11	64	294
Müller & Co., J. G., Stuttgart, Germany. Artists' colors, varnishes, and driers	22,457	Aug. 8	64	854
Müller, Frederick H., Chicago, Ill. Preparation for the skin, consisting of a cream-like ointment	22,799	Nov. 7	65	890
Müller Söhne, F. Ad., Wiesbaden, Germany. Artificial eyes	22,275	June 27	63	1959
Munro, Norman L., New York, N. Y. Headache-powders	22,391	Jan. 31	62	738
Munsell, Eugene, L. W. Kingsley, and F. Brooks, New York, N. Y. Electrical insulators	22,623	Mar. 7	62	1510
Munson's Homeopathic Family Medicine Company, Camden, N. J., and New York, N. Y. Homeopathic and other medicines and remedies	22,647	Mar. 14	62	1649
Muscatine Oat Meal Company, Muscatine, Iowa. Rolled oats and oatmeal	22,554	Aug. 29	64	1261
Myers, Angelo, Philadelphia, Pa., and Camden, N. J. Whisky	22,865	Apr. 25	63	606
Myers, Bell P., Orlando, Fla. Yeast	22,393	July 25	64	556
N. & G. Taylor Co., Philadelphia, Pa. Tin-plate,terne-plate, and coated and uncoated sheet metal	22,854	Apr. 18	63	462
N. K. Fairbank & Company, Chicago, Ill. Oleaginous food substances	22,697	Oct. 10	65	294
Nash-Smith Tea and Coffee Company, St. Louis, Mo., and Denver, Colo. Baking powder	22,382	July 18	64	436
Nashoba Manufacturing Company, Ayer, Mass. Cleansing mordants for use in dyeing fibers and fabrics	22,141	May 30	63	1379
National Building Supply Company, Baltimore, Md. English Portland cement	22,813	Nov. 14	65	1063
National Building Supply Company, Baltimore, Md. German Portland cement	22,814	Nov. 14	65	1063
National Cigarette and Tobacco Company, New York, N. Y. Cigarettes and tobacco	22,307	July 4	64	153
National Needle Company, Springfield, Mass. Sewing-machine and hand sewing needles	22,612	Sept. 12	64	1532
Neazley, James K., Wilkes-Barre, Pa. Remedy for certain named diseases	22,873	Apr. 25	63	607
Neelands, Johnston L. (See Neelands, Thomas D. and J. L.)				
Neelands, Thomas D. and J. L., Chicago, Ill. Collars and cuffs	22,642	Sept. 26	64	1767
Neely, William A., Lynn, Mass. Leather stays for boots and shoes	22,523	Feb. 28	62	1346
Nehrbrass, Peter, Brooklyn, N. Y. Soap powder	22,545	Feb. 28	62	1348
Nesbitt, William H. A., Pittsburg, Pa. Remedy for rheumatism	22,684	Mar. 21	62	1818
Neubert, Crisdo F., Chicago, Ill. Headache remedy	22,264	June 27	63	1958
Neuss, Hesslein & Co., New York, N. Y. Gray, bleached, dyed, printed, and fancy domestic cotton goods	22,818	Apr. 18	63	459
Neuss, Hesslein & Co., New York, N. Y. Gray, bleached, dyed, printed, and fancy domestic cotton goods	22,819	Apr. 18	63	459
Neuss, Hesslein & Co., New York, N. Y. Gray, bleached, dyed, printed, and fancy domestic cotton goods	22,820	Apr. 18	63	459
New England Cure Co., Providence, R. I. Medicine for the cure of alcoholism	22,716	Oct. 17	65	419
New England Whalebone Manufacturing Co., New York, N. Y. Commercial whalebone	22,525	Feb. 28	62	1347
New Home Sewing Machine Company, New York, N. Y. Sewing-machines and attachments	22,689	Oct. 10	65	293
New Process Nail Company, Torrington, Conn. Horseshoe-nails	22,187	June 6	63	1528
New York Belling and Packing Company, Limited, New York, N. Y. Fire-hose and woven fabric of which it is composed	22,124	May 30	63	1378
New York Biscuit Company, Chicago, Ill., and New York, N. Y. Crackers or biscuits	22,737	Oct. 24	65	595
New York Condensed Milk Company, New York, N. Y. Milk, cream, butter, and cheese	22,536	Feb. 28	62	1318

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New York Condensed Milk Company Jersey City, N. J., and New York, N. Y. Fluid or dairy milk.	23,604	Sept. 12	64	1531
New York Paper Bag Machine and Manufacturing Company, New York, N. Y. Paper bags	23,783	Nov. 7	65	839
New York Sewing Machine and Manufacturing Company, Plattsburg, N. Y. Sewing-machines and their attachments	22,329	Jan. 10	62	314
New York Sewing Machine and Manufacturing Company, Plattsburg, N. Y. Sewing-machines and their attachments	22,330	Jan. 10	62	314
New York Sewing Machine and Manufacturing Company, Plattsburg, N. Y. Sewing-machines and their attachments	22,331	Jan. 10	62	314
New York Sewing Machine and Manufacturing Company, Plattsburg, N. Y. Sewing-machines and their attachments	22,332	Jan. 10	62	314
New York Sewing Machine and Manufacturing Company, Plattsburg, N. Y. Sewing-machines and their attachments	22,333	Jan. 10	62	314
New York Smelting and Refining Company, New York, N. Y. Antifriction and Babbitt metals	22,334	Jan. 10	62	314
Newburne, John W., Springfield, Ill. Antipyretic anodyne in powdered form	23,057	May 16	63	1058
Newell Coal Company, Peoria, Ill. Coal	22,568	Feb. 28	62	1350
Newton, Chambers & Company, Limited, near Sheffield, England. Disinfectants	22,503	Feb. 21	62	1204
Newton, Chambers & Company, Limited, near Sheffield, England. Sheep-dips	23,664	Sept. 26	64	1788
Newton, Isaac, Cleveland, Ohio. Grapes	23,665	Sept. 26	64	1788
Nickels & Tuller, Philadelphia, Pa. Whisky	23,249	June 27	63	1956
Nichols Manufacturing Company, New York, N. Y. Corn and bunion cure	23,556	Aug. 29	64	1261
Nielsen & Wyler, Galveston, Tex. Cosmetics	23,846	Nov. 21	65	1219
Noble, James E., Albany, N. Y. Soap for family, laundry, and mill use	22,310	Jan. 10	62	312
Non-Alcoholic Beer Brewing Company, Chicago, Ill. Unfermented malt-and-hops beverages classed as soft drinks	23,600	Sept. 12	64	1530
Norman Paper Company, Holyoke, Mass. Writing-paper	23,625	Sept. 19	64	1647
North British Rubber Company, Limited, Edinburgh, Scotland, and London, England. Rubber-soled canvas shoes	22,808	Apr. 18	63	458
North Chemical Company, New York, N. Y. Remedy for diseases peculiar to women	23,666	Oct. 3	65	131
North Dakota Milling Company, Grand Forks and Forest River, N. D. Wheat-flour	23,150	May 30	63	1379
North Packing and Provision Company, Boston, Mass. Lard	22,319	Jan. 10	62	313
North Packing and Provision Company, Boston, Mass. Lard	23,131	May 30	63	1378
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,258	June 27	63	1957
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	22,359	Jan. 24	62	584
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,296	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,297	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,298	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,299	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,300	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,301	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,302	July 4	64	152
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,384	July 18	64	436
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,696	Oct. 10	65	294
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour	23,769	Oct. 31	65	749
Norwegian Milk Condensing Company, Limited, Christiania, Norway. Condensed milk	23,721	Oct. 17	65	439
Noyes & Bro., W. H., Newburyport, Mass. Fine-tooth combs	22,838	Apr. 18	63	461
Nusbaum, Frank A., Columbus, Ohio. Oil-filters	22,575	Feb. 28	62	1350
O'Donnell & Duer Bavarian Brewing Company, Chicago, Ill. Lager-beer	22,867	Apr. 25	63	607
O'Donnell & Duer Bavarian Brewing Company, Chicago, Ill. Beer and ale	23,656	Sept. 26	64	1788
O'Donnell & Duer Bavarian Brewing Company, Chicago, Ill. Ale and beer	23,657	Sept. 26	64	1788
O'Meara, John U., Washington, D. C. Headache-powders	23,565	Aug. 29	64	1262
Oak Chemical Company, Philadelphia, Pa. Face-powder	22,844	Apr. 18	63	461
Oakland Vinegar and Pickle Company, Highland, Mich. Vinegar and pickles	23,234	June 20	63	1813
Oakley Soap and Perfumery Company, New York, N. Y. Perfumery	23,024	May 16	63	1054
Occidental Manufacturing Co., Philadelphia, Pa. Remedies for coughs and diseases of the throat	23,032	May 16	63	1055
Od Cheni. Company, New York, N. Y. Certain named remedies	22,871	Apr. 25	63	607
Ogden, Charles E., London, England. Writing fluids and inks	22,583	Mar. 7	62	1506
Ogden, Charles E., London, England. Writing fluids and inks	22,584	Mar. 7	62	1506
Ohlsen, Henry D., New York, N. Y. Remedies for gout, rheumatism, and impure blood	22,837	Apr. 18	63	461
Oliver, James, South Bend, Ind. Chilled plows	23,595	Sept. 5	64	1394
Olmstead, Chauncey L., Springfield, Mass. Corsets for ladies	23,112	May 30	63	1377
Olmsted & Co., Chicago, Ill. Chain-pumps	23,591	Sept. 5	64	1393
Ollwell & Co., James, New York, N. Y. Whiskies	22,289	Jan. 3	62	157
Ollwell & Co., James, New York, N. Y. Whisky	22,458	Feb. 14	62	1060
Ollwell & Co., James, New York, N. Y. Whiskies	22,502	Feb. 21	62	1204
Openbryn & Sons, William, New York, N. Y. Silk ribbons	22,670	Mar. 21	62	1817
Openbryn & Sons, William, New York, N. Y. Velvet ribbons	22,816	Apr. 18	63	456
Oppenheimer, Abraham E., Philadelphia, Pa. Preparation to remove superfluous hair	22,937	May 2	63	756
Orvis, Franklin H. and S. M., Manchester, Vt. Natural spring water	23,719	Oct. 17	65	439
Orvis, Sarah M. (See Orvis, Franklin H. and S. M.)				
Osborne, Frank N., New York, N. Y. Jewelry, spoons, forks, ladles, cutlery, and similar articles	23,729	Oct. 24	65	595
Osborne, Frank N., New York, N. Y. Jewelry, spoons, forks, ladles, cutlery, and similar articles	23,730	Oct. 24	65	595
Osborne, Frank N., New York, N. Y. China, glass, and porcelain for table use and bric-a-brac	23,934	Dec. 19	65	1913
Oshkosh Match Works, Oshkosh, Wis. Matches	23,287	July 4	64	151
Ottinger, James J., Philadelphia, Pa. Tooth and gum washes	22,296	Jan. 3	62	158
Packard, James W. (See Packard, William D. and J. W.)				
Packard, James W. and W. D., Warren, Ohio. Incandescent lamps, dynamos, and electric fixtures	22,577	Feb. 28	62	1350
Packard, William D. (See Packard, James W. and W. D.)				
Packard, William D. and J. W., Warren, Ohio. Arc and incandescent lamps	23,514	Aug. 15	64	1004
Paine, John F., Providence, R. I. Remedies for catarrhal diseases	22,875	Apr. 25	63	607
Paine William L., Argenta, Ark. Lockets, brooches, charms, badges, finger-rings, and similar jewelry	22,716	Apr. 4	63	146
Palmer, Adelaide E., Boston, Mass. Bluing	22,889	Apr. 25	63	609
Palmer, Firm of Solon, New York, N. Y. Perfumery, sachet-powders, and toilet soap	22,363	Jan. 24	62	584
Parker & Co., E. L., Baltimore, Md. Tin plates,terne plat's, tin taggers, black taggers, and sheet metal and solder	22,325	Jan. 10	62	314
Parker, Webb & Company, Detroit, Mich. Compound used as a substitute for butter and lard	23,432	Aug. 1	64	710
Parks Bros. & Rogers, Providence, R. I. Collar-buttons, tie-holders, studs, and kindred jewelry	22,299	May 2	63	753
Parsons & Bird, Buffalo, N. Y. Sewing-machines and attachments	22,473	Feb. 14	62	1061
Pastor Kneipp Medicine Company, Chicago, Ill. Certain named medicinal preparations of roots and herbs	22,782	Apr. 11	63	308
Peabody & Co., Henry W., New York, N. Y. Flour	22,740	Apr. 4	63	148
Peabody & Co., Henry W., New York, N. Y. Kerosene	22,951	May 2	63	757
Pearson, William E., Paris, France. Oily medicinal preparation for internal and external use	23,662	Sept. 26	64	1788

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Name, residence, and title.	No.	Date.	Official Gazette.	
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Pearson, William E., Paris, France. Oily medicinal preparation for internal and external use	23,663	Sept. 26	64	1788
Pease, Campbell B., and M. H. Johnston, Galesburg, Ill. Remedies for gonorrhea, gleet, and the like	23,317	July 4	64	153
Penberthy Injector Company, Detroit, Mich. Steam-boiler injectors	22,962	May 2	63	758
Penfield & Son, J. W., Willoughby, Ohio. Friction-clutch pulleys	23,908	Dec. 5	65	1590
Penington, David F., Baltimore, Md. Watches, cuff and lapel buttons, watch-charms, and medals	23,645	Sept. 26	64	1787
Pepper, James W., Philadelphia, Pa. Wind, string, and other musical instruments and trimmings therefor	22,517	Feb. 28	62	1346
Pepper, James W., Philadelphia, Pa. Violins	23,062	May 23	63	1197
Peptonized Lager Company, Chicago, Ill. Lager-beer	23,669	Oct. 3	65	131
Perceval, Charles, New York, N. Y. Pork-meats and lard	22,743	Apr. 4	63	149
Perego & Co., Ira, New York, N. Y. Shirts, collars, cuffs, neckties, underwear, and outer clothing	23,517	Aug. 22	64	1127
Perfection Chemical and Manufacturing Company, Des Moines, Iowa. Mortar and coatings for walls	23,512	Aug. 15	64	1004
Perkins, William A., Greenville, Tex. Remedy for chills	23,030	May 16	63	1055
Perrin Frères et Cie., New York, N. Y. Gloves	23,331	July 11	64	295
Perrin Frères et Cie., New York, N. Y. Gloves	23,332	July 11	64	295
Perrin Frères et Cie., New York, N. Y. Gloves	23,333	July 11	64	295
Perrin Frères et Cie., New York, N. Y. Gloves	23,334	July 11	64	295
Perrin Frères et Cie., New York, N. Y. Gloves	23,335	July 11	64	295
Perry, Henry E., Essex Junction, Vt. Compound sirup of spruce gum	23,351	July 11	64	297
Perry, John W., Kansas City, Mo. Hair restorative and perfumery	22,839	Apr. 18	63	461
Petel & Co., Ed., Paris, France. Cashmeres	22,492	Feb. 7	62	895
Peter Stubs, Limited, Warrington and Rotherham, England. Steel, steel wire, tools, files, and saws	22,752	Apr. 4	63	149
Peter Stubs, Limited, Warrington and Rotherham, England. Steel, steel wire, tools, files, and saws	22,753	Apr. 4	63	150
Peter Stumpf Brewing Company, Richmond, Va. Ale, porter, and beer	23,522	Aug. 22	64	1127
Peterboro Medicine Co., Peterborough, Canada. Kidney and liver cure	22,447	Feb. 7	62	897
Petri, George, New York, N. Y. Washing-powder	23,006	May 9	63	908
Pettijohn California Breakfast Food Company, Minneapolis, Minn. Rolled wheat	22,459	Feb. 14	62	1080
Petzelt, Christopher, Philadelphia, Pa. Face ointment for beautifying the skin	22,935	May 2	63	756
Pew & Son, John, Gloucester, Mass. Preserved fish	22,906	May 2	63	754
Pew & Son, John, Gloucester, Mass. Preserved fish	22,907	May 2	62	754
Pew & Son, John, Gloucester, Mass. Preserved fish	22,908	May 2	63	754
Pew & Son, John, Gloucester, Mass. Preserved fish	22,909	May 2	63	754
Pew & Son, John, Gloucester, Mass. Preserved fish	22,910	May 2	63	754
Peyton, Lacey E., Omaha, Nebr. Remedies for cramp, colic, cholera, and catarrh	23,674	Oct. 3	65	132
Pfaffmann, George A., Cleveland, Ohio. Egg noodles	22,431	Feb. 7	62	896
Pfister & Vogel Leather Company, Milwaukee, Wis. Boots, shoes, and analogous footwear	22,721	Apr. 4	63	146
Pflugh & Co., Albert, Hoboken, N. J. White lead	22,437	Feb. 7	62	897
Phelps, William, New York, N. Y. Remedies for rheumatism, neurotic, myopathic, and idiopathic pain, and fevers	23,701	Oct. 10	65	294
Philip H. Postel Milling Company, Mascoutah, Ill. Flour	23,260	June 27	63	1957
Philipp, Gustav A. (See Schulz and Philipp.)				
Phillips, Arthur, San Francisco, Cal. Suppositories	23,096	May 23	63	1199
Phillips Insulated Wire Company, Pawtucket, R. I. Insulated wire and insulated wire cables	23,857	Nov. 21	65	1220
Phillips, Richard, Baird, Tex. Medicine for expelling tape-worms	23,610	Sept. 12	64	1531
Phoenix Candle Company, Syracuse and New York, N. Y. Certain candles	23,288	July 4	64	151
Phoenix Candle Company, Syracuse and New York, N. Y. Candles	23,619	Sept. 19	64	1646
Phoenix Candle Company, Syracuse and New York, N. Y. Candles of a high grade	23,722	Oct. 17	65	439
Phoenix Glass Company, Monaca, Pa. Shades, globes, and other glassware	23,832	Nov. 21	65	1218
Phoenix Portland Cement Company, Limited, Frindsbury, near Rochester, and London, England. Cement	22,362	Jan. 24	62	584
Phenix Stock Food Co., Chicago, Ill. Medicated compound food for stock	23,355	July 11	64	297
Pickel, Joseph W., St. Louis, Mo. Wrenches	23,475	Aug. 8	64	856
Picot, Jules, Paris, France. Lye product	22,361	Jan. 24	62	584
Pierce, Henry L., Boston, Mass. Chocolate	22,356	Jan. 24	62	584
Pierce, Samuel, Hoskins, Nebr. Fruit and vegetable preserving compounds	22,281	Jan. 3	62	156
Pike, George H. (See Warren and Pike.)				
Pike Manufacturing Company, Haverhill, N. H. Oil-stones and whetstones	23,448	Aug. 1	64	711
Pine, Milford L., Fabius, N. Y. Dental remedies and specifics	23,027	May 16	63	1055
Pitchers, William T., Godalming, England. Sweaters	23,687	Oct. 10	65	293
Pitt, Jesse B., Kansas City, Mo. Remedies for catarrh	23,148	May 30	63	1379
Plantation Pharmacal Company, Memphis, Tenn. Remedies for gonorrhea and gleet	23,538	Aug. 22	64	1129
Plantation Pharmacal Company, Memphis, Tenn. Plasters, powders, ointments, and sarsaparilla	23,563	Aug. 29	64	1262
Platt, Henry B., New York, N. Y. Disinfectant	22,653	Mar. 14	62	1649
Plume & Atwood Manufacturing Company, Waterbury, Conn., and New York, N. Y. Pins	22,717	Apr. 4	63	146
Plume & Atwood Manufacturing Company, Waterbury, Conn., New York, N. Y., Boston, Mass., and Chicago, Ill. Rivets, washers, burrs, and like articles of copper and brass	23,651	Sept. 26	64	1787
Pohl, Julius, Horton, Kans. Dermal remedies	22,933	May 2	63	756
Pollock, Nathaniel A. (See Bell, Dickinson, and Pollock.)				
Porter, Lewis B., Watertown, Mass. Starching-machines	22,449	Feb. 7	62	898
Portland-Cement-Fabrik "Germania" H. Manske & Co., Lehrte, Germany. Hydraulic cement	23,587	Sept. 5	64	1393
Potsdam Milk-Sugar Company, Potsdam, N. Y. Butter, cheese, and milk-sugar	22,795	Apr. 11	63	309
Powley, Jacob S. (See Eman and Powley.)				
Prall, Delbert E., Saginaw, Mich. Preparation for the cure of colic in horses	22,573	Feb. 28	62	1350
Priesmeyer, August, St. Louis and Jefferson City, Mo. School-shoes	23,070	May 23	63	1197
Prindle, Roscoe S., New York, N. Y. Certain named products of the conifera	22,554	Feb. 28	62	1349
Probst & Co., Frederick, New York, N. Y. Cashmiers	22,905	May 2	63	753
Progressive Product Company, Jersey City, N. J., and New York, N. Y. Powdered composition for cleaning fabrics and for household use	23,142	May 30	63	1379
Protector, Christian, Chicago, Ill. Liniments	22,826	Nov. 14	65	1064
Prouty & Co., Isaac, Spencer and Boston, Mass. Boots and shoes	22,303	Jan. 10	62	312
Prouty & Co., Isaac, Spencer and Boston, Mass. Boots and shoes	22,355	Jan. 24	62	584
Prouty & Co., Isaac, Spencer and Boston, Mass. Boots and shoes	22,522	Feb. 28	62	1346
Pry, A. C. & E. A., Keedysville, Md. Wheat-flour	23,261	June 27	63	1958
Prym, Firm of William, Stolberg, near Aachen, Germany. Hooks and eyes	23,925	Dec. 12	65	1764
Puech & Freret, New Orleans, La. Press-cloth and filter-cloth	22,821	Apr. 18	63	459
Purdue Frederick Company, New York, N. Y. Tonic compound	23,794	Nov. 7	65	890
Quandt Brewing Company, Troy, N. Y. Lager-beer	23,078	May 23	63	1198
Radam, William, New York, N. Y. Remedy known as a microbe-killer	23,399	July 25	64	556
Rahr's Sons, Henry, Green Bay, Wis. Lager-beer	22,428	Feb. 7	62	896
Rand, Allen S., and G. Bell, Cincinnati, Ohio, and Peoria, Ill. Washing fluid	23,485	Aug. 15	64	1002
Randall, Rühl & Co., Baltimore, Md. Canned goods	23,255	June 27	63	1957
Raser, John B., Reading, Pa. Headache and fever remedy	23,566	Aug. 29	64	1262
Rasin, Thomas M., Spokane, Wash. Suits for boys and children	23,068	May 23	63	1197

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Raysor & Smith, Asheville, N. C. Ointment used as a remedy for skin diseases.	22,704	Mar. 22	62	1961
Reach, Robert, Philadelphia, Pa. Toys.	23,596	Sept. 12	64	1530
Reading Hardware Company, Reading, Pa. Builders' hardware, including locks and latches.	23,325	July 4	64	154
Reading Stove Works, Orr, Painter & Company, Reading, Pa. Stoves and heaters and parts of the same.	22,578	Feb. 28	62	1350
Red Jacket Manufacturing Co., Davenport, Iowa. Pumps.	22,663	Mar. 14	62	1650
Red Seal Remedy Co., Rockland, Me. Sarsaparilla and cough sirup.	22,682	Mar. 21	62	1818
Redding, William F., King's Station, N. Y. Folding clothes-driers.	23,472	Aug. 8	64	855
Reed, Charles A., New York, N. Y. Preparation of calisaya.	23,155	May 30	63	1380
Reid, Murdoch & Company, Chicago, Ill. Green and black teas.	23,577	Sept. 5	64	1392
Reid, Murdoch & Company, Chicago, Ill. Green and black teas.	23,578	Sept. 5	64	1392
Reid, Murdoch & Company, Chicago, Ill. Green and black teas.	23,579	Sept. 5	64	1392
Reisch & Bros., F., Springfield, Ill. Lager-beer.	22,288	Jan. 3	62	157
Reiset, Frederic, and G. A. Waerber, New York, N. Y. Olive-oil.	23,940	Dec. 19	65	1914
Reisinger, Hugo, New York, N. Y. Carbons for electrical purposes.	23,777	Oct. 31	65	750
Reliance Manufacturing Company, New York, N. Y. Tooth-powder.	22,544	Feb. 28	62	1348
Reliance Manufacturing Company, New York, N. Y. Carbolic soap.	22,551	Feb. 28	62	1348
Reliance Manufacturing Company, New York, N. Y. Liquid glue.	22,552	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Mucilage.	22,553	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Shoe blacking and dressing.	22,556	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Glass-cleaning preparations.	22,557	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Polish for silver and like wares.	22,558	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Metal-polish.	22,559	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Stove-polish.	22,560	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Oil for harness and leather.	22,564	Feb. 28	62	1349
Reliance Manufacturing Company, New York, N. Y. Liniment.	22,615	Mar. 7	62	1509
Reliance Manufacturing Company, New York, N. Y. Salves and liniments for animal use.	22,651	Mar. 14	62	1649
Reliance Manufacturing Company, New York, N. Y. Lubricating-oil.	22,654	Mar. 14	62	1649
Reliance Manufacturing Company, New York, N. Y. Writing-ink.	22,809	Apr. 18	63	458
Reliance Manufacturing Company, New York, N. Y. Toilet powder.	22,245	Apr. 18	63	461
Reliance Manufacturing Company, New York, N. Y. Wash-bluing.	22,848	Apr. 18	63	462
Reliance Manufacturing Company, New York, N. Y. Furniture and wood polish.	22,849	Apr. 18	63	462
Kembaugh, Burlington S., Sedalia, Mo. Flour.	23,128	May 30	63	1378
Remy Co., Albert F., Mansfield, Ohio. Canned fruits, vegetables, fish, meat, oysters, catsup, and soup.	22,399	Jan. 31	62	739
Remy Co., Albert F., Mansfield, Ohio. Canned fruits, fish, meats, oysters, catsup, and soup.	22,742	Apr. 4	63	148
Remy Co., Albert F., Mansfield, Ohio. Canned fruits, vegetables, fish, meats, oysters, catsup, and soup.	23,015	May 9	63	908
Remy Co., Albert F., Mansfield, Ohio. Canned fruits, vegetables, fish, meats, oysters, catsup, and soup.	23,466	Aug. 8	64	855
Rice & Robinson Soap Company, Titusville, Pa. Laundry and toilet soap.	22,549	Feb. 28	62	1348
Rice & Robinson Soap Company, Titusville, Pa. Laundry and toilet soap.	22,550	Feb. 28	62	1348
Rice, Stix & Co., St. Louis, Mo. Men's overalls, pantaloons, shirts, and drawers.	22,337	Jan. 10	62	314
Richards, Thomas E., Eden, Fla. Proprietary internal remedies produced from the pineapple.	22,883	Apr. 25	63	608
Richardson & Boynton Company, New York, N. Y., and Chicago, Ill. Hot air and water heaters.	23,323	July 4	64	154
Richmond, Samuel A., Tuscola, Ill. Remedy for eczema, tetter, sunburn, freckles, and other blemishes of the complexion.	23,230	June 20	63	1813
Riker, Clarence B., New York, N. Y. Cathartic pills.	22,572	Feb. 28	62	1350
Riley & Co., Wm. B., Philadelphia, Pa. Horse-blankets.	23,342	July 11	64	296
Rinald Bros., Philadelphia, Pa. Paints and paint-removers.	23,100	May 23	63	1200
Roark, John P., Bushnell, Ill. Nerve tonic.	22,931	May 2	63	756
Robert Portner Brewing Company, Alexandria, Va. Lager-beer.	23,870	Nov. 28	65	1401
Robinson Bros. & Co., Boston, Mass. Toilet soap.	22,364	Jan. 24	62	5-5
Robinson, Robert D., Lafayette, Ind. Medicinal coal-tar derivative.	23,278	Nov. 28	65	1402
Robison, Walter S., Cleveland, Ohio. Chewing-gum.	23,479	Aug. 15	64	1002
Rockwood, Thomas H., St. Louis, Mo. Teas.	23,079	May 23	63	1198
Roessler & Hasslacher Chemical Company, New York, N. Y. Bleaching compound.	22,435	Feb. 7	62	896
Roger & Gallet, Paris, France. Perfumery, soaps, oils, tooth powder, smelling extracts, rice powders, and cologne.	22,440	Feb. 7	62	897
Rogers, Moore & Bunting, Atlanta, Ga. Medicine for diseases of the blood and resultant disorders.	23,034	May 16	63	1055
Rork, James E., Eau Claire, Wis. Liniment.	23,672	Oct. 3	65	131
Rose Co., R. M., Atlanta, Ga. Whisky.	23,914	Dec. 12	65	1763
Roseman & Levy, New York, N. Y. Watchcases.	23,499	Aug. 15	64	1003
Rosenzi, Enrico C., Philadelphia, Pa. Remedy for hog-cholera and other diseases.	22,649	Mar. 14	62	1649
Roskam, Gerstley & Co., Philadelphia, Pa. Whisky.	22,991	May 9	63	907
Roth, August P., M. E. and M. C. Van Harlingen, Georgetown, Ohio. Remedy for eye troubles.	23,174	June 6	63	1527
Rothwell Hosiery Company, Bolton, England. Underwear.	23,831	Nov. 21	65	1218
Rottmann, William A., St. Louis, Mo. Babbitt metal and antifricition metal for journal-bearings.	23,280	June 27	63	1959
Royal Cycle Works, Marshall, Mich. Bicycles.	22,413	Jan. 31	62	740
Royal Milling Company, Great Falls, Mont., and Minneapolis, Minn. Flour and other cereal products.	23,677	Oct. 3	65	132
Ruff Brewing Company, Quincy, Ill. Lager-beer.	23,805	Nov. 14	65	1062
Russell Printing Company, Cincinnati, Ohio. Pictorial story-books.	22,456	Feb. 14	62	1060
Ruth & Co., B. F., Reading, Pa. Liquid filler.	22,746	Apr. 4	63	149
Ryan, John C., Jr., St. Joseph, Mo. Leather-dressings.	23,281	June 27	63	1960
S. Liebmann's Sons Brewing Company, Brooklyn, N. Y. Ales, porters, and beers.	23,139	May 30	63	1379
S. P. Shotter Company, Savannah, Ga., Chicago, Ill., New York, N. Y., and New Orleans, La. Rosin-oil.	22,952	May 2	63	757
S. P. Shotter Company, Savannah, Ga., Chicago, Ill., New York, N. Y., and New Orleans, La. Rosin-oil.	22,953	May 2	63	757
S. P. Shotter Company, Savannah, Ga., Chicago, Ill., New York, N. Y., and New Orleans, La. Rosin-oil.	23,003	May 9	63	908
S. P. Shotter Company, Savannah, Ga., Chicago, Ill., New York, N. Y., and New Orleans, La. Brewers' pitch, a pine-tree product.	23,004	May 9	63	908
S. S. White Dental Manufacturing Company, Philadelphia, Pa., New York and Brooklyn, N. Y., Boston, Mass., Chicago, Ill., and Atlanta, Ga. Dentifrice.	23,005	May 9	63	908
Sachs, Rosenwasser & Stern, New York, N. Y. Overgaiters and leggings.	22,542	Feb. 28	62	1348
Sacks, Louis, Newark, N. J. Boxes containing implements for shoe repairs.	22,476	Feb. 14	62	1062
Sacks, Louis, Newark, N. J. Boxes containing implements for shoe repairs.	23,449	Aug. 1	64	711
Sacks, Louis, Newark, N. J. Heel-plates for boots and shoes.	23,540	Aug. 22	64	1129
Salina Cement Plaster Company, Salina and Dillon, Kans. Cement plaster.	22,464	Feb. 14	62	1060

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Salomon & Bro., L. A., New York, N. Y. Fuller's earth.....	22,891	Apr. 25	63	609
Salutaris Natural Mineral Water Company, St. Clair, Mich. Natural mineral water.....	22,365	Jan. 24	62	585
Samson Cordage Works, Boston, Mass. Braided sash-cord.....	23,509	Aug. 15	64	1004
Sandalide Co., New York, N. Y. Remedy for gonorrhea, female weaknesses, and analogous diseases.....	22,374	Jan. 24	62	585
Sandrock & Co., Henry, New York, N. Y. Drawing-ink.....	23,907	Dec. 5	65	1590
Savage, Mary E., Minneapolis, Minn. Medicated food for domestic animals.....	22,886	Apr. 25	63	609
Sawyer Medicine Co., Bridgeport, Conn. Alternatives, tonics, and blood-purifiers.....	23,037	May 16	63	1055
Sawyer & Son, H. M., Cambridge, Mass. Oil-clothing.....	22,766	Apr. 11	63	306
Sayer & Co., George, Cognac, France. Brandy.....	23,869	Nov. 28	65	1401
Scala, Maria B., Milan, Italy. Anticholera and tonic remedy.....	23,850	Nov. 21	65	1219
Scala, Maria B., Milan, Italy. Anticholera and tonic remedy.....	23,877	Nov. 28	65	1402
Scala, Maria B., Milan, Italy. Anticholera and tonic remedy.....	23,898	Dec. 5	65	1589
Scala, Maria B., Milan, Italy. Anticholera and tonic remedy.....	23,899	Dec. 5	65	1590
Scarborough, Nephew & Co., Halifax, England. Serge.....	23,667	Oct. 3	65	131
Schermanson, Joel, Washington, D. C. Cough pills, catarrh cure, liniment, and tonics.....	22,295	Jan. 3	62	158
Schiffmann, Rudolph, St. Paul, Minn. Medicine for asthma and like affections.....	22,880	Apr. 25	63	608
Schilling Corset Co., Detroit, Mich. Corsets.....	23,242	June 27	63	1956
Schnasi, Sarlarmen, New York, N. Y. Cigarettes and smoking-tobacco.....	23,459	Aug. 8	64	854
Schlegel & Bro., Robert A., St. Louis, Mo. Plate-glass mirrors.....	23,321	July 4	64	154
Schlotmann & Co., Berlin, Germany. Knitted shawls.....	23,597	Sept. 12	64	1530
Schmidt & Co., S., New York, N. Y., and Portland, Oreg. Fresh, frozen, and pickled fish.....	23,840	Nov. 21	65	1219
Schmidt, Jacob A., Barmen, Germany, and New York, N. Y. Tools, pruning implements, and cutlery.....	23,568	Aug. 29	64	1262
Schoenike, Edward B., Kenosha, Wis. Medicinal tea.....	23,036	May 16	63	1055
Schopp & Co., Conrad, St. Louis, Mo. Kraut.....	23,812	Nov. 14	65	1062
Schulz, Friedrich A., and G. A. Philipp, Leipsic, Germany. Cleaning and polishing preparations.....	23,724	Oct. 17	65	439
Schulz, Friedrich A., and G. A. Philipp, Leipsic, Germany. Scouring and polishing preparations.....	23,820	Nov. 14	65	1063
Schweickhardt, Richard, & A. de Lorenzi, Dallas, Tex. Perfumes.....	23,356	July 11	64	297
Schweinburg, Emil, New York, N. Y. Corsets.....	23,804	Nov. 14	65	1062
Schweimer Emailirwerk Braselmann, Püttmann & Co., Schweim, Germany. Enameled cooking utensils and other enameled domestic ware.....	23,157	May 30	63	1380
Schwerin & Co., Emanuel, Philadelphia, Pa. Knee-pants.....	23,425	Aug. 1	64	709
Scott & Co., James B., Pittsburg, Pa. Tin and terne plates.....	23,855	Nov. 21	65	1920
Scovill & Adams Company, New York, N. Y. Albumenized paper.....	22,666	Mar. 21	62	1817
Searby, Zeilin & Co., San Francisco, Cal. Laxatives and tonics.....	22,834	Apr. 18	63	460
Sears, Robert, Newark, N. J. Bridle-bits.....	23,690	Oct. 10	65	293
Seaver, Charles S., Joliet, Ill. Wheat-flour.....	22,830	Apr. 18	63	460
Seeman Brothers, New York, N. Y. Canned fruits.....	23,089	May 23	63	1199
Seeman Brothers, New York, N. Y. Certain named cereal products.....	23,126	May 30	63	1378
Senior, Joss, Philadelphia, Pa. Remedy for piles.....	23,031	May 16	63	1055
Sharood, Charles K., and S. S. Crooks, St. Paul, Minn. Ladies' fine shoes.....	22,861	Apr. 25	63	606
Sharpless Bros., Philadelphia, Pa. Cotton cloth with a silk finish for dresses and linings.....	22,904	May 2	63	753
Sharpless Bros., Philadelphia, Pa. Printed cotton cloth.....	23,072	May 23	63	1197
Shaw, William B., North Attleborough, Mass. Remedies for coughs, colds, and throat affections.....	23,848	Nov. 21	65	1219
Shawnee Remedy Co., Toledo, Ohio. Remedy for diseases of the blood and liver.....	22,393	Jan. 31	62	739
Shawnee Remedy Co., Toledo, Ohio. Medicine for coughs, colds, bronchitis, and kindred diseases.....	23,900	Dec. 5	65	1590
Sheaffer, Alfred B., Lancaster, Pa. Whisky.....	23,655	Sept. 26	64	1788
Shepard, Norwell & Co., Boston, Mass. Blankets.....	23,550	Aug. 29	64	1261
Shirey & Brown, Buena Vista, Va. Emollient for the skin.....	23,800	Nov. 7	65	890
Shockey, William H., Tyler, Tex. Coffins.....	22,414	Jan. 31	62	740
Shoemaker & Co., Robert, Philadelphia, Pa. Preparation for the hair.....	23,897	Dec. 5	65	1589
Shumpp, Fabian, Carbondale, Pa. Lubricating-oils.....	23,815	Nov. 14	65	1063
Siere, Auguste, Paris, France. Purgative tea.....	23,951	Dec. 26	65	2058
Sillesky & Co., Daniel R., Lockport, N. Y. Shirts.....	22,475	Feb. 14	62	1061
Silver State Cigar Company, Denver, Colo. Cigars.....	22,864	Apr. 25	63	606
Simmons, Stephen W., Clinton, Mass. Baking-powder.....	22,738	Apr. 4	63	148
Simon & Co., N., Neenah, Wis. American brick, Limburger, and imitation Swiss cheese.....	23,553	Aug. 29	64	1261
Simpson, Charles A., Saxonville, Mass. Disinfectant.....	22,461	Feb. 14	62	1060
Singer, George S., Cardington, Ohio. Fountains, brooders, and incubators for poultry.....	23,829	Nov. 14	65	1060
Skanska Cement Aktie-Bolaget, Malmö, Sweden. Portland cement.....	23,277	June 27	63	1959
Smillie Coupler and Manufacturing Company, Newark, N. J. Car-couplings and parts thereof.....	23,419	July 25	64	558
Smith & Bailey, Belton, Tex. Dropsy cure.....	22,610	Mar. 7	62	1508
Smith-Brewer Novelty Company, Detroit, Mich. Skirt-holder.....	22,586	Mar. 7	62	1506
Smith Brothers, Poughkeepsie, N. Y. Cough-drops.....	22,294	Jan. 3	62	158
Smith, Charles H., Albany, N. Y. Bitters, emulsions, cough mixtures, sarsaparilla, and remedy for rheumatism.....	23,314	July 4	64	153
Smith & Co., E. T., Worcester, Mass. Coffee.....	22,433	Feb. 7	62	896
Smith & Egge Manufacturing Company, Bridgeport, Conn. Alloy of metal.....	23,567	Aug. 29	64	1262
Smith & Egge Manufacturing Company, Bridgeport, Conn. Locks and keys.....	23,589	Sept. 5	64	1393
Smith & Egge Manufacturing Company, Bridgeport, Conn. Sash-chains.....	23,590	Sept. 5	64	1393
Smith, Florence L., Cleveland, Ohio. Lubricating-oil.....	23,588	Sept. 5	64	1393
Smith, Frank J., Albany, N. Y. Root-beer.....	23,378	July 18	64	435
Smith, George H., Fresno City, Cal. Remedy for skin diseases.....	22,785	Apr. 11	63	308
Smith, George H., and T. W. Day, South Orange, N. J. Insecticide, disinfectant, and cleansing liquid.....	23,706	Oct. 10	65	294
Smith, Hogg & Gardner, New York, N. Y. Cotton dress goods.....	22,862	Apr. 25	63	606
Smith, Hugh, Newark, N. J. Hides, sides, splits, or skins, or similar forms of leather.....	22,423	Feb. 7	62	895
Smith, Richard, Macclesfield, England. Flour.....	22,739	Apr. 4	63	148
Smith, Richard, Macclesfield, England. Bread, biscuit, and fancy cakes.....	23,788	Nov. 7	65	890
Smith & Son, Theophilus, Ipswich, Mass. Remedies for pulmonary diseases.....	22,611	Mar. 7	62	1509
Smith, Warren E., New York, N. Y. Coats, pantaloons, and vests for men and boys.....	23,521	Feb. 23	62	1346
Smith & Wesson, Springfield, Mass. Revolving firearms.....	23,056	May 16	63	1057
Smith, William W., Chicago, Ill. Liniment.....	22,369	Jan. 24	62	545
Smoot, Willard G., Chicago, Ill. Punch.....	23,077	May 23	63	1194
Snowden, Rene R., Ocala, Fla. Washing-powder.....	23,447	Aug. 1	64	711
Sollmann, Luitpold, Canton, Ohio. Drugs.....	23,583	Sept. 5	64	1393
Soule Medical Co., Lisbon, N. D. Ointments, salves, and similar preparations.....	21,564	Aug. 29	64	1262
South Bend Medicine Company, South Bend, Ind., and Chicago, Ill. Cosmetic.....	23,026	May 16	63	1055
Southern Coffee Co., Louisville, Ky. Yeast-powder.....	23,484	Aug. 15	64	1002
Southwick, George W., Stamford, Conn. Belt-grease.....	23,605	Sept. 12	64	1531
Spalding, George I., London, England. Cameras.....	23,389	July 18	64	436
Spanogle & Yeager, Lewistown and Reedsville, Pa. Wheat-flour.....	23,049	May 16	63	1057
Spencer & Son, David H., Spencer, Va. Plug-tobacco.....	22,321	Jan. 10	62	313
Sperry & Alexander, New York, N. Y. Cutlery.....	23,158	May 30	63	1380

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Name, residence, and title.	No.	Date.	Official Gazette.	
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Sperry Flour Company, San Francisco, Cal. Rolled wheat meal for a breakfast food	23,942	Dec. 26	65	2058
Sperry, Nanine, New York, N. Y. Medicinal essence of herbs and roots and wine and alcohol	23,435	Aug. 1	64	710
Spiegelberger, Ludwig, Fürth, Germany. Leaf or powder metal	22,949	May 2	63	757
Spitz, Frank X., Des Moines, Iowa. Cigars	23,377	July 18	64	435
Springdale Paper Company, Westfield, Mass. Writing-paper	22,665	Mar. 21	62	1817
Spyer, Joseph, Chicago, Ill. Tooth-paste	23,723	Oct. 17	65	439
St. Arnould & Co., Epernay, France. Champagne-wine	23,247	June 27	63	1956
Stackhouse, Urbine, Indianapolis, Ind. Remedy for the tobacco habit	23,309	July 4	64	153
Stafford Mineral Spring Company, Limited, New Orleans, La. Natural mineral-spring water	22,869	Apr. 25	63	607
Stahl, George H., Quincy, Ill. Incubators and brooders	23,865	Nov. 28	65	1401
Standard Folding Bed Company, New York, N. Y. Folding beds	22,576	Feb. 28	62	1350
Standard Sewing Machine Company, Cleveland, Ohio. Sewing-machines	23,160	May 30	63	1380
Standard Shoe Company, Jefferson City, Mo. Boots and shoes	23,243	June 27	63	1956
Stapley & Smith, London, England. Underwear for ladies and children	23,921	Dec. 12	65	1764
Star and Crescent Milling Company, Chicago, Ill. Wheat-flour	23,262	June 27	63	1953
Star Brewery, Chicago, Ill. Lager-beer	22,868	Apr. 25	63	607
Star Brewery Company, Belleville, Ill. Lager-beer	23,903	Dec. 5	65	1590
Stark Medicine Company, Portland, Oreg. Preparations for the skin and complexion	22,934	May 2	63	756
Stark Medicine Company, Portland, Oreg. Perfumes, sachet-powders, complexion preparations, toilet soaps, and tooth-washes	22,938	May 2	63	756
Stark Medicine Company, Portland, Oreg. Perfumes, powders, cosmetics, lotions, and soaps	22,999	May 9	63	907
Steam Gauge and Lantern Company, Syracuse, N. Y. Tubular lamps and lanterns	23,239	June 20	63	1814
Stearns & Co., E. C., Syracuse, N. Y. Bicycles and other velocipedes and parts thereof	22,710	Mar. 28	62	1962
Stearns & Gordon, New York, N. Y. Toilet soap	22,496	Feb. 21	62	1204
Steel Edge Stamping and Retinng Company, Boston, Mass. Nutmeg graters	22,299	Jan. 3	62	158
Steel Edge Stamping and Retinng Company, Boston, Mass. Toilet-paper receptacles	22,326	Jan. 10	62	314
Steinhardt & Bro., A., New York, N. Y. Hooks and eyes	23,648	Sept. 26	64	1787
Steinhauser, Elliott, Oakland, Cal. Catarrh remedies, blood medicine, laxative compound, and plasters	22,874	Apr. 25	63	607
Stengel, George F., Newark, N. J. Skins or hides or hides treated with patent-leather composition for shoes, &c.	23,197	June 13	63	1684
Stevens, Edward G., Boston, Mass. Eye guards and protectors	23,330	July 11	64	295
Stevens, Simon G., Brooklyn, Me. Sardines	22,594	Mar. 7	62	1507
Stevens, William P., and J. E. Durham, Muncie, Ind. Laxative	22,477	Feb. 14	62	1062
Stiles, Noel W., Boston, Mass. Medicated cough-drops	22,492	Feb. 21	62	1203
Stillwell, Albert H., Philadelphia, Pa. Chocolate icing	23,200	June 13	63	1684
Stitt & Co., Wm. J., New York, N. Y. Spices, herbs, flavoring extracts, essences, celery salt, tapioca, sage, rice, pepper-sauce, and ketchup	22,279	Jan. 3	62	156
Stitt & Co., Wm. J., New York, N. Y. Coffee	23,383	July 18	64	436
Stobie Cereal Mills, St. Louis, Mo. Rolled oats	22,828	Apr. 18	63	460
Stocking, George B., Tacoma, Wash. Jewelry, spoons, and other flat ware	22,807	Apr. 18	63	458
Stoddard, Henry H., New London, Conn. Remedies for coughs and colds	23,311	July 4	64	153
Stokes, William H., Watertown, S. D. Wheat-flour	22,283	Jan. 3	62	157
Stokes, William H., Watertown, S. D. Wheat-flour	23,295	July 4	64	152
Stone, Elmer H., Detroit, Mich. Salve	22,932	May 2	63	756
Stone, Walter J., Bethel, Conn. Baking-powder	23,048	May 16	63	1057
Stover Bicycle Manufacturing Company, Freeport, Ill. Bicycles, tricycles, and velocipedes	23,594	Sept. 5	64	1394
Straub, John P., Chicago, Ill. Wines and cordials	22,528	Feb. 28	62	1347
Straus, Glaser & Co., Chicago, Ill. Men's boys', and children's clothing	23,949	Dec. 26	65	2058
Street & Co., L. A. B., Boston, Mass. Certain named remedies	22,928	May 2	63	955
Stromberg & Co., A., New York, N. Y. Dissolved washing-soda	23,619	Nov. 14	65	1063
Stroschein, Johann E., Berlin, Germany. Remedy for diabetes	23,493	Aug. 15	64	1003
Sultan, Frederick W., and J. A. Wellington, St. Louis, Mo. Chewing-gum	23,574	Sept. 5	64	1392
Superior Drill Company, Springfield, Ohio. Seeding implements, cider-mills, and hay-tools	23,569	Aug. 29	64	1262
Sward, Andrew W., Sheldahl, Iowa. Liniments	23,216	June 13	63	1685
Swift & Company, Chicago, Ill. Pepsin, pancreatin, and rennet and their compounds	22,539	Feb. 28	62	1348
Swift & Company, Chicago, Ill. Hams, bacon, and shoulders	22,638	Mar. 14	62	1648
Swift & Company, Chicago, Ill. Substitute for lard	22,797	Apr. 11	63	309
Swift & Company, Chicago, Ill. Butterine	23,201	June 13	63	1684
Swift & Company, Chicago, Ill. Butterine	23,290	July 4	64	151
Swift & Company, Kansas City, Kans., Chicago, Ill., and Omaha, Nebr. Sugar-cured hams, shoulders, breakfast bacon, and lard	23,050	May 16	63	1057
Swift & Company, Kansas City, Kans., Chicago, Ill., South Omaha, Nebr., and East St. Louis, Ill. Hams, breakfast-bacon, and shoulders	23,480	Aug. 15	64	1002
Swift & Company, Kansas City, Kans., Chicago and East St. Louis, Ill., and South Omaha, Nebr. Trimmings from the fore shoulders of hogs	23,525	Aug. 22	64	1128
Taboe Medical Company, Reno, Nev. Remedy for diseases of the kidneys	22,569	Feb. 28	62	1350
Tanner, Casper W., Williamstown, Ky. Remedy for catarrh and scrofulous diseases	22,784	Apr. 11	63	308
Tarbel, Paul E., Boston, Mass. Chemical fuel	22,314	Jan. 10	62	313
Tasmania Eucalyptus Oil Co., Hobart, Tasmania, and London, England. Eucalyptus oil and its extract and medicinal and sanitary compounds having these constituents	23,751	Oct. 24	65	596
Tata, Khursed M., Navsari, near Bombay, India. Remedies for diseases of the stomach, spleen, liver, lungs, heart, spine, and nerves	23,929	Dec. 19	65	1913
Taylor, Charlotte E., New York, N. Y., Chicago, Ill., Boston, Mass., and Philadelphia, Pa. Women's dresses and dress-goods	23,937	Dec. 19	65	1914
Taylor, Lynn B., Stillwater, Minn. Cough medicines	22,702	Mar. 28	62	1961
Taylor, Thomas P., Bridgeport, Conn. Dress and corset stays	22,340	Jan. 17	62	447
Tezeler, Gustav, Boston, Mass. Paste and cement for paper, leather, and similar materials	22,286	Jan. 3	62	157
Terre Haute Shovel and Tool Company, Terre Haute, Ind. Diamond-pointed spades	23,409	July 25	64	557
Tellow Manufacturing Company, Limited, Philadelphia, Pa. Complexion-powder	22,644	Mar. 14	62	1648
Tellow Manufacturing Company, Limited, Philadelphia, Pa. Liquid perfume	22,722	Apr. 4	63	147
Thomas & Klein, St. Louis, Mo. Paints for covering wood and iron	23,206	June 13	63	1685
Thompson & Co., C. E., Toledo, Ohio. Remedy for rheumatism	22,292	Jan. 3	62	157
Thompson, Duty S., Chicago, Ill. Baking-powder	22,914	May 2	63	754
Thompson, Edgar W., Cleveland, Ohio. Chewing-gum	22,727	Apr. 4	63	147
Thompson, Edgar W., Cleveland, Ohio. Chewing-gum	23,833	Nov. 21	65	1218
Thompson Milling Company, Lockport, N. Y. Wheat-flour	23,430	Aug. 1	64	709
Thomson & Taylor Spice Company, Chicago, Ill. Meat extracts	22,360	Jan. 24	62	584
Thum, George E., Elizabeth, N. J. Tape-worm medicine in capsules	22,462	Feb. 14	62	1060
Thurraas, Anton C., Minneapolis, Minn. Cheese	21,524	Aug. 22	64	1127
Tiffany & Company, New York, N. Y. Bronzes and silver and plated ware	23,572	Sept. 5	64	1392
Tiffany & Company, New York, N. Y. Jewelry and watches	23,573	Sept. 5	64	1392
Timms, Walter B., New York, N. Y. Canned fish, fruits, vegetables, soups, and milk	23,483	Aug. 15	64	1002
Tinker, Kossuth, and W. A. Hibbard, Athens, Ohio. Cure for the tobacco habit	22,392	Jan. 31	62	738

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Toledo Spice Company, Toledo, Ohio. Coffee	22,735	Apr. 4	63	148
Toledo Spice Company, Toledo, Ohio. Baking-powder	22,737	Apr. 4	63	148
Tooker, Edmund C. (See Higley and Tooker.)				
Tottenham, Francis R., Victoria, Canada. Remedy for sea-sickness	23,661	Sept. 26	64	1788
Tracy, Harriet R., New Brighton, N. Y. Sewing-machines	23,222	June 13	63	1686
Tre Denick, John B., Brooklyn, N. Y. Mustard	22,741	Apr. 4	63	148
Triner, Joseph, Chicago, Ill. Tonic	23,700	Oct. 10	65	294
Trojan Car Coupler Company, Troy, N. Y. Car-couplers and their parts	22,381	Jan. 24	62	586
Trommer Extract of Malt Company, Fremont, Ohio. Extracts of malt	22,603	Mar. 7	62	1508
Tucker, Nathaniel F., Boston, Mass. Boots and shoes	22,629	Mar. 14	62	1647
Turner-Shaker Medicine Co., St. Louis, Mo., and Union Village, Ohio. Certain named remedies	22,478	Feb. 14	62	1062
Turner-Shaker Medicine Co., St. Louis, Mo., and Union Village, Ohio. Remedies for nervous disorders and all diseases of the blood, liver, and kidneys	22,479	Feb. 14	62	1062
Turin Canning and Pickling Company, Limited, Turin, N. Y. Canned fruits and vegetables	23,809	Nov. 14	65	1062
Turin Canning and Pickling Company, Limited, Turin, N. Y. Canned fruits and vegetables	23,810	Nov. 14	65	1062
Tuttle & Harmon, Burton, Ohio. Maple-sugar and maple-sirup	22,794	Apr. 11	63	309
Uhl, Charles J., Chicago, Ill. Ointment or jelly for external use	23,670	Oct. 3	65	131
Union Bag and Paper Company, Chicago, Ill. Paper bags	23,066	May 23	63	1197
Union Cycle Manufacturing Company, Boston, Mass. Tires for vehicles	22,453	Feb. 7	62	898
Union Gas Engine Company, San Francisco, Cal. Vapor-engines	22,625	Mar. 7	62	1510
Union Hardware Company, Torrington, Conn., and New York, N. Y. Ice and roller skates	23,727	Oct. 17	65	440
United Alkali Company, Limited, Liverpool, England. Bleaching-powder	22,939	May 2	63	756
United Alkali Company, Limited, Liverpool, England. Bleaching-powder	22,940	May 2	63	756
United Alkali Company, Limited, Liverpool, England. Bleaching-powder	22,941	May 2	63	756
United Alkali Company, Limited, Liverpool, England. Common soap and detergents	23,942	May 2	63	756
United Alkali Company, Limited, Liverpool, England. Common soap and detergents	22,943	May 2	63	756
United Alkali Company, Limited, Liverpool, England. Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes	22,946	May 2	63	757
United Alkali Company, Limited, Liverpool, England. Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes	22,947	May 2	63	757
United Alkali Company, Limited, Liverpool, England. Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes	22,848	May 2	63	757
United Indurated Fibre Company, Portland, Me. Household and other ware made from wood pulp and waterproofed	22,377	Jan. 24	62	586
United Indurated Fibre Company, Portland, Me. Household and other ware made from wood pulp and waterproofed	22,378	Jan. 24	62	586
United Indurated Fibre Company of New Jersey, Lockport, N. Y. Waterproofed hollow ware known as indurated	23,189	June 6	63	1528
United States Graphite Company, Saginaw, Mich. Plumbago axle-grease	22,851	Apr. 18	63	462
United States Printing Company, Cincinnati, Ohio. Playing-cards	22,580	Mar. 7	62	1506
United States Printing Company, Cincinnati, Ohio. Playing-cards	22,581	Mar. 7	62	1506
United States Printing Company, Cincinnati, Ohio. Playing-cards	22,582	Mar. 7	62	1506
United States Printing Company, Cincinnati, Ohio. Playing-cards	23,781	Nov. 7	65	889
United States Printing Company, Cincinnati, Ohio. Playing-cards	23,782	Nov. 7	65	889
Valentine's Meat-Juice Company, Richmond, Va. Extracts of meat and compounds thereof	23,811	Nov. 14	65	1062
Valentine's Meat-Juice Company, Richmond, Va. Meat extracts and compounds thereof	23,841	Nov. 21	65	1219
Valk & Bro., S. J., New York, N. Y. Peas, sardines, mushrooms, truffles, macaroni, capers, olive-oil, olives, and prunes	22,622	Sept. 19	64	1647
Van Harlingen, Matthias C. (See Roth and Van Harlingen.)				
Van Harlingen, Montie E. (See Roth and Van Harlingen.)				
Van Lill, Preserving Company, Baltimore, Md. Preserves, jellies, fruit butters, and mince-meat	23,254	June 27	63	1957
Vapo-Cresolene Company, Stanley, N. J., and New York, N. Y. Certain named medical and disinfecting compounds and apparatus	23,441	Aug. 1	64	711
Vice & Co., David, Jr., Lancaster, Pa. Toilet face-wash	23,444	Aug. 1	64	711
Victoria Mineral Water Spring Company, Rotterdam, Netherlands. Natural mineral water	23,136	May 30	63	1378
Victoria Mineral Water Spring Company, Rotterdam, Netherlands. Natural mineral water	23,137	May 30	63	1378
Victoria Mineral Water Spring Company, Rotterdam, Netherlands. Natural mineral waters	23,170	June 6	63	1527
Victoria Mineral Water Spring Company, Rotterdam, Netherlands. Natural mineral waters	23,246	June 27	63	1956
Vienna Enamel and Stamping Company, Chicago, Ill., and Porter, Ind. Granite-ware articles for household use	23,471	Aug. 8	64	855
Vilmar & Goetze, New York, N. Y. Clover-seed	23,843	Nov. 21	65	1219
Vogel Brothers, New York, N. Y. Men's and boy's outer clothing and shirts, collars, cuffs, neck-wear, and underwear	23,422	Aug. 1	64	709
Vogeler Co., Charles A., Baltimore, Md. Hair-eradicators	22,309	Jan. 10	62	312
Volk, August H. and P., Minneapolis, Minn. Remedy for catarrh	22,291	Jan. 3	62	157
Volk, Philip. (See Volk, August H. and P.)				
Vossler, Jacob C., Dayton, Ohio. Remedy for headache, neuralgia, and rheumatism	23,228	June 20	63	1813
W. A. Bingham & Company, New York, N. Y. Wrapping-paper, paper boxes, and paper bags	22,518	Feb. 28	62	1346
W. J. Wilcox Lard and Refining Company, Union, N. J., and New York, N. Y. Lard and its substitutes	22,911	May 2	63	754
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Hog lard and oil	23,943	Dec. 26	65	2058
Wacker & Birk Brewing and Malting Company, Chicago, Ill. Lager-beer	22,826	Apr. 18	63	460
Wacker & Birk Brewing and Malting Company, Chicago, Ill. Lager-beer	22,988	May 9	63	906
Wacker & Birk Brewing and Malting Company, Chicago, Ill. Lager-beer	23,041	May 16	63	1056
Wade, Henry, Kingston, Canada. Remedy for headache, insomnia, and similar troubles	22,781	Apr. 11	63	308
Wadsworth, Howland & Company, Incorporated, Boston, Mass. Tinted leads	23,110	May 30	63	1377
Waerber, Gustavus A. (See Reiset and Waerber.)				
Wagner, Robert H., Rye, N. Y. Liniment	23,562	Aug. 29	64	1262
Wailles, Dove & Co., Newcastle-on-Tyne, England. Paints and compositions for protecting iron structures from corrosion	23,817	Nov. 14	65	1063
Wakelee & Company, San Francisco, Cal. Cosmetics	23,177	June 6	63	1528
Walker-Gordon Laboratory Co., Boston, Mass. Pure milk for nursery and sick-room use	23,043	May 16	63	1056
Walker, John D., Lexington, Ky. Twist tobacco	22,425	Feb. 7	62	895
Walker Paint Company, Cincinnati, Ohio. White lead, including dry, mixed in oil, and mixed in oil with colors	22,956	May 2	63	757
Walker Pharmacal Company, St. Louis, Mo. Medicinal preparation used as an antiflat and rheumaticide	22,878	Apr. 25	63	608
Walker Pharmacal Company, St. Louis, Mo. Ointment for skin diseases	23,923	Dec. 12	65	1764
Walker, William A., Evansville, Ind. Parlor game	23,224	June 20	63	1813
Wallace & Co., New York, N. Y. Confectionery	23,075	May 23	63	1198
Wallace, Elliott & Co., New York, N. Y. Shoes	23,408	July 25	64	557
Waller, John T., Pasadena, Fla. Oranges, lemons, and peaches	23,842	Nov. 21	65	1219
Walrath & Co., Syracuse, N. Y. Teas and coffees	23,694	Oct. 10	65	293

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Walter M. Lowney Company, Boston, Mass. Chocolates and other bonbons.....	22,591	Mar. 7	62	1507
Walter M. Lowney Company, Boston, Mass. Bonbons.....	23,693	Oct. 10	65	293
Wampole & Co., Henry K., Philadelphia, Pa. Suppositories for diseases of the bowels and rectum.....	22,370	Jan. 24	62	585
Wampole & Co., Henry K., Philadelphia, Pa. Mineral-spring water.....	22,527	Feb. 28	62	1347
Wampole & Co., Henry K., Philadelphia, Pa. Mineral-spring water.....	23,245	June 27	63	1956
Wanamaker, Firm of John, Philadelphia, Pa. Sewing-machines and attachments.....	23,926	Dec. 12	65	1764
Wands, John C., St. Louis, Mo. Water-filters.....	23,945	Dec. 26	65	2058
Ward, Henry C., New York, N. Y. Whisky.....	23,904	Dec. 5	65	1590
Ward, William M., Paradise, Tex. Bitters, liniment, and cough-syrup.....	22,780	Apr. 11	63	308
Warder, Bushnell & Glessner Company, Springfield, Ohio. Guard-fingers, cutters, knife-sections, and other parts of harvesting-machines.....	23,681	Oct. 3	65	132
Warder, Bushnell & Glessner Company, Springfield, Ohio. Self-rakes, droppers, reels, and supplemental platforms, &c.....	23,682	Oct. 3	65	132
Warder, Bushnell & Glessner Company, Springfield, Ohio. Harvesting-machines, mowing-machines, reaping-machines, and combined reapers and mowers.....	23,683	Oct. 3	65	132
Warren, Charles G. (See Warren, John F. and C. G.).....				
Warren, George A., and G. H. Pike, Worcester, Mass. Liquid dressing for leather goods.....	23,518	Aug. 22	64	1127
Warren, John F. and C. G., Worcester, Mass. Leather belting.....	22,863	Apr. 25	63	606
Wartenberg, Emma, New York, N. Y. Washing fluid.....	22,692	Mar. 21	62	1819
Wasserman, Benoit, New York, N. Y. Cigars.....	22,350	Jan. 17	62	448
Wasserman, Benoit, New York, N. Y. Cigars.....	22,351	Jan. 17	62	448
Wasserman, Benoit, New York, N. Y. Cigars.....	22,352	Jan. 17	62	448
Watkins, Joseph R., Winona, Minn. Certain named medicines.....	23,585	Sept. 5	64	1393
Watson, Erwin & Co., Oakland, Cal. Insect-extminating compound.....	23,320	July 4	64	154
Waukesha Hygeia Mineral Springs Company, Chicago, Ill., and Waukesha, Wis. Mineral water and beverages into which it enters as a constituent.....	22,643	Mar. 14	62	1648
Waukesha-Lithia Spring Company, Chicago, Ill. Mineral water.....	23,038	May 16	63	1056
Waverley Manufacturing Co., Boston, Mass. Extract or coloring material for food.....	22,540	Feb. 28	62	1348
Waynick, John W., Bristol, Tenn. Ginger ale, soda and mineral waters, and draft and bottled beer.....	22,602	Mar. 7	62	1508
Weaver, John C., New York, N. Y. Paints for vehicles.....	23,816	Nov. 14	65	1063
Weber, Joseph, New York, N. Y. Plant-fertilizer.....	22,945	May 2	63	756
Weber, Otto E., Radebeul, Germany. Preparation for improving the taste of coffee.....	23,720	Oct. 17	65	439
Webster, Warren, Philadelphia, Pa. Feed-water heaters and purifiers.....	23,013	May 9	63	908
Weeks, Hiram W., Philadelphia, Pa. Extracts for making ginger-ale.....	23,765	Oct. 31	65	749
Weeks & Potter Company, Boston, Mass. Quinine tonic.....	22,608	Mar. 7	62	1508
Wehr-Hobemann-Gottlieb Brewing and Malting Company of Baltimore City, Baltimore, Md. Lager-beer.....	23,555	Aug. 29	64	1261
Weiser, Firm of E. J., Decorah, Iowa. Plasters.....	23,144	May 30	63	1379
Weiskittel & Son, A., Baltimore, Md. Elevated boiler, brick-set, and portable ranges, cook-stoves and heating-stoves, and all kinds of gas, gasoline, and oil stoves and ranges.....	22,379	Jan. 24	62	586
Weiskittel & Son, A., Baltimore, Md. Gas-stoves, gas-ranges, and gas-heaters, and gasoline, oil, coal, and wood burning stoves.....	22,380	Jan. 24	62	586
Wellington, John A. (See Sultan and Wellington.).....				
Wellington, Walter L., New York, N. Y. Henrietta cloth.....	23,407	July 25	64	557
Wells, Albert A., and G. R. Craft, Lafayette, Ind. Veterinary medicine for distemper and cough.....	23,901	Dec. 5	65	1590
Wells & Co., S. C., Le Roy, N. Y. Dentifrice.....	23,466	Aug. 15	64	1002
Wells & Co., S. C., Le Roy, N. Y. Remedy for catarrh.....	23,586	Sept. 5	64	1393
Wells, Schuyler C., Le Roy, N. Y. Herb tea used as a remedy for indigestion, eruptions of the skin, &c.....	23,436	Aug. 1	64	710
Wells Cultivator Co., Milford, Mich. Cultivators and bean-harvesters.....	22,452	Feb. 7	62	898
Wells-Stone Mercantile Company, Duluth, Minn. Canned goods.....	23,786	Nov. 7	65	889
Wertheimer Company, San Francisco, Cal. Cigars.....	23,403	July 25	64	557
Wertheimer Company, San Francisco, Cal. Cigars.....	23,404	July 25	64	557
Wertheimer Company, San Francisco, Cal. Cigars.....	23,405	July 25	64	557
Wessell, Nickel & Gross, New York, N. Y. Piano-actions.....	23,274	June 27	63	1959
West, George, Stockton, Cal. Wines and liquors manufactured from grape-juice.....	23,461	Aug. 8	64	854
West Side Brewery Company, Chicago, Ill. Lager-beer.....	22,733	Apr. 4	63	148
West Side Brewery Company, Chicago, Ill. Lager-beer.....	22,777	Apr. 11	63	308
West Sarvey Central Dairy Co., Guilford, England. Cream.....	23,839	Nov. 21	65	1219
Westcott Chuck Company, Oneida, N. Y. Chucks.....	22,800	Apr. 11	63	310
Western Tin Plate Works, Limited, Llanelly, England. Tin plates.....	23,852	Nov. 21	65	1220
Western Tin Plate Works, Limited, Llanelly, England. Tin plates.....	23,853	Nov. 21	65	1220
Westervelt & Co., W. H., New York, N. Y. Fruits.....	23,575	Sept. 5	64	1392
Westmoreland Coal Company, Philadelphia and Westmoreland county, Pa. Bituminous coal.....	22,955	May 2	63	757
Wheatley, William A., Baltimore, Md. Raw and processed oysters.....	22,318	Jan. 10	62	313
Wheaton & Sons, Hiram, New Bedford, Mass. Carbonated beverages.....	22,778	Apr. 11	63	308
Wheeler, Edward C., Boston, Mass. Substitute for coffee.....	23,081	May 23	63	1198
Wheeling Coffee and Spice Company, Wheeling, W. Va. Coffee and spices.....	22,636	Mar. 14	62	1647
Whitaker, Thomas D., Philadelphia, Pa. Plaster, Portland cement, and analogous compositions.....	23,513	Aug. 15	64	1004
White, Edward B., Lancaster, Ohio. Remedy for neuralgia.....	22,648	Mar. 14	62	1649
White, Frank C., Peoria, Ill. Salve for lumpy jaw in animals.....	23,267	June 27	63	1958
White Rock Mineral Spring Company, Waukesha, Wis. Mineral water, ginger ale, phosphate, ozonate, and carbonated beverages.....	23,873	Nov. 28	65	1402
White Rose Manufacturing Co., Pawtucket, R. I. Washing-powders.....	23,559	Aug. 29	64	1261
White Sewing Machine Company, Cleveland, Ohio. Sewing-machines.....	22,957	May 2	63	757
Whitney & Co., New York, N. Y. Ribbons.....	23,018	May 16	63	1054
Whitney & Co., New York, N. Y. Silks.....	23,120	May 30	63	1377
Whitney Glass Works, Glassborough, N. J. Glass bottles and vials.....	23,156	May 30	63	1380
Whittier, Fuller & Co., San Francisco, Cal. White lead.....	23,919	Dec. 12	65	1764
Wiard Plow Company, Batavia, N. Y. Plows, cultivators, rollers, and harrows.....	22,417	Jan. 31	62	740
Wichert, Henry, Chicago, Ill. Ketchup, chowchow, pickles, and other preserved fruits and vegetables, sauces, and jellies.....	22,887	Apr. 25	63	609
Wiebusch, Estate of Frederick, New York, N. Y. Cutlery, including knives, razors, shears, files, &c.....	23,639	Sept. 19	64	1648
Wiedenmayer, George W., Newark, N. J. Ale and beer.....	23,460	Aug. 8	64	854
Wientge, Charles C., assignor to Howard Sterling Company, Providence, R. I. Bowl.....	23,798	Sept. 26	64	1783
Wilcox Specific Medicine Company, Philadelphia, Pa. Remedy for amenorrhea, dismenorrhea, copulency, and nervous diseases.....	23,400	July 25	64	557
Wiley & Russell Manufacturing Company, Greenfield, Mass. Screw-plates, taps and dies, and bolt-cutters.....	23,854	Nov. 21	65	1220
Wilkins & Beckner, Greenfield, Ind. Plasters, liniments, ointments, medicated candy, and remedies for coughs, cholera, and headache.....	23,825	Nov. 14	65	1064
Willcox & Gibbs Sewing Machine Company, New York, N. Y. Hosiery and underwear.....	23,194	June 13	63	1684

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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William J. Matheson & Company, Limited, New York, N. Y. Dye-stuffs produced from log-wood	22,950	May 2	63	757
Williams & Co., New York, N. Y. Anticorrosive composition and an antifouling composition for ships' bottoms	22,745	Apr. 4	63	149
Williams, Davis, Brooks & Co., Detroit, Mich. Perfumes	23,223	June 20	63	1813
Williams, William J., Waukesha, Wis. Natural mineral water	23,834	Nov. 21	65	1218
Williamson Corset and Brace Company, St. Louis, Mo. Corsets, corset-waists, and shoulder-braces	22,668	Mar. 21	62	1817
Williamson, Harriet, Braidwood, Ill. Confections	22,632	Mar. 14	62	1647
Willis, Grinnell, New York, N. Y. Bleached, brown, and printed cotton goods	22,903	May 2	63	753
Willis, Grinnell, New York, N. Y. Bleached, brown, and printed cotton goods	23,022	May 16	63	1054
Willis, Grinnell, New York, N. Y. Brown, bleached, and printed cotton goods	23,712	Oct. 17	65	438
Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Soft steel and iron	22,659	Mar. 14	62	1649
Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Steel in sheets, strips, bars, and rods	23,059	May 16	63	1058
Wilson, Palmer & Co., Baltimore, Md. Table-sirups	23,084	May 23	63	1199
Wing Brothers & Hartt, New York, N. Y. Coffee and tea	23,044	May 16	63	1056
Wing Brothers & Hartt, New York, N. Y. Spices and mustard	23,045	May 16	63	1056
Wing Brothers & Hartt, New York, N. Y. Cigars and cigarettes	23,076	May 23	63	1198
Wingate, Stone & Welles Mercantile Company, Kansas City, Mo. Shirts, blouses, trousers, and overalls	23,069	May 23	63	1197
Wm. Bergenthal Company, Milwaukee, Wis. Brandy	23,138	May 30	63	1378
Wm. J. Lemp Brewing Company, St. Louis, Mo. Beer and ale	23,134	May 30	63	1378
Wm. J. Lemp Brewing Company, St. Louis, Mo. Beer and ale	23,135	May 30	63	1378
Wood & Co., W. W., Winston, N. C. Plug-tobacco	22,526	Feb. 28	62	1347
Wood Drug Company, Bristol, Va. Vermifuge	22,729	Apr. 4	63	147
Woodcock, Ernest E., Lawrence, Ark. Mineral waters	22,920	May 2	63	755
Woods & Co., Kangaroo Island, South Australia. Eucalyptus oil and extract	23,468	Aug. 8	64	855
Wooley & Son, A., Warsaw, Ind. Remedies for throat and lung affections	22,879	Apr. 25	63	608
Worcester Corset Company, Worcester, Mass. Corsets	23,686	Oct. 10	65	293
Worcester Envelope Company, Worcester, Mass. Writing-paper and envelopes	23,709	Oct. 17	65	438
Worthley, Frank O., Boston, Mass. Iron mangers	22,626	Mar. 7	62	1510
Wright Bros. Tobacco Company, St. Charles, Mo. Plug-tobacco	22,297	Jan. 3	62	158
Wright Bros. Tobacco Company, St. Charles, Mo. Plug-tobacco	22,298	Jan. 3	62	158
Wright, Charles, Detroit, Mich. Pills	22,614	Mar. 7	62	1509
Wright & Co., L. A., Boston, Mass. Flour	23,167	June 6	63	1527
Wright, Robert, Cleveland, Ohio. Chewing-gum	23,369	July 18	64	434
Wrisley, Allen B., Chicago, Ill. Handkerchief extracts	22,439	Feb. 7	62	897
Wuersten, Frederick, New York, N. Y. Bougies and suppositories	23,930	Dec. 19	65	1913
X-Zalia Medicine Company, Portland, Me., and Boston, Mass. External remedy for man and beast	23,171	June 6	63	1527
X-Zalia Medicine Company, Portland, Me., and Boston, Mass. Medicine for topical application	23,367	July 18	64	434
York Manufacturing Company, Saco, Me., and Boston, Mass. Certain named dry goods	22,767	Apr. 11	63	306
Yost Manufacturing Company, Toledo, Ohio. Bicycles, velocipedes, and articles accessory thereto	22,455	Feb. 7	62	898
Young, Alexander V., Troy, N. Y. Medicines for the cure of blood, liver, and kidney diseases	23,495	Aug. 15	64	1003
Young, David W., Omaha, Nebr. Prepared wheat and oats for table use	23,127	May 30	63	1378
Yzermans & Co., Vlaardingen, Netherlands. Herrings and sardines	22,293	July 4	64	152
Zellner Bros., Philadelphia, Pa. Chemical composition for softening or treating cotton	22,944	May 2	63	756
Ziegler Brothers, Philadelphia, Pa. Shoes for men and women	23,757	Oct. 31	65	748
Ziegler Brothers, Philadelphia, Pa. Metal eyelets	23,885	Nov. 28	65	1402
Zimmermann, Charles F., Philadelphia, Pa. String instruments	22,339	Jan. 17	62	447
Zimmermann, Moses, New York, N. Y. Refined fats used for culinary purposes	22,285	Jan. 3	62	157
Zimmermann, Moses, New York, N. Y. Prepared and refined beef fat	22,480	Feb. 14	62	1062
Zündhütchen-und Patronenfabrik, vormals Sellier & Bellot, Schönebeck, Germany. Caps, detonators, cartridges, and shells	23,650	Sept. 26	64	1787

PRINTS.

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Bovril, Limited, London, England, and New York, N. Y. "Bovril." (For canned goods and cured meats).....	2	Aug. 29	64	1138
Heinz Co., H. J., Pittsburg, Pa. "Heinz's Preserves, Celery Sauce, and Ketchups"	1	Mar. 7	62	1357

DISCLAIMERS.

Name, residence, and invention.	No.	Filed.	Official Gazette.	
			Vol.	Page.
Corser, Brackett G., Brattleborough, Vt.; disclaimer filed by inventor. Overalls	366,621	Aug. 14, 1893	64	863
Hales, Henry W., Ridgewood, N. J.; disclaimer filed by patentee. Shutter attachments for photographic cameras.....	436,658	Aug. 18, 1893	64	1012
Paine, Seth White, Rochester, N. Y., Hiram A. Gray, New Haven, Conn., and Charles E. Pettie, Ilion, N. Y.; disclaimer filed by assignee. Lasting machine.....	387,366	Mar. 16, 1893	62	1827
Shannon, James S., Chicago, Ill.; disclaimer filed by assignee. Temporary binder	217,907	Feb. 23, 1893	62	1211
Stetson, Joseph B., Lincoln, Me.; disclaimer filed by patentee and assignees. Lanterns	244,944	July 21, 1893	64	443
Westinghouse, George, Jr., Pittsburg, Pa.; disclaimer filed by assignee. Fluid-pressure automatic brake mechanism	376,837	Dec. 4, 1893	65	1597
Woodward, Erastus, Somerville, Mass.; disclaimer filed by assignee. Lasting and fastening machine.....	248,544	Feb. 16, 1893	62	1069

ALPHABETICAL LIST OF INVENTIONS.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Specification.	Drawing.	Volume.	Page.
Abdominal supporter	J. A. Marvin	497,803	May 23	2281	574	63	1077
Abdominal supporter	A. B. S. Phillips	500,609	July 4	121	32	64	24
Abdominal supporter	H. G. Suplee	500,336	June 27	2659	660	63	1900
Abrading device. Portable electric	A. J. Nellis	497,197	May 9	1282	326	63	867
Abrading or polishing materials to cutting and polishing tools. Device for supplying	J. Camberon	507,212	Oct. 24	2429	599	65	493
Abrasive roll or wheel	S. Ross, Jr	494,892	Apr. 4	583	146	63	113
Accordion	W. R. Mühlmann	501,803	July 18	2034	501	64	399
Accounts. Blank form for keeping	T. M. Brown	490,135	Jan. 17	1824	476	62	405
Accounts. Means for keeping	A. L. Eastman and W. H. Babcock	510,011	Dec. 5	294	66	65	1465
Accumulator	W. A. Macleod	491,726	Feb. 14	1079	273	62	980
Accumulator-plates. Manufacture of	A. M. Michel	489,316	Jan. 3	510		62	111
Acid. Apparatus for making sulphuric	F. B. Hacker and P. S. Gilchrist	503,847	Aug. 22	2647	663	64	1096
Acid combinations. Obtaining meta or pyro phosphoric	H. Precht	502,424	Aug. 1	295		64	620
Acid compound. Salicylic	H. Janssen	492,868	Mar. 7	154		62	1389
Acid. Making carbonic	E. Lubmann	503,286	Aug. 15	1753	433	64	915
Acid. Making derivatives of amido-crotonic	L. Lederer	499,301	June 13	918		63	1564
Acid. Making nitric	O. Guttman	491,481	Feb. 7	688	173	62	880
Acid. Making nitric	C. O. Volz	500,786	July 4	404	106	64	75
Acid. Manufacture of acetic	J. Farmer	507,895	Oct. 31	3569	879	65	721
Acid. Manufacture of para-amido-phenol sulphonic	A. A. Noyes and A. A. Clement	511,450	Dec. 26	2789		65	1967
Acid. Method of and apparatus for concentrating sulphuric	H. Howard	509,664	Nov. 28	2826	682	65	1334
Acid. Monosulpho-dioxynaphthoic	J. Schmid and R. Paganini	493,562	Mar. 14	1267		62	1620
Acid. Naphthylene-diamine disulpho	M. Hoffmann	498,882	June 6	238		63	1435
Acid. Production of amido-naphthol disulphonic	M. Moeller	511,708	Dec. 26	3190		65	2040
Acid. Recovering metastannic	F. Gruessner	489,633	Jan. 10	1002		62	223
Acid. Regaining sulphurous	V. Drewsen	492,196	Feb. 21	1807	451	62	1142
Adding and registering machine	W. A. Neal	510,927	Dec. 19	1890	463	65	1789
Adding device	C. A. Miller	508,435	Nov. 14	745	181	65	911
Adding device and register	T. J. Lockwood	500,919	July 4	600	157	64	101
Adding-machine	O. Beher	494,618	Apr. 4	148	35	63	31
Adding-machine	A. J. Brooks	493,971	Mar. 21	1952	497	62	1768
Adding-machine	L. C. Dalton and G. C. Myatt	509,722	Nov. 28	2911	704	65	1349
Adding-machine	W. S. Gubelmann	507,810	Oct. 31	3438	844	65	697
Adding machine	B. H. Phillips	497,058	May 9	1075	276	63	830
Adding-machine	F. Shanisey	510,522	Dec. 12	1122	271	65	1636
Adding-machine	T. A. Trent, Jr	508,450	Nov. 14	765	189	65	914
Adding or registering machine	W. A. Ritchie	493,117	Mar. 7	536	134	62	1465
Adhesive composition	W. L. and T. C. Stanley	506,745	Oct. 17	1615	406	65	332
Adjustable holder	W. A. Faber	509,884	Dec. 5	66	16	65	1422
Adjustable seat	A. Schmidt	507,044	Oct. 17	2107	521	65	423
Adjustable table	N. M. Anderson and G. S. Rider	501,638	July 18	1759	438	64	352
Adjustable wrench	W. H. Griffin and E. P. Nichols	499,919	June 20	1964	477	63	1761
Adjustable wrench	W. H. Griffin and E. P. Nichols	499,920	June 20	1965	477	63	1761
Advertisements. Apparatus for distributing	F. B. Cochran	502,396	Aug. 1	245	58	64	610
Advertisements. Means for displaying	E. O. Hart	497,023	May 9	1022	262	63	820
Advertising apparatus	S. Kuh	489,961	Jan. 17	1522	398	62	344
Advertising apparatus	J. D. Oliver and I. S. Phillips	504,421	Sept. 5	180	47	64	1304
Advertising apparatus	J. D. Oliver and I. S. Phillips	499,570	June 13	1391	332	63	1647
Advertising apparatus	T. Obbinson	500,939	July 4	626	164	64	115
Advertising-balloon	E. S. Reed	507,165	Oct. 24	2331	574	65	476
Advertising-balloon	R. Wilson	496,177	Apr. 25	2622	660	63	534
Advertising-blotter	A. R. Baker	499,197	June 13	763	182	63	1537
Advertising. Circulating system of	E. H. Hoffmann	495,736	Apr. 18	1958	494	63	395
Advertising-clock	L. Peterson	499,931	June 20	1978	480	63	1764
Advertising counter-guard for rails or bars	W. R. P. Clark	494,289	Mar. 28	2480	625	62	1881
Advertising device	J. H. Cairncross	510,157	Dec. 5	534	123	65	1511
Advertising device	J. A. Gibbons	504,919	Sept. 12	1005	259	64	1474
Advertising device	E. Harmer	501,137	July 11	966	247	64	191
Advertising device	J. Harrison	510,599	Dec. 12	1285	313	65	1665
Advertising device	W. C. Johnston	509,473	Nov. 28	2525	609	65	1276
Advertising device	R. D. Knight	489,126	Jan. 3	223	60	62	51
Advertising device	A. G. Macdonell	491,900	Feb. 14	1353	336	62	1034
Advertising device	G. Mann	501,015	July 4	753	197	64	137
Advertising device for glass vessels	A. T. Crossley	489,555	Jan. 10	890	233	62	201
Advertising. Electrically-illuminated character for	A. D. Page	501,533	July 18	1586	399	64	320
Advertising-machine	M. Anthony	509,640	Nov. 28	2781	668	65	1325
Advertising. Means of	A. T. Bond	502,947	Aug. 8	1200	296	64	801

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Advertising or other illuminating effect.....	H. F. Simon.....	499,150	June 6	679	163	63	1509
Advertising-valise.....	D. W. Long and C. Dimick.....	501,013	July 4	752	197	64	137
Advertising-wagon.....	H. D. Stone.....	505,682	Sept. 26	2311	587	64	1744
Aerating and purifying the water of wells, &c. Means for	J. H. Armstrong.....	493,853	Mar. 21	1744	444	62	1729
Aerating apparatus.....	B. F. Tatman.....	507,392	Oct. 24	2724	668	65	550
Aerating, cooling, and clarifying liquors. Apparatus for	C. Rettig.....	498,571	May 30	3554	874	63	1313
Aerating distilled water.....	J. E. Thomas and E. P. Grow.....	502,409	Aug. 1	269	64	64	615
Aerating distilled water. Apparatus for.....	J. E. Thomas and E. P. Grow.....	502,408	Aug. 1	267	63	64	615
Aerator. Milk.....	H. B. Long.....	489,164	Jan. 3	273	77	62	63
Aerial camera.....	C. B. Adams.....	510,759	Dec. 12	1562	390	65	1717
Aerial machine.....	S. B. Battey.....	502,168	July 25	2613	658	64	523
Aerial vessel.....	A. F. Bergqvist.....	506,969	Oct. 17	1978	490	65	400
Aerothermic motor.....	L. Genty.....	508,301	Nov. 7	523	127 128 129 130	65	855
Age-gage.....	A. and J. Bolinger.....	493,963	Mar. 21	1937	494	62	1765
Aging liquors.....	E. A. Spink.....	489,337	Jan. 3	545	147	62	117
Aging wines, spirits, or other liquors. Process of and apparatus for	T. R. Timby.....	496,759	May 2	503	156	63	724
Agitator.....	G. H. Collins and M. A. Mills.....	499,712	June 20	1605	388	63	1699
Agitator.....	J. E. James.....	497,181	May 9	1265	321	63	864
Agraffe.....	F. Schimmel and S. F. Nelson.....	503,167	Aug. 15	1562	384	64	881
Agricultural implement.....	A. Caldwell.....	502,032	July 25	2395	602	64	510
Agricultural implement.....	L. Dorsch, Sr.....	508,210	Nov. 7	382	93	65	829
Agricultural implement.....	M. Macleod.....	499,239	June 13	819	194	63	1547
Agricultural implement.....	M. V. Sexton.....	495,274	Apr. 11	1215	305	63	242
Agricultural implements. Support for the hoes of ..	R. Galloway.....	498,165	May 23	2842	711	63	1176
Air and gas. Apparatus for mixing.....	W. W. Thayer and A. P. Weld.....	497,221	May 9	1320	336	63	875
Air and gas mixing apparatus.....	T. Smith.....	491,060	Jan. 31	3349	854	62	731
Air apparatus. Compressed.....	E. Thomson.....	495,071	Apr. 11	850	218	63	178
Air. Apparatus for administering heated and medicated	W. S. McLean.....	489,029	Jan. 3	73	21	62	19
Air. Apparatus for estimating the quantity of combustible gas or vapor present in	F. Clowes and B. Redwood.....	502,173	July 25	2621	617	64	524
Air-brake.....	O. W. Dean.....	511,071	Dec. 19	2125	525 526	65	1832
Air-brake.....	J. Erdody.....	510,594	Dec. 12	1277	310	65	1663
Air-brake.....	A. P. Massey.....	501,016	July 4	755	198	64	137
Air-brake.....	W. H. Masterman.....	504,227	Aug. 29	3267	815	64	1229
Air-brake.....	R. A. Parke, F. L. Clark, and T. J. Hogan.....	506,185	Oct. 3	630	161	65	122
Air-brake.....	L. A. Pinkston.....	501,359	July 11	1326	332 333	64	254
Air-brake.....	C. S. Shallenberger and L. O. Rand.....	506,739	Oct. 17	1604	404	65	330
Air-brake apparatus.....	J. T. Hayden.....	509,898	Dec. 5	92	21, 22	65	1427
Air-brake. Automatic.....	W. Keywood.....	500,910	July 4	588	154	64	108
Air-brake coupling.....	J. Graham.....	498,705	May 30	3773	931	63	1354
Air-brake coupling.....	L. Sennett and T. F. Arnett.....	489,763	Jan. 10	1198	314	62	263
Air-brake mechanism.....	A. B. Pool and J. J. Beals.....	499,582	June 13	1405	335	63	1650
Air-brake mechanism for railway-cars.....	C. W. Higgins.....	503,083	Aug. 8	1405	333	64	839
Air-brake pressure-regulator.....	M. L. E. Duval.....	510,635	Dec. 12	1350	331	65	1677
Air-brake. Railway-car.....	D. Dunn.....	489,527	Jan. 10	857	223	62	194
Air-brake regulator.....	M. L. E. Duval.....	510,870	Dec. 12	1795	441 442	65	1758
Air-brake slack-adjuster.....	H. Hinckley.....	508,421	Nov. 14	726	179	65	907
Air braking apparatus. Compressed.....	E. P. Barber.....	494,772	Apr. 4	390	96, 97	63	77
Air circulating and cooling device.....	R. Leslie.....	493,036	Mar. 7	417	104	62	1441
Air-compressing apparatus. Hydraulic.....	C. T. Schützinger.....	508,150	Nov. 7	284	71	65	812
Air-compressing device.....	T. O. Perry.....	498,989	June 6	425	99 100	63	1466
Air-compressor.....	C. F. Fogg.....	493,263	Mar. 14	768	196	62	1527
Air-compressor.....	J. Knoche.....	508,225	Nov. 7	402	97, 98	65	833
Air-compressor.....	G. de Laval.....	511,086	Dec. 19	2157	531	65	1838
Air-compressor.....	C. Quast.....	501,046	July 4	805	210	64	146
Air-compressor. Hydraulic.....	J. Gustafson.....	509,220	Nov. 21	2050	495	65	1175
Air-compressor. Hydraulic.....	G. H. Walker.....	491,232	Feb. 7	279	70	62	801
Air cooling and purifying apparatus.....	D. G. Proctor.....	489,033	Jan. 3	80	23	62	21
Air-current governor.....	S. P. Smith.....	505,238	Sept. 19	1520	398	64	1583
Air-deflecting device.....	B. F. Taylor.....	500,337	Nov. 21	2244	542	65	1211
Air-drying apparatus.....	G. P. Schneider.....	511,217	Dec. 19	2360	578	65	1878
Air engine. Carbureted.....	E. A. Durand.....	497,048	May 9	1054	270	63	827
Air engines. Heater for compressed.....	R. C. Smith.....	491,859	Feb. 14	1287	319	62	1021
Air-filtering apparatus.....	J. O. Bentley.....	489,450	Jan. 10	727	194	62	169
Air heating and moistening apparatus.....	A. Caywood.....	505,750	Sept. 26	2432	611	64	1764
Air-heating furnace.....	R. S. Kent.....	493,333	Mar. 14	891	228	62	1548
Air-lock.....	D. E. Moran.....	500,149	June 27	2350	568 569	63	1840
Air moistening and attemperating apparatus.....	J. F. Dornfeld.....	494,292	Mar. 28	2485	626	62	1882
Air-moistening apparatus.....	E. G. de Montmore.....	496,525	May 2	209	55	63	657
Air-moistening apparatus.....	A. Schmid.....	497,034	May 9	1039	265 266	63	824
Air-motor.....	J. P. Foulks.....	500,877	July 4	547	142	64	100
Air motor for propelling wheeled vehicles. Compressed.....	J. Kames.....	491,892	Feb. 14	1339	331 332 333	62	1031
Air or gas compressor.....	N. W. Wheeler.....	490,526	Jan. 24	2466	635	62	543
Air or gas compressor. Triple compound.....	J. Clayton.....	492,915	Mar. 7	234	58, 59	62	1404
Air-propeller or ventilating-fan.....	W. Sayer.....	494,307	Mar. 28	2504	632	62	1887
Air-purifier.....	J. S. Dodge.....	507,675	Oct. 31	3222	789	65	656
Air-ship.....	E. Pyncheon.....	508,753	Nov. 14	1240	309 310	65	1007
Air-ship.....	T. Steinmann.....	501,111	July 11	931	238 239	64	184

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Air-ship. Navigable	C. F. Billwiller	507,609	Oct. 31	3109	760	65	635
Air-tight can and cover therefor	A. Schmitz	505,853	Oct. 3	75	18	65	17
Air-warmer. Tubular	J. J. Blackmore	490,763	Jan. 31	2862	734	62	634
Air-warming furnace	G. W. Johnston	501,604	July 18	1701	424	64	342
Air-warming furnace	J. J., and P. Schill	511,164	Dec. 19	2283	559	65	1862
Alarm:							
See Bell-alarm. High or low water alarm.							
Boiler-alarm. Hotel-alarm.							
Boiler water-alarm. Leak-alarm.							
Burglar-alarm. Low-water alarm.							
Burglar and fire alarm. Overflow-alarm.							
Door-alarm. Pneumatic alarm.							
Electric alarm. Railway-alarm.							
Electro-magnetic alarm. Railway-crossing alarm.							
Fire-alarm. Shoal-alarm.							
Fire and stable alarm. Show-case alarm.							
Fire or burglar alarm. Tank-alarm.							
Gas-alarm. Thermo-mechanical alarm.							
Grave-alarm. Thermometric alarm.							
Watch-alarm. Till-alarm.							
Alarm device. Automatic	G. W. Schilling and J. G. Haslam	490,684	Jan. 31	2741	706	62	611
Alarm device. Pneumatic	S. P. Hasey	493,265	Mar. 14	770	196	62	1527
Alarm-indicator	H. Bolthoff	494,519	Mar. 28	2846	713	62	1949
Alarm-lock. Electric	J. A. Nadeau	490,161	Jan. 17	1862	485	62	412
Alarm system. Electric	G. F. Bulen	506,841	Oct. 17	1772	446	65	361
Alarm system. Electrical	C. K. Hall and W. B. Lillard	504,980	Sept. 12	1109	284	64	1493
Album	C. F. Geyer	500,327	June 27	2643	647	63	1892
Album	G. Schwab	494,031	Mar. 21	2049	522	62	1787
Album. Cabinet	O. H. Williams	501,857	July 18	2104	520	64	412
Album. Coin	H. Müller	509,546	Nov. 28	2635	637	65	1297
Album. Easel	W. A. Holman	491,942	Feb. 14	1417	354	62	1047
Album leaf. Photographic	S. Posen	499,936	June 20	1984	482	63	1765
Album. Photograph	R. M. Hunter	496,976	May 9	946	248	63	808
Album-stand	I. Kaufmann	508,224	Nov. 7	401	97	65	833
Album-stand	G. J. Kraushaar	498,173	May 23	2858	714	63	1177
Alcoholic liquids. Apparatus for maturing and improving fermented	W. Saint-Martin	497,033	May 9	1037	264	63	823
Alcoholic liquors. Method of and apparatus for treating	C. Bullock	497,857	May 23	2366	593	63	1091
Alizarinhexacyanin	R. E. Schmidt	506,265	Oct. 10	807	523	65	165
Alkali. Apparatus for recovering	H. Blackman	492,322	Feb. 28	2099	524	62	1213
Alkali. Apparatus for recovering	H. Blackman	497,088	May 9	1120	257	63	838
Alkalies by electrolysis. Process of and apparatus for dissociating salts of	H. S. Blackmore	508,804	Nov. 14	1314	327	65	1021
Alkalies or of the alkaline earth metals by electrolysis. Obtaining chlorates of the	W. T. Gibbs and S. P. Franchot	493,023	Mar. 7	398	.....	62	1437
Alkaline metals and metals of the alkaline earths. Manufacture of chlorates of the	H. Gall and A. de Villardy de Montlaur	492,003	Feb. 21	1508	376	62	1080
Alkaline metals. Manufacture of oxides of the	H. Y. Castner	494,757	Apr. 4	364	92	63	72
Alkaline phosphate. Making	T. Meyer	504,453	Sept. 5	225	.....	64	1313
Alloy	J. W. Richards and A. E. Hunt	501,233	July 11	1113	.....	64	218
Alloy. Aluminium	C. F. Whitney	501,553	July 18	1627	518	64	329
Alloy. Metallic	F. W. and F. R. Martino	489,314	Jan. 3	508	.....	62	110
Alloys of metals and making same	F. G. Stark	490,174	Jan. 17	1880	.....	62	416
Alloys by electro-deposition. Production of	C. R. Fletcher	499,726	June 20	1631	393	63	1704
Alloys of nickel with other metals. Manufacturing	F. W. Martino	499,559	June 13	1372	.....	63	1645
Alloys. Producing metallic	W. H. Greene and W. H. Wahl	490,961	Jan. 31	3184	.....	62	697
Almond hulling and shelling machine	W. G. Read	505,002	Sept. 12	1145	293	64	1500
Almond-nuts. Machine for cracking and separating	W. G. Read	504,244	Aug. 20	3295	823	64	1234
Almond or walnut huller	A. Gamble	493,887	Mar. 21	1791	457	62	1738
Altar. Portable	J. D. Schaub	493,790	Mar. 21	1642	418	62	1711
Alumina. Treating hydrated phosphates of	S. L. Goodale	493,889	Mar. 21	1794	.....	62	1739
Aluminous compound	T. G. Harrison and C. Semper	497,571	May 16	1919	.....	63	995
Aluminous compounds. Making	T. S. Harrison and C. Semper	497,571	May 16	1920	.....	63	995
Aluminium and aluminium alloys. Coating	G. Wegner and P. Gührs	505,864	Oct. 3	98	.....	65	20
Aluminium and forming alloys thereof. Electrically reducing	T. L. Willson	491,294	Feb. 7	553	140	62	854
Aluminium compounds. Making	W. E. Case	503,901	Aug. 22	2722	.....	64	1110
Aluminium compounds. Making	W. E. Case	504,324	Sept. 5	19	.....	64	1274
Aluminium fluoride. Making	W. Ackermann	504,796	Nov. 14	1304	.....	65	1020
Aluminium fluosulphate. Making	W. E. Case	503,900	Aug. 22	2721	.....	64	1110
Aluminium fluosulphate. Making	W. E. Case	504,325	Sept. 5	20	.....	64	1274
Aluminium. Producing	J. B. Hall	503,929	Aug. 22	2765	692	64	1119
Amalgamating-machine	D. N. Cook	496,247	Apr. 25	2737	684	63	555
Amalgamating-machine	S. W. Vale	507,465	Oct. 24	2834	693	65	571
Amalgamating-machine	J. C. Wiswell	504,508	Sept. 5	328	84	64	1331
Amalgamating ores	C. C. Ormsby	492,426	Feb. 28	2168	542	62	1227
Amalgamating-pan	M. P. Boss	504,859	Sept. 12	909	234	64	1456
Amalgamation of precious metals	G. R. Evans	502,902	Aug. 8	1118	275	64	787
Amalgamator	H. Calhoun and A. M. Beam	489,216	Jan. 3	364	101	62	83
Amalgamator	J. Ellison	497,267	May 9	1399	354	63	888
Amalgamator	W. M. Fuller	504,678	Sept. 5	596	152	64	1382
Amalgamator	J. S. Johnson	503,765	Aug. 22	2536	630	64	1074
Amalgamator	C. C. Ormsby	492,425	Feb. 28	2164	541	62	1226

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Amalgamator	N. L. Raber	497,603	May 16	1969	493	63	1004
Amalgamator	H. L. Simmons	496,670	May 2	447	120	63	700
Amalgamator. Centrifugal	O. B. Peck	490,041	Jan. 17	1668	433 434	62	372
Amalgamator for gold or silver ores	A. B. Kittson	497,669	May 16	2069	516 517	63	1022
Amalgamator. Hydraulic	R. J. Kennedy	498,979	June 6	408	95	63	1463
Amalgamator. Ore	C. B. Brierly	503,034	Aug. 8	1335	328	64	826
Amalgamator. Ore	J. E. Chaster	492,711	Feb. 28	2631	652	62	1322
Amalgamator. Ore	F. O. Norton	491,686	Feb. 14	1017	257	62	969
Amido-crotonylanilid and making it	L. Lederer	503,748	Aug. 22	2513	249	64	1070
Ammeter	W. Hochhausen	501,144	July 11	978	249	64	193
Ammeter and voltmeter. Combined	E. W. Jewell	510,177	Dec. 5	566	131 132	65	1517
Ammeter. Recording	E. Weston	490,699	Jan. 31	2761	710 711	62	615
Ammonia. Underground distribution and recovery of anhydrous	D. Branson, R. D. Thornburgh, and J. E. Starr	489,729	Jan. 10	1139	294 295	62	251
Ammonium chloride. Apparatus for volatilizing	L. Mond	491,741	Feb. 14	1102	279	62	985
Ammonium nitrate. Making	J. Landin	500,914	July 4	593	64	109	
Ampere-meter or voltmeter	C. Wilkens	509,342	Nov. 21	2252	545	65	1213
Amusement and for advertising. Device for	J. S. Vine	502,896	Aug. 8	1108	273	64	785
Amusement apparatus	R. S. Hughes	511,272	Dec. 19	2462	600	65	1894
Anæsthetic vapors. Process of and apparatus for generating and applying	S. J. Hayes	509,849	Nov. 28	3120	753	65	1390
Anchor	J. W. Byrne	503,694	Aug. 22	2423	603	64	1051
Anchor	E. T. Starr	493,901	Mar. 21	1814	461 462	62	1743
Anchor. Land	J. Stombaugh	501,811	July 18	2042	503	64	400
Anchors. Making	W. N. Fisher	503,591	Aug. 22	2253	564 565	64	1021
Aniline-black discharge	W. T. Whitehead	499,688	June 13	1564	63	1677	
Aniline-black discharge	W. T. Whitehead	499,691	June 13	1567	63	1678	
Aniline-black resist	W. T. Whitehead	499,689	June 13	1565	63	1677	
Aniline-black resist	W. T. Whitehead	499,692	June 13	1568	63	1678	
Animal-boot	L. H. Smalley	500,968	July 4	689	181	64	125
Animal-catcher	W. P. Roberts	506,864	Oct. 17	1805	453	65	367
Animal-cleaning device	D. Price	506,643	Oct. 10	1434	359	65	287
Animal-holder	O. M. Kelso	490,968	Jan. 31	3196	817	62	699
Animal mouth opener	J. H. Ryan	490,602	Jan. 24	2575	664	62	564
Animal-shears	C. and H. Burgon	501,324	July 11	1260	316	64	242
Animal-shears	A. Melchior	492,818	Mar. 7	72	17	62	1372
Animal-shears	J. Moffat and W. W. Virtue	494,070	Mar. 21	2111	538 539	62	1798
Animal-shears	J. Moffat and W. W. Virtue	494,071	Mar. 21	2114	540	62	1799
Animal-shears	A. D. Reynolds	499,938	June 20	1926	482	63	1765
Animal-shears	J. A. Schmidt	502,865	Aug. 8	1055	259	64	776
Animal-shears	W. Silver	494,034	Mar. 21	2052	524	62	1788
Animal-shears	L. G. Werner	506,755	Oct. 17	1635	409	65	336
Animal-shoeing apparatus	E. Sirois	502,054	July 25	2430	612	64	486
Animal-stock	J. Underkofler	490,053	Jan. 17	1685	439	62	375
Animal-trap	J. Alexander	499,079	June 6	579	138	63	1492
Animal-trap	G. Andrews	491,329	Feb. 7	446	115	62	833
Animal-trap	F. Baird	509,995	Dec. 5	257	60	65	1457
Animal-trap	J. C. Brown	497,089	May 9	1126	288	63	839
Animal-trap	M. Burton	498,909	June 6	288	67	63	1443
Animal-trap	M. Carpenter	510,836	Dec. 12	1689	420	65	1740
Animal-trap	W. H. Castle	507,417	Oct. 24	2764	677	65	558
Animal-trap	W. E. Crockett and R. E. McAdams	501,599	July 18	1695	422	64	341
Animal-trap	T. E. Fry	488,996	Jan. 3	31	9	62	9
Animal-trap	J. W. and E. C. Glover	497,004	May 9	995	256	63	816
Animal-trap	A. Hagar and A. J. Amick	507,000	Oct. 17	2026	501	65	409
Animal-trap	L. Herman	491,309	Feb. 7	415	107	62	826
Animal-trap	T. M. Hovell	502,254	July 25	2762	698 699	64	550
Animal-trap	J. T. Kisinger, Sr	489,869	Jan. 10	1341	350	62	294
Animal-trap	J. Manning	496,164	Apr. 25	2603	655	63	530
Animal-trap	C. C. Martin and A. J. Schlaifer	501,953	July 25	2269	567	64	457
Animal-trap	J. Nelson	502,986	Aug. 8	1271	311	64	813
Animal-trap	E. B. Stephens	506,951	Oct. 17	1954	484	65	395
Animal-trap	W. Vogt	509,561	Nov. 28	2661	644	65	1302
Animal-trap. Self-setting	C. C. Martin	504,811	Sept. 12	831	211	64	1439
Animals from jumping. Device for preventing	S. A. Nichols	500,152	June 27	2358	570	63	1841
Animals. Means for transporting seminal fluid of	J. S. Wintermute	507,193	Oct. 24	2384	588	65	485
Anisolin and making it	P. Monnet	499,927	June 20	1972	63	1763	
Annealing	M. Coppinger, 2d	495,930	Apr. 18	2251	63	449	
Annealing-furnace	J. H. Rogers	494,597	Apr. 4	115	27	63	24
Annealing-furnace	G. Tomkinson	492,594	Feb. 28	2449	609	62	1286
Annealing wire. Furnace for	J. McConnell	500,410	June 27	2765	681	63	1914
Annunciator	J. H. Ellering	496,192	Apr. 25	2642	664	63	538
Annunciator and alarm. Automatic passenger-train	A. E. Watts	505,687	Sept. 26	2319	589	64	1745
Annunciator. Electric	T. Spencer	502,472	Aug. 1	373	89	64	635
Annunciator. Electrical	J. R. Hard	492,519	Feb. 28	2330	578	62	1260
Annunciator. Electrical	J. B. Rogers	494,762	Apr. 4	369	93	63	73
Annunciator. Hotel time	F. S. Carter	493,067	Mar. 7	459	116	62	1450
Annunciator. Pneumatic	J. Schnepf	491,027	Jan. 31	3300	842	62	721
Annunciator restoring system	L. A. Berthon	504,797	Sept. 12	802	204 205	64	1433
Annunciator system. Electric	H. Van Hooenbergh	490,327	Jan. 24	2150	561	62	481
Annunciator system. Electric	E. R. Wilder	495,127	Apr. 11	978	245	63	200
Anticribbing device	E. Burvill-Holmes	505,590	Sept. 26	2155	545	64	1716
Antifriction composition	J. B. Cleaver	507,969	Oct. 31	3692	65	744	
Antifriction composition	J. B. Cleaver	507,970	Oct. 31	3692	65	744	

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Antifriction linings or facings. Composition for attaching	K. W. Hedges	499,111	June 6	626	150	63	1499
Antimony compound and making same	T. Mayer	509,478	Nov. 28	2535		65	1278
Antiseptic compound	L. H. Baekeland	500,549	July 4	20		64	6
Apartment-ventilator	J. Fransmann	500,880	July 4	550	143	64	100
Apparel. Bar or tack for slitted portions of articles of	A. E. Burk	509,190	Nov. 21	1985	482	65	1164
Apparel fastener. Wearing-	T. Heintz	500,893	July 4	567	147	64	103
Apparel. Fastening for wearing	A. Fiske	498,913	June 6	296	68	63	1445
Arch for ceilings or vaults	G. L. Möckel	489,654	Jan. 10	1026	267	62	229
Arch structure. Roofed.	C. F. T. Kandelers	495,222	Apr. 11	1124	280	63	226
Architectural purposes. Composition for	J. Flynn	503,592	Aug. 22	2255		64	1021
Architectural purposes. Composition for	E. A. Moore	504,933	Sept. 12	1029		64	1479
Arm and hand. Artificial	W. L. Minzey	493,440	Mar. 14	1054	271	62	1581
Arm and wrist rest	R. Kirk	492,889	Mar. 7	185	45	62	1395
Arm-rest	C. S. Rodgers and C. E. Schudy	501,364	July 11	1339	335	64	257
Armature	M. Rahner	505,957	Oct. 3	238	63	65	47
Armature	J. J. Smith and G. W. Findlater	501,376	July 11	1360	340	64	261
Armature and constructing same	H. F. Parrshall	502,988	Aug. 8	1274	311	64	814
Armature and means for supporting the same	E. Kolben	491,568	Feb. 14	833	211 } 212 }	62	930
Armature attachment	W. D. Packard	496,791	May 2	637	170	63	732
Armature-coil for dynamos	G. Wilkes	507,297	Oct. 24	2556	630	65	516
Armature-conductor	E. Kolben	491,567	Feb. 14	832	211	62	930
Armature-conductors. Making.	R. E. B. Crompton	497,001	May 9	991	256	63	815
Armature connection for dynamo-electric machines.	A. G. Rollins	493,447	Mar. 14	1062	273	62	1582
Armature-core	H. G. Reist	508,637	Nov. 14	1077	266	65	976
Armature-core for electric motors	J. E. Stuart and U. S. James	497,504	May 16	1822	459	63	978
Armature-core. Magnetic	T. H. Hicks	492,355	Feb. 21	2055	513	62	1192
Armature-cores for electric motors or dynamos. Constructing	A. W. Smith	492,244	Feb. 21	1884	471	62	1157
Armature. Dynamo	J. J. Wood	507,194	Oct. 24	2387	588 } 589 }	65	485
Armature. Dynamo-electric-machine	W. Fritzsche	496,514	May 2	193	52.53	63	654
Armature. Dynamo-electric-machine	H. F. Parrshall	493,337	Mar. 14	897	229	62	1549
Armature. Electric-machine	A. Schmid	505,926	Oct. 3	193	49	65	38
Armature. Electric-motor	R. H. Hassler	493,025	Mar. 7	401	100	62	1438
Armature. Electric-motor	W. J. Sherwood	505,729	Sept. 26	2391	604	64	1758
Armature. Electric motor or dynamo	C. F. Daniels	489,070	Jan. 3	134	36.37	62	33
Armature for dynamo-electric machines	G. Hoare	492,681	Feb. 28	2585	639 } 640 }	62	1312
Armature for dynamo-electric machines	J. T. Morrow	504,401	Sept. 5	141	37	64	1297
Armature for dynamo-electric machines and motors	S. S. Wheeler	503,106	Aug. 8	1449	357	64	847
Armatures for dynamo-electric machines. Mounting	E. D. Priest	508,634	Nov. 14	1072	266	65	975
Armature for dynamo-electric machines or electric motors and balancing same. Balanced	G. S. Dunn	493,375	Mar. 14	955	246	62	1562
Armature for dynamo-electric machines or motors	W. T. Kosinski	505,247	Sept. 19	1538	401	64	1586
Armature for dynamo-electric machines or motors	E. Thomson	490,376	Jan. 24	2233	581	62	498
Armature for electric machines. Revolving	E. A. Sperry	501,194	July 11	1057	267	64	207
Armature for electric motors or generators	J. F. McLaughlin	497,887	May 23	2426	605	63	1103
Armature for motors and generators	N. C. Bassett	493,349	Mar. 14	912	234	62	1552
Armature. Magnet	F. L. Gregory	496,648	May 2	411	111	63	694
Armature. Multipolar-dynamo-electric-machine	G. E. Dorman	491,990	Feb. 21	1488	372	62	1076
Armature. Ring	C. W. Jefferson	500,902	July 4	578	150 } 151 }	64	105
Armatures for dynamo-electric machines. System of winding	W. M. Thomas	494,042	Mar. 21	2063	527	62	1790
Armatures. Shaft-mount for	S. E. Hitt	509,620	Nov. 28	2752	664	65	1320
Armatures. Winding coils for dynamo-electric	J. B. Blood	503,449	Aug. 15	2005	497	64	960
Armatures. Winding coils for dynamo-electric	E. Thomson	503,445	Aug. 15	1998	496	64	959
Armor-plates. Improving the quality of steel	A. Schmitz	506,446	Oct. 10	1132		65	229
Artificial board	J. E. Eaton	491,092	Feb. 7	46	12	62	757
Ash pan and sieve. Combined	I. M. Levy	507,624	Oct. 31	3134	767	65	640
Ash-shovel	W. T. Miller	507,826	Oct. 31	3469	853	65	703
Asbes, &c. Conveyor for	W. McClave	495,350	Apr. 11	1344	337	63	266
Asparagus bundler and cutter	J. S. Van Mater	490,179	Jan. 17	1866	491	62	417
Asphalt-disintegrating boiler	A. Haskins	500,495	June 27	2886	710	63	1935
Asphalt-mixing machine	G. Winding	490,218	Jan. 17	1959	513 } 514 }	62	430
Asphalt-purifying apparatus	A. S. Cooper	507,885	Oct. 31	3556	876	65	719
Asphaltic mastic. Securing	L. Haarmann	492,197	Feb. 21	1808		62	1142
Asphaltic mixtures. Apparatus for treating	S. R. Scharf	499,256	June 13	839	201	63	1550
Asphaltum, &c. Extracting and refining	A. F. L. Bell	505,416	Sept. 19	1817	469	64	1638
Aspirator and air-injector	W. Borchers	493,012	Mar. 7	378	94	62	1433
Astringent pencils. Preparing cast	F. P. Harned	497,659	May 16	2056		63	1020
Atmospheric heater	E. A. Edwards	509,023	Nov. 21	1700	420 } 421 }	65	1108
Atomizer	W. J. Evans	503,837	Aug. 22	2630	658	64	1092
Atomizer	F. B. Giesler	507,581	Oct. 31	3064	749	65	626
Atomizer	I. Q. Gurnee	502,904	Aug. 8	1120	276	64	788
Atomizer	C. Herscher	495,735	Apr. 18	1957	493	63	395
Atomizer	W. Hagershoff	495,249	Apr. 11	1181	296	63	237
Atomizer	P. J. McElroy	493,512	Mar. 14	1167	298	62	1600
Atomizer	W. H. Payne	507,160	Oct. 24	2325	571	65	475
Atomizer	B. Stern	507,603	Oct. 31	3100	757	65	633
Atomizing or pulverizing liquids. Apparatus for	F. F. Bourdil	501,178	July 11	1035	262	64	203
Auger	A. Y. Pearl	505,844	Oct. 3	64	17	65	15
Auger	O. P. Swanson	503,882	Aug. 22	2691	674 } 675 }	64	1104
Auger. Adjustable earth-	G. S. Decatur	501,561	July 18	1636	409	64	330
Auger-bit	A. L. Adams	503,224	Aug. 15	1654	406	64	898
Auger-bit	A. L. Adams	503,225	Aug. 15	1655	406	64	898
Auger-bit	A. L. Adams	504,261	Aug. 29	3323	811	61	1240

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Auger. Earth.....	J. Fraser.....	503,078	Aug. 8	1396	345	64	837
Auger. Earth.....	W. H. Gibbs.....	505,456	Sept. 26	1885	480	64	1664
Auger. Earth.....	A. J. Greiner.....	493,769	Mar. 21	1611	410	62	1704
Auger. Earth.....	W. E. Scott and A. Miks.....	501,630	July 18	1745	435	64	350
Auger for mining purposes. Power.....	C. H. Sergeant.....	511,467	Dec. 26	2814	680	65	1972
Auger-point.....	W. Caldwell.....	504,018	Aug. 29	2926	733	64	1165
Auger. Post-hole.....	H. Zuber.....	509,994	Dec. 5	256	60	65	1457
Autographic register.....	C. F. Bassett and I. S. Dement.....	505,260	Sept. 19	1552	405	64	1589
Autographic register.....	S. Berens.....	508,080	Nov. 7	163	46	65	789
Autographic register.....	J. E. Boyer and H. Dixon.....	493,207	Mar. 7	672	172	62	1490
Autographic register.....	H. Cook.....	504,467	Sept. 5	250	65, 66	64	1316
Autographic register.....	L. C. Farmer.....	503,532	Aug. 15	2138	537	64	984
Autographic register.....	C. Fox.....	502,924	Aug. 8	1163	287	64	795
Autographic register.....	W. M. Kinnard.....	509,392	Nov. 28	2328	564	65	1238
Autographic register.....	P. E. Loree.....	499,679	June 13	1553	374	63	1676
Autographic register.....	G. M. Morris.....	508,552	Nov. 14	943	232	65	948
Autographic register.....	G. M. Morris and R. L. Stokes.....	508,553	Nov. 14	946	232	65	949
Autographic register.....	A. Olsen.....	494,281	Apr. 4	568	143	63	110
Autographic register.....	J. Pfeifer.....	496,534	May 2	222	58, 59	63	659
Autographic register.....	J. Pfeifer.....	496,535	May 2	228	60, 61	63	660
Autographic register.....	J. Pfeifer.....	496,894	May 9	825	219	63	726
Autographic register.....	J. P. Rex and T. B. McNiece.....	499,250	June 13	832	197	63	1549
Autographic register.....	J. C. Shoup.....	507,760	Oct. 31	3344	819	65	679
Autographic register and cash-drawer.....	J. Pfeifer.....	498,486	May 30	3383	843	63	1287
Autographic register and cash-drawer. Combined.....	J. Pfeifer.....	498,485	May 30	3380	842	63	1287
Autographic register and manipulating and storing the record-strip therein.....	J. Pfeifer.....	506,131	Oct. 3	518	134	65	101
Autoharp-hammer.....	C. H. Eisenbrandt.....	490,407	Jan. 24	2273	590	62	505
Automatic brake.....	A. G. Billings.....	489,452	Jan. 10	730	195	62	169
Automatic brake.....	E. A. Merriman.....	502,536	Aug. 1	471	113	64	653
Automatic elevator.....	J. P. Lybarger.....	507,712	Oct. 31	3277	801	65	667
Automatic furnace.....	F. Wild.....	492,175	Feb. 21	1776	444	62	1135
Automatic gate.....	A. M. Whiteley.....	493,669	Mar. 21	1446	369	62	1671
Automatic safety-switch.....	A. E. Hutchins.....	496,611	May 2	342	93, 94	63	682
Automatic sight-feed lubricator.....	C. Couse.....	508,566	Nov. 14	964	237	65	953
Automatic sliding or rolling gate.....	J. T. Crim.....	492,863	Mar. 7	142	35	62	1386
Automatic sprinkler.....	T. Holmes.....	495,337	Apr. 11	1310	329	63	261
Automatic sprinkler.....	R. W. Newton.....	506,929	Oct. 17	1925	477	65	389
Automatic sprinkler and fire-indicator.....	J. S. Kiehl.....	506,700	Oct. 17	1531	383	65	316
Automatic switch.....	C. H. Bedell.....	493,009	Mar. 7	375	93	62	1433
Automatic switch.....	F. A. Chapman.....	507,352	Oct. 24	2658	653	65	537
Automatic switch.....	J. O'Marra.....	495,227	Apr. 11	1134	282	63	228
Automatic wrench.....	J. H. Montgomery.....	500,025	June 20	2124	514	63	1789
Automaton. Coin-controlled.....	H. D. Pursell and E. F. Price.....	496,324	Apr. 23	2864	715	63	579
Awning.....	W. Bennett.....	510,881	Dec. 19	1816	448	65	1774
Awning.....	C. Glawe.....	501,932	July 25	2244	560	64	452
Awning.....	F. A. Leavitt.....	510,274	Dec. 5	727	176	65	1547
Awning.....	J. Morein.....	493,105	Mar. 7	522	131	62	1462
Awning.....	R. D. Thornton.....	493,130	Mar. 7	557	138	62	1469
Awning.....	E. B. Warren.....	493,954	Mar. 21	1914	488	62	1761
Awning-frame.....	H. Giessenbier.....	500,741	July 4	335	89	64	63
Awning-frame.....	J. Keers and W. B. McLaughlin.....	507,736	Oct. 31	3305	809	65	672
Awning-frame.....	H. J. Kellogg.....	495,113	Apr. 11	944	238	63	195
Ax-handle shield and protector.....	C. S. Terpening.....	489,511	Jan. 10	832	218	62	189
Ax-helve.....	H. Hall, Jr. (Reissue).....	11,312	Mar. 7	724	185	62	1501
Ax-making die.....	C. W. Hubbard.....	499,998	June 20	2078	503	63	1781
Ax wedge and guard.....	G. P. Morrill.....	503,351	Aug. 15	1864	461	64	935
Axes. Manufacture of.....	J. Taylor.....	500,084	June 20	2209	539	63	1804
Axle and box. Wagon.....	J. Raddin.....	500,427	June 27	2794	688	63	1919
Axle bar and blank. Channeled.....	O. C. Hall.....	492,553	Feb. 28	2379	593	62	1273
Axle-box.....	J. D. Mattison.....	506,009	Oct. 3	324	85	65	63
Axle-box.....	C. Pullar.....	509,574	Nov. 28	2697	652	65	1309
Axle-box.....	A. H. Sensenig.....	508,438	Nov. 14	750	185	65	912
Axle-box.....	J. M. Smith.....	491,380	Feb. 7	533	136	62	850
Axle-box.....	R. Brewer.....	502,652	Aug. 1	677	163	64	691
Axle-box. Car.....	H. Havell.....	493,036	Mar. 7	403	100	62	1438
Axle-box. Car.....	J. L. Kinsell and F. A. Leavens.....	507,141	Oct. 24	2292	563	65	489
Axle-box. Car.....	W. Rader and E. Hunter.....	492,251	Feb. 21	1869	467	62	1154
Axle-box. Car.....	J. S. Speer.....	491,819	Feb. 14	1222	306	62	1009
Axle-box dust-guard.....	J. J. Busenbenz.....	501,325	July 11	1262	316	64	242
Axle-box dust-guard.....	J. Timms.....	498,369	May 30	3210	799	63	1255
Axle box frame for car-trucks.....	J. A. Brill.....	492,525	Feb. 28	2339	581	62	1262
Axle-box lid.....	A. W. Zimmerman.....	489,888	Jan. 10	1373	357	62	299
Axle-box lid.....	A. W. Zimmerman.....	489,889	Jan. 10	1374	357	62	299
Axle-box lid. Car.....	A. C. McCord.....	506,330	Oct. 10	925	229	65	188
Axle-box lids. Guard attachment for car.....	J. J. Busenbenz and A. Woltmann.....	507,105	Oct. 24	2212	546	65	455
Axle-box. Self-lubricating.....	T. Moore.....	501,727	July 18	1901	473	64	376
Axle box. Vehicle.....	P. Dansereau.....	492,146	Feb. 21	1733	432	62	1126
Axle. Carriage.....	C. W. Brooks.....	505,387	Sept. 19	1770	458	64	1629
Axle. Carriage.....	H. M. Enders.....	497,371	May 16	1602	405	63	940
Axle-clamp for sleigh attachments for vehicles.....	G. B. Paquette.....	499,575	June 13	1396	334	63	1648
Axle frame. Car.....	C. Thompson.....	494,942	Apr. 4	649	166	63	125
Axle-gage.....	W. A. Woiceski, V. M. Hyde, and C. C. Martens.....	495,444	Apr. 11	1482	373	63	292
Axle gage. Vehicle.....	T. H. Edwards.....	490,804	Jan. 31	2927	751	62	647
Axle-journal.....	C. W. Reniff.....	504,749	Sept. 12	727	181	64	1420

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Axle-lubricating device. Car-wheel	F. Palfrey	508,335	Nov. 7	577	142	65	865
Axle-lubricator	L. E. Atkinson	491,671	Feb. 14	995	250	62	963
Axle-lubricator	J. G. Coburn	505,265	Sept. 19	1563	408	64	1591
Axle-lubricator	H. V. Conway	503,074	Aug. 8	1391	343 344	64	836
Axle-lubricator	J. D. O. Dubrule and F. Lebel	496,824	May 2	691	182	63	742
Axle-lubricator	W. J. Miller	509,928	Dec. 5	132	31	65	1434
Axle-lubricator	J. Mulligan	490,300	Jan. 24	2103	548	62	471
Axle-lubricator	F. Petterpher	505,124	Sept. 19	1350	348	64	1552
Axle-lubricator	J. T. Richards	492,697	Feb. 23	2609	646	62	1317
Axle-lubricator	A. W. Sanborn	496,325	Apr. 25	2865	715	63	580
Axle-lubricator	J. W. Schoaf	493,121	Mar. 7	544	136	62	1466
Axle-lubricator	J. A. Wyman	495,867	Apr. 18	2163	542	63	432
Axle-lubricator and dust-guard	E. O. Bryden	506,203	Oct. 10	692	174	65	142
Axle-lubricator. Car	W. H. Daniels	498,772	June 6	30	7	63	1394
Axle-lubricator for vehicle-hubs	R. Parker	504,816	Sept. 12	841	216	64	1441
Axle mounting. Car	J. H. Watt	501,389	July 11	1381	345	64	265
Axle-nut	J. Berniel	500,464	June 27	2842	700	63	1928
Axle, &c. Pivotal	W. A. Warner	490,694	Jan. 31	2753	709	62	613
Axle. Roller-bearing vehicle	C. A. Bowen	508,499	Nov. 14	853	210	65	932
Axle. Sulky	S. J. Campbell	500,249	June 27	2510	613	63	1869
Axle support. Vehicle	J. W. Vaughn	499,578	Jan. 10	927	240	62	208
Axle. Vehicle	L. N. Stely	496,285	Apr. 25	2791	698	63	566
Axle. Vehicle	F. S. Church	490,180	Jan. 3	302	84	62	69
Axle. Vehicle	F. S. Church	489,181	Jan. 3	303	84	62	69
Axle. Vehicle	T. S. Field	508,876	Nov. 14	1435	356	65	1043
Axle. Vehicle	J. Lohges	489,487	Jan. 10	787	208	62	181
Axle. Vehicle	T. Rodecker	495,433	Apr. 11	1462	369	63	289
Axle. Vehicle	J. W. Vaughn	499,577	Jan. 10	926	240	62	208
Axle. Vehicle	J. D. Wilson	492,651	Feb. 28	2548	630	62	1304
Axle. Wagon	A. F. Gillet	496,826	May 2	694	183	63	743
Axle. Wagon	C. C. Leiwentich	498,177	May 23	2865	716	63	1180
Axle. Wagon	C. F. Milburn	493,039	Mar. 7	421	106	62	1442
Axle. Wagon	G. W. Taylor	507,181	Oct. 24	2365	584	65	482
Axle-washer. Vehicle	A. W. Woodward	507,868	Oct. 31	3534	869	65	715
Axles. Forging	F. Horn	503,481	Aug. 15	2064	515	64	970
Axles. Machine for bending crank	P. Gendron	499,020	June 6	493	114	63	1477
Axles. Machine for turning wooden	C. F. Milburn, G. E. Byrkit, and J. C. Crabbs.	493,038	Mar. 7	419	105	62	1441
Axles. Shoulder-cutter for vehicle	J. Sovereign	507,389	Oct. 24	2719	687	65	549
Axles. Treating car	J. N. Lauth	505,405	Sept. 19	1799	465	64	1635
Baby-jumper	A. J. Johnson	508,423	Nov. 14	729	180	65	907
Baby-walker	A. Parnelli	499,032	June 6	507	119	63	1479
Baby-walker	J. W. Wood	509,991	Dec. 5	251	59	65	1456
Back-band	J. L. Campbell	508,128	Nov. 7	246	62	65	804
Back-rest	H. Obischlager	494,434	Mar. 28	2708	679	62	1924
Badge	B. S. Whitehead	493,003	Mar. 7	365	92	62	1431
Badge. Identification receptacle	D. W. Perry	507,036	Oct. 17	2093	518	65	421
Badge, pencil, and bouquet holder. Combined	H. O. Thomas	491,614	Feb. 14	915	230	62	947
Bag:							
See Feed-bag.	Nose-bag.						
Hand-bag.	Saddle-bag.						
Mail-bag.	School-bag.						
Mailing-bag.	Sifting-bag.						
Moth-proof bag.	Traveling-bag.						
Bag	J. R. Collins	490,103	Jan. 17	1766	460	62	393
Bag	T. Manahan	498,180	May 23	2869	716	63	1181
Bag	D. S. McKinlay	489,165	Jan. 3	275	77	62	63
Bag-fastener	A. Osterloh	503,113	Aug. 8	1461	359	64	849
Bag-fastener	J. W. Vaughan	492,071	Feb. 21	1606	399	62	1099
Bag-handle	J. Swegles	499,481	June 13	1237	295	63	1621
Bag-holder	S. F. Brown	501,820	July 18	2055	506	64	403
Bag-holder	E. R. Dye and C. W. Boettner	506,587	Oct. 10	1355	340	65	272
Bag-holder	R. Elliott	495,728	Apr. 18	1947	490	63	392
Bag-holder	G. Hunt	507,542	Oct. 31	2979	731	65	611
Bag-holder	J. S. Konntz	504,787	Sept. 12	792	200	64	1431
Bag-holder	T. Merry	490,578	Jan. 24	2533	652	62	556
Bag-holder	J. Travis, Jr.	503,627	Aug. 22	2321	578	64	1032
Bag holder	L. G. Wade	494,908	Apr. 4	607	153	63	117
Bag-holding device. Adjustable	C. L. Allen	506,896	Oct. 17	1867	465	65	379
Bag or pouch	F. M. Turck	491,148	Feb. 7	134	36	62	775
Bag or purse frame	A. Goertz	490,433	Jan. 24	2310	599 600	62	511
Bag-tie or analogous fastening	F. J. Shephard and A. C. Hopkins	490,457	Jan. 24	2349	608	62	519
Bag-turning device	L. E. Barbeau	503,692	Aug. 22	2420	602	64	1051
Bagasse-burner	E. H. Robeson	493,522	Mar. 14	1187	204	62	1604
Bagasse-furnace	L. P. Cohen and E. Herrmann	500,378	June 27	2718	668	63	1905
Bagasse-furnace	F. Cook	497,770	May 23	2243	562 563	63	1070
Baggage-carrier	M. H. Barry and D. M. Cahill	493,348	Mar. 14	910	233	62	1552
Baggage-loading device	S. R. Heidelberg	489,003	Jan. 3	41	11, 12	62	11
Bail-ears to sheet-metal cans or pails. Attaching	H. T. Porter and J. Haas	493,114	Mar. 7	532	133	62	1464
Bait-box	J. W. Lewis and W. J. Estep	503,722	Aug. 22	2467	613	64	1060
Bake-pan	M. I. Griffith	508,305	Nov. 7	535	131	65	857
Bake-pan	C. W. Richardson	497,606	May 16	1976	494	63	1005
Bake-pan	C. Schifferly	504,480	Sept. 5	275	71	64	1321
Bake-pan	M. A. Wilcox	496,078	Apr. 25	2479	626	63	506
Bake-pan. Strawberry-short-cake	F. J. Ball	495,872	Apr. 18	2173	545	63	433
Baker's paddle	E. C. Cox	508,411	Nov. 14	714	176	65	904
Baking-pan	A. Rammel	489,985	Jan. 17	1569	411	62	352
Balance	J. W. Gibboney	502,433	Aug. 1	308	74	64	622
Balance	A. Stöcker	499,479	June 13	1235	294	63	1621
Balcony-boist	J. B. Chetwynd	501,455	July 11	1470	369	64	283
Bale and forming same	P. K. Dederick	496,042	Apr. 25	2421	612	63	496

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Bale-band cutter. Cotton.....	E. B. Williams	508,156	Nov. 7	291	72	65	812
Bale or bundle wiring tool.....	G. Schubert	502,323	Aug. 1	120	27	64	587
Bale-press	B. Fitzpatrick and H. C. Boatright	494,920	Apr. 4	622	158	63	120
Bale-tie	W. A. Kilmer	504,436	Sept. 5	204	53	64	1308
Bale-tie	H. C. Tully	499,809	June 20	1778	431	63	1729
Bale-tie hooks and apparatus therefor. Manu- facture of	C. Scholtz	495,208	Apr. 11	1104	274 275	63	223
Bale-tie machine	C. O. Mook	493,279	Mar. 14	708	206 207	62	1532
Bale-ties. Device for forming wire	A. S. Allen	507,642	Oct. 31	3175	777	65	647
Bale-wiring tool	G. Schubert	501,667	July 18	1806	449	64	360
Baling apparatus. Cotton.....	E. M. Ivens	504,983	Sept. 12	1115	285 286	64	1494
Baling cotton	J. Watson	505,580	Sept. 26	2136	541	64	1712
Baling cotton. Apparatus for	E. M. Ivens	502,193	July 25	2650	669 670	64	529
Baling-machine	J. C. F. Cornelius	498,953	June 6	358	86	63	1455
Baling-press	F. R. Brown	490,633	Jan. 24	2651	683	62	580
Baling-press	J. W. Brown and A. A. Gehrt	494,915	Apr. 4	614	157	63	119
Baling-press	J. W. Brown and A. A. Gehrt	505,389	Sept. 19	1772	459	64	1639
Baling-press	L. A. Corning	497,090	May 9	1127	288	63	839
Baling-press	L. A. Corning	497,091	May 9	1128	288 289	63	840
Baling-press	G. W. Driggs	498,845	June 6	171	43	63	1422
Baling-press	B. F. Hackett and J. P. McLarty	508,703	Nov. 14	1173	289	65	994
Baling-press	C. Harrington	504,033	Aug. 29	2949	738	64	1169
Baling-press	E. M. Ivens	502,192	July 25	2648	668 669	64	529
Baling-press	M. B. Jones	495,589	Apr. 18	1716	432 433	63	354
Baling-press	W. H. Kenner	491,967	Feb. 14	1451	361 362	62	1054
Baling-press	W. S. Livengood, W. H. Chadbourne, and J. M. Gibbons	495,944	Apr. 18	2270	572	63	452
Baling-press	J. L. Madden	492,037	Feb. 21	1563	359	62	1090
Baling-press	J. A. Mealer	510,434	Dec. 12	980	234	65	1610
Baling-press	P. Nielsen	508,966	Nov. 21	1617	397	65	1092
Baling-press	M. C. Nixon	494,686	Apr. 4	246	63	63	50
Baling-press	J. M. Sanders	510,821	Dec. 12	1668	414	65	1737
Baling-press	G. Schubert	498,032	May 23	2652	663	63	1141
Baling-press	G. Schubert	502,533	Aug. 8	1008	246	64	767
Baling-press	G. Schubert	504,481	Sept. 5	276	71	64	1321
Baling-press	C. B. Selover	496,669	May 2	445	120	63	700
Baling-press	P. and L. Trabue	511,665	Dec. 26	3124	763 764	65	2029
Baling-press	J. Watson	505,581	Sept. 26	2139	542	64	1712
Baling-press	A. Wickey	497,039	May 9	1045	267	63	825
Baling-press	C. G. Wilson	494,267	Mar. 28	2444	616 617	62	1875
Baling-press binding attachment	A. Wickey	496,628	May 2	371	101	63	687
Baling press. Cotton.....	J. W. Graves	510,385	Dec. 5	888	215	65	1578
Baling-press feeding-chamber and door	G. Schubert	496,984	May 9	954	250	63	809
Baling-press for cotton, &c.....	J. W. Graves	510,386	Dec. 5	895	215 216	65	1580
Baling-press for cotton, &c.....	J. W. Graves	510,387	Dec. 5	899	216	65	1581
Baling-press for cotton, &c.....	J. W. Graves	510,388	Dec. 5	903	217	65	1582
Baling-press. Hand	F. Posey	500,425	June 27	2791	687	63	1918
Baling-press operating mechanism	H. H. Huntley	494,527	Mar. 28	2867	717	62	1952
Baling-press power	E. C. Sooy	494,798	Apr. 4	438	108	63	85
Baling-press. Traveling.....	J. Wiebe	506,492	Oct. 17	1861	463 464	65	377
Ball: <i>See</i> Pool-ball. Sporting-ball.							
Ball-and-socket joint.....	J. G. Falcon	497,373	May 16	1604	405	63	940
Ball-throwing device	J. P. Hill	491,558	Feb. 14	817	207	62	927
Ball throwing or bowling machine.....	F. H. Keane and D. Wilson	502,299	Aug. 1	72	16	64	579
Balloon	J. A. Sumovski	510,492	Dec. 12	1075	258	65	1628
Balloon. Fire	T. M. Pierce	498,692	May 30	3747	925	63	1350
Balloon for observing distant objects	C. A. Smith	505,414	Sept. 19	1814	468	64	1638
Balloon-ship	G. T. L. Gabrielli	500,326	June 27	2642	646	63	1892
Ballot-box	L. Stockstrom	493,195	Mar. 7	655	166 167	62	1487
Ballot-box canceling, feeding, and locking device.....	J. Q. Adams	503,025	Aug. 8	1319	323 324	64	823
Ballot-box. Duplex	J. W. Ernest	499,337	June 13	978	237	63	1574
Ballot-box. Registering	W. S. Black	499,669	June 20	1884	458 459	63	1747
Ballot-box. Registering	E. H. Towne	509,410	Nov. 28	2391	579 580	65	1249
Ballot-box. Registering and canceling	E. K. Tolman	503,626	Aug. 22	2319	578	64	1032
Ballot-box. Registering and canceling	E. H. Towne	489,169	Jan. 3	222	79	62	65
Ballot-boxes. Canceling and register-actuating de- vice for	W. T. Butler	500,850	July 4	501	130	64	91
Ballot-registering device	U. G. Iles	500,001	June 20	2081	504 505	63	1782
Ballot. Voting.....	R. White	496,965	May 9	933	245	63	806
Balloting-booth	J. H. Van Dorn	501,119	July 11	946	242	64	186
Balloting-booth	J. H. Van Dorn	501,120	July 11	948	242	64	187
Balloting device	J. McTammany	502,743	Aug. 8	850	207	64	737
Band-cutter and feeder	J. E. Boles and A. Wilson	495,010	Apr. 11	754	192	63	160
Band-cutter and feeder	J. C. Brash	491,522	Feb. 14	757	193	62	914
Band-cutter and feeder	W. P. Burke	507,879	Oct. 31	3549	873 874	65	717
Band-cutter and feeder.....	R. E. Dorton	506,422	Oct. 10	1090	271	65	220

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Band-cutter and feeder.	E. P. Haugen.	496,260	Apr. 25	2755	689	63	558
Band-cutter and feeder.	C. F. Hawkins.	489,679	Jan. 10	1060	276	62	236
Band-cutter and feeder.	J. W. Kinross.	511,242	Dec. 19	2411	587	65	1885
Band-cutter and feeder.	M. T. Minogue.	504,990	Sept. 12	1130	289	64	1497
Band-cutter and feeder.	S. G. Scholz.	511,463	Dec. 26	2806	679	65	1971
Band-cutter and feeder.	J. W. Tripp.	492,067	Feb. 21	1599	398	62	1098
Band-cutter and feeder.	N. O. Westberg.	508,855	Nov. 14	1398	348	65	1036
Band-cutter and feeder.	E. S. Wilhite. (Reissue)	11,349	July 4	808	210	64	147
Band-cutter and feeder.	C. H. Zishka.	504,353	Sept. 5	111	28, 29	64	1291
Band-cutter and feeder. Automatic	C. H. Edwards.	504,715	Sept. 12	659	167	64	1406
Band-cutter. Wire.	J. Sindelar.	509,694	Nov. 28	2863	692	65	1341
Band-cutting and grain-feeding machine	A. J. Jacques.	509,380	Nov. 28	2825	563	65	1237
Band. Testing.	J. F. Ford.	508,609	Nov. 14	1033	254	65	966
Bandage. Abdominal.	J. T. W. de Jong.	511,336	Dec. 26	2582	629	65	1930
Bandage. Abdominal.	P. H. Jobse.	506,913	Oct. 17	1891	471	65	383
Bandage-rolling machine.	G. A. Keist.	510,346	Dec. 5	829	200	65	1567
Bandage. Suspensory.	W. L. Marcy.	508,229	Nov. 7	411	99	65	835
Bandage. Uterine.	C. F. Ohlrich.	505,249	Sept. 19	1540	401	64	1586
Bandage. Water.	G. F. Ellis.	500,568	July 4	49	15	64	11
Bank-notes or other currency. Press for packing.	W. F. Hess.	500,766	July 4	374	97	64	70
Banjo.	A. Anderson.	509,507	Nov. 28	2577	623	65	1286
Banjo.	F. B. Converse.	494,059	Mar. 21	2088	533	62	1794
Banjo.	A. C. Fairbanks.	489,470	Jan. 10	760	201	62	175
Banjo.	J. F. Luscomb.	504,810	Sept. 12	830	211	64	1439
Banjo.	W. Mayer.	493,635	Mar. 21	1393	353	62	1661
Banjo.	H. C. Middlebrooke.	495,823	Apr. 18	2086	526	63	418
Banjo.	H. E. Oakes.	498,361	May 30	3197	796	63	1252
Banjo.	J. E. Quinlan.	493,875	Mar. 21	1774	452	62	1735
Banjo-bridge.	C. F. Albert, Jr.	503,396	Aug. 15	1931	480	64	948
Banjo-heads. Device for stretching	A. J. Wilmshurst.	498,345	May 30	3177	791	63	1248
Banjo or similar musical instrument	J. A. Todd.	508,586	Nov. 14	1002	246	65	960
Banker's case.	A. Y. Andrews.	508,394	Nov. 14	688	169	65	899
Banner.	D. Locke.	496,423	May 2	48	13	63	627
Bar.	See Grate-bar. Swivel-bar. Metal bar. T merchant-bar.						
Bar rounding and straightening machine.	P. A. Wagner and N. Beauregard.	510,454	Dec. 12	1016	243	65	1617
Barber's cabinet.	J. B. Cox.	505,030	Sept. 12	1190	306	64	1509
Barbers' chairs. Automatic register for	J. E. Mammen.	505,053	Sept. 12	1225	315	64	1515
Barbing-machine.	A. M. Munson.	495,464	Apr. 11	1521	379	63	301
Barge. Coal.	J. Chase.	494,121	Mar. 28	2212	563	62	1832
Barge. Coal.	J. Chase.	494,122	Mar. 28	2214	564	62	1833
Bark from logs. Machine for removing.	R. P. Bloss.	489,178	Jan. 3	300	83	62	68
Barn.	J. Scheidler.	506,732	Oct. 17	1597	402	65	329
Barometer. Aneroid.	R. Corry.	506,672	Oct. 17	1487	373	65	309
Barrel.	L. Fritz.	496,085	Apr. 25	2492	629	63	509
Barrel.	J. Pleukharp and W. K. Liggett.	496,953	May 9	917	241	63	803
Barrel and making same.	J. C. Dozier.	505,446	Sept. 26	1872	482	64	1662
Barrel-bodies. Process of and machinery for producing metal	T. C. Barraclough and T. T. Heaton.	495,147	Apr. 11	1010	252	63	205
Barrel-filling apparatus.	P. H. Shumway.	491,195	Feb. 7	220	56	62	789
Barrel-head-cutting machine.	J. A. Campbell.	493,064	Mar. 7	452	114	62	1449
Barrel-heading device.	J. S. Downing.	501,828	July 18	2062	508	64	404
Barrel-heading press.	B. S. Miles.	491,847	Feb. 14	1270	315	62	1018
Barrel-hoop.	J. Korman.	511,439	Dec. 26	2771	671	65	1963
Barrel-hoop.	H. Matullath.	490,255	Jan. 17	2018	527	62	442
Barrel-hooping machine.	L. D. Morrison.	497,806	May 23	2284	574	63	1077
Barrel-hooping machine.	J. A. Seaman.	490,316	Jan. 24	2134	556	62	478
Barrel-hooping machinery.	R. Welch.	503,021	Aug. 8	1314	322	64	822
Barrel indicator, register, and recorder.	N. Horn.	509,083	Nov. 21	1808	444	65	1129
Barrel leveling, trussing, and hooping machine.	L. M. Greif.	493,329	Mar. 14	886	226	62	1547
Barrel-making machine.	G. S. Pasquith.	494,260	Mar. 28	2434	613	62	1873
Barrel-making machine.	W. T. Vale.	497,105	May 9	1147	293	63	843
Barrel. Metal.	J. L. Kirby.	494,275	Mar. 28	2457	619	62	1877
Barrels or casks. Machine for setting up and wind-lassing	L. M. Greif.	499,787	June 20	1742	421	63	1722
Barrel or crate.	C. B. Dare and J. D. Hall.	504,445	Sept. 5	213	56	64	1310
Barrel or keg.	E. A. David and J. Rath.	503,580	Aug. 22	2227	558	64	1017
Barrel setting-up, crozing, and chining machine	F. S. Palmatier.	504,891	Sept. 12	956	247	64	1464
Barrel. Ventilated.	W. R. Bright.	510,499	Dec. 12	1087	262	65	1631
Barrel-washer.	F. E. Anderson.	489,066	Jan. 3	129	35	62	32
Barrel-washer.	U. Eberhardt.	493,762	Mar. 21	1602	407	62	1702
Barrel-washer.	J. W. and A. F. Flower and E. J. Consins.	502,414	Aug. 1	276	66	64	617
Barrel-washer.	R. C. Inslee.	504,036	Aug. 29	2954	739	64	1170
Barrel-washer.	J. Schmidt.	493,044	Mar. 7	427	107	62	1443
Barrels. Manufacture of.	W. P. Hayne.	509,534	Nov. 28	2619	634	65	1294
Barrels, &c. Manufacture of metal.	D. Caird.	502,846	Aug. 8	1025	251	64	770
Barrow. Brick.	D. J. C. Arnold.	501,314	July 11	1234	311	64	239
Basement ventilator.	P. H. Jackson.	503,484	Aug. 15	2068	516	64	971
Basic lining.	J. Reese.	499,248	June 13	830	63	63	1549
Basin, bath-tub, &c. Wash.	A. O'Brien.	503,249	Aug. 15	1688	415	64	904
Basin-clamp.	J. M. McVey.	493,178	Mar. 7	632	160	62	1482
Basin. Wash.	W. H. Hodge.	510,021	Dec. 5	310	69	65	1468
Basin waste or overflow.	H. C. Montgomery.	507,237	Oct. 24	2460	606	65	499

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Basket	E. Behne	505,694	Sept. 26	2340	592	64	1749
Basket	G. Gorton	496,197	Apr. 25	2651	666	63	539
Basket and basket-hamper. Splint	G. H. Carlson	497,306	May 16	1500	378	63	920
Basket. Folding	C. C. Egerton	492,379	Feb. 21	2091	522	62	1198
Basket for gathering fruit	C. S. Brown	494,666	Apr. 4	218	55	63	45
Basket. Fruit-picking	S. C. Warner	496,024	Apr. 25	2391	605	63	491
Basket or receptacle. Fruit or vegetable	T. Cogswell	508,408	Nov. 14	711	175	65	903
Basket. Pitcher-carrying	H. T. Blake	499,775	June 20	1723	415	63	1719
Basket. Splint laundry	G. H. Carlson	500,991	July 4	718	189	64	130
Baskets, &c. Construction of	P. F. Pia	497,205	May 9	1293	330	63	870
Baster. Automatic	T. D. Brown	510,380	Dec. 5	882	212	65	1577
Bath:							
See Electrolytic bath. Turkish bath.							
Retting-bath.							
Bath	G. Elliott	500,479	June 27	2860	704	63	1931
Bath cabinet. Vapor	G. B. Parker	507,078	Oct. 17	2155	534	65	431
Bath-room standing platform	J. Dellar	510,869	Dec. 12	1794	440	65	1758
Bath-tub	H. C. Stifel, F. J. Torrance, and O. F. Grant	493,194	Mar. 7	654	166	62	1486
Bath-tub	W. E. Templeton	489,241	Jan. 3	399	111	62	89
Bath-tub attachment	T. R. Treiber	492,949	Mar. 7	278	71	62	1414
Bath-tub fitting	J. Powell	494,160	Mar. 28	2271	576 577	62	1842
Bath-tub. Folding	G. Madden	490,914	Jan. 31	3112	798	62	684
Bath-tub leg	W. Bunting, Jr.	507,259	Oct. 24	2495	614	65	505
Bath-tub. Portable	F. Druckenbrod	494,557	Apr. 4	33	7	63	8
Bath-tubs. Device for heating water in	B. W. Felthousen	500,892	July 4	430	113	64	79
Bath-tubs. Foot-bath attachment for	C. H. Stephenson	501,304	July 11	1217	308	64	236
Bath-water heater	D. V. Sugg	499,403	June 13	1114	267 268	63	1599
Bathing apparatus. Electro-thermal	W. F. Howe	507,367	Oct. 24	2684	660	65	542
Bathometer and shoal-water indicator. Automatic	N. Potschinsky	507,590	Oct. 31	3078	752 753	65	629
Batteries. Apparatus for transferring secondary	M. Pfatischer	493,221	Mar. 7	693	177 178	62	1494
Batteries, electric cells, &c. Box for secondary	C. Therye and A. Oblasser	502,643	Aug. 1	660	160	64	688
Batteries. Process of and composition for the manufacture of porous cups for electrical	F. G. Curtis	511,514	Dec. 26	2880	700	65	1985
Battery:							
See Dry battery. Galvanic battery.							
Electric battery. Pyro-electric battery.							
Electric body-battery. Secondary battery.							
Electric primary battery. Secondary electric battery.							
Battery-box and case	L. F. Jordan	509,381	Nov. 28	2327	563	65	1238
Battery element	W. Mills	508,551	Nov. 14	942	232	65	948
Battery element	W. Mills	508,897	Nov. 14	1461		65	1047
Battery-element separator	C. P. Elieson	494,849	Apr. 4	524	132	63	102
Battery grids. Machine for making storage	R. M. Lloyd	510,808	Dec. 12	1637	407	65	1731
Battery-jar	A. M. Gee	503,132	Aug. 15	1504	370	64	870
Battery-jar	J. F. McLaughlin	492,422	Feb. 28	2162	540	62	1226
Battery systems. Polarity-switch for secondary	A. E. Whiting	508,069	Nov. 7	138	39	65	784
Beacon or buoy	J. M. Foster	498,256	May 30	3007	750	63	1320
Beads in molds. Device for forming	T. F. Harris	508,385	Nov. 7	665	163	65	881
Beam and girder support	F. Cavallaro	495,783	Apr. 18	2032	514	63	408
Beam-hangers. Machine for making	J. Grant	494,102	Mar. 21	2164	552 553	62	1808
Beam-hangers. Machine for making	J. Grant	506,197	Oct. 3	653	166 167	65	126
Beam or girder support	F. Cavallaro	508,280	Nov. 7	497	120	65	850
Beam-stirrups. Machine for making	W. Crossley	499,355	June 13	1026	247 248	63	1584
Beams. Mechanism for handling	A. E. Rhoades	504,459	Sept. 5	229	61	64	1313
Beams. Mechanism for handling	A. E. Rhoades	504,458	Sept. 5	233	62	64	1314
Bearing	O. B. Jacobs	505,107	Sept. 19	1324	341	64	1547
Bearing	J. P. Vallin	508,787	Nov. 14	1289	321	65	1017
Bearing. Adjustable spindle	C. H. Brown	511,318	Dec. 19	2543	619	65	1910
Bearing and hub. Axle	W. D. T. Travis	498,589	May 30	3558	882	63	1317
Bearing and its support	J. H. Cooper	499,012	June 6	478	111	63	1475
Bearing. Antifriction	J. G. Avery	502,025	July 25	2383	599	64	478
Bearing. Antifriction	P. Beckman	491,401	Feb. 7	565	142	62	856
Bearing. Antifriction	F. H. Chase	497,764	May 23	2233	559	63	1068
Bearing. Antifriction	C. H. Cook	509,199	Nov. 21	1998	486	65	1166
Bearing. Antifriction	J. Swegles	506,953	Oct. 17	1956	484	65	396
Bearing. Antifriction	C. W. Wynn	496,242	Apr. 25	2728	683	63	554
Bearing. Axle	D. W. Copeland	496,346	Apr. 25	2903	726	63	587
Bearing. Axle	H. N. Hamilton	510,255	Dec. 5	692	167	65	1541
Bearing. Axle	R. L. McLaren	493,176	Mar. 7	629	159	62	1482
Bearing. Ball	P. Dausereau	494,190	Mar. 28	2321	587	62	1853
Bearing. Ball	W. B. Douglas	492,958	Mar. 7	294	75	62	1417
Bearing. Ball	S. Elliott	491,938	Feb. 14	1411	352	62	1046
Bearing. Ball	O. B. Jacobs	509,739	Nov. 28	2939	711	65	1354
Bearing. Ball	G. F. Simonds	501,374	July 11	1357	338	64	260
Bearing. Ball	G. F. Simonds	501,375	July 11	1358	339	64	260
Bearing. Ball	H. R. Wellman	506,409	Oct. 10	1065	265	65	215
Bearing. Ball	A. Winton	511,228	Dec. 19	2387	582	65	1882
Bearing. Ball thrust	N. C. Bassett	508,670	Nov. 14	1124	278	65	985
Bearing-box lining	F. J. Randall	497,210	May 9	1303	331	63	872
Bearing. Car-axle	O. B. Jacobs	501,790	July 18	2014	496 497	64	396
Bearing composition	J. F. Newell	494,156	Mar. 28	2268		62	1842
Bearing composition	J. F. Newell	494,433	Mar. 28	2707		62	1924
Bearing cone. Shaft	A. Perkins	494,885	Apr. 4	573	144	63	111

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Bearing. Counter-pressure fluid.	W. Harrison	506,779	Oct. 17	1673	422	65	343
Bearing eccentric and strap therefor. Ball.	C. H. Knowlton and B. F. Meyer	507,016	Oct. 17	2055	508	65	414
Bearing. Elevator thrust.	G. Linder	510,645	Dec. 12	1373	336	65	1681
Bearing for centrifugal extractors.	J. C. and E. F. Poland	509,677	Nov. 28	2842	687	65	1337
Bearing for connecting-rods, &c. Adjustable	C. M. Conradson and B. V. Nordberg.	490,639	Jan. 31	2662	686	62	596
Bearing for conveyers. Shaft.	J. B. Ivey	493,726	Mar. 21	1541	393	62	1690
Bearing for lathe-spindles. Ball.	G. Hays	496,828	May 2	697	184	63	743
Bearing for propeller-shafts. Thrust.	H. C. Pedersen	494,024	Mar. 21	2039	520	62	1785
Bearing for shafts. Ball.	P. Lobben	503,609	Aug. 22	2293	572	64	1027
Bearing for sheaves. Roller.	W. H. Thompson	504,287	Aug. 29	3362	840	64	1248
Bearing for wheels. Axle.	C. F. Lavender	510,179	Dec. 5	569	132	65	1517
Bearing for wheels. Ball.	D. Roughhead	489,133	Jan. 3	229	62	62	53
Bearing. Pitman.	J. H. Miller	490,296	Jan. 24	2098	547	62	470
Bearing plates. Manufacture of center.	C. T. Schoen	491,192	Feb. 7	215	55	62	788
Bearing. Roller.	B. Beaupre	498,737	May 30	3842	947	63	1366
Bearing. Roller.	E. H. Benner	498,228	May 30	2961	738	63	1211
Bearing. Roller.	R. L. Berry and J. M. Oliver	491,867	Feb. 14	1302	321	62	1024
Bearing. Roller.	G. Botsford and W. Holtz	491,055	Mar. 21	2081	532	62	1793
Bearing. Roller.	D. W. Copeland	496,348	Apr. 25	2907	727	63	588
Bearing. Roller.	S. Garwood	499,019	June 6	492	114	63	1476
Bearing. Roller.	E. F. Morse	507,153	Oct. 24	2313	568	65	473
Bearing. Roller.	A. Petterson	491,585	Feb. 14	855	217	62	935
Bearing. Roller.	F. Purdon and H. E. Walters.	507,162	Oct. 24	2327	572	65	476
Bearing. Roller.	F. Purdon and H. E. Walters	509,048	Nov. 21	1739	430	65	1116
Bearing. Roller.	F. Purdon, H. E. Walters, and W. H. Woodcock.	490,859	Jan. 31	3003	770	62	663
Bearing. Roller.	F. Van Benthuysen	509,003	Nov. 21	1672	412	65	1103
Bearing rolls. Guide for roller.	J. W. Hyatt	506,692	Oct. 17	1517	381	65	314
Bearing. Shaft.	W. E. Good	506,848	Oct. 17	1783	448	65	363
Bearing. Shaft.	S. G. Phillips.	504,049	Aug. 29	2973	743	64	1174
Bearing. Shaft.	A. H. Reid	499,752	June 20	1692	405	63	1713
Bearing. Shaft thrust.	S. Ingersoll.	507,682	Oct. 31	3230	791	65	658
Bearing. Spindle.	G. H. Allen	506,616	Oct. 10	1393	350	65	279
Bearing. Spindle.	W. A. Chandler	505,746	Sept. 26	2481	626	64	1776
Bearing. Spindle.	J. H. Cooper	499,158	June 6	696	167	63	1511
Bearing. Spindle.	G. O. Draper	501,408	July 11	1409	353	64	270
Bearing. Spindle.	G. O. Draper	507,355	Oct. 24	2665	655	65	558
Bearing. Spindle.	G. O. Draper	507,356	Oct. 24	2667	656	65	538
Bearing. Spindle.	W. F. Draper	505,196	Sept. 19	1461	377	64	1571
Bearing. Swinging	J. Roger	508,981	Nov. 21	1639	402	65	1097
Bearing. Thrust.	E. B. Sintzenich	504,253	Aug. 29	3311	827	64	1237
Bearing. Thrust.	A. K. Watt	503,260	Aug. 15	1707	420	64	907
Bearing. Vehicle axle.	H. Sichel Schmidt.	508,775	Nov. 14	1274	317	65	1014
Bearing. Vehicle ball.	D. Pettit and J. R. Congdon	494,384	Mar. 28	2634	661	62	1910
Bearing. Vehicle-wheel ball.	E. A. Jones	502,927	Aug. 8	1167	288	64	796
Bearing. Wagon roller.	F. W. Nagel	499,847	June 20	1845	449	63	1740
Beater or stirrer	H. Jaquette	509,665	Nov. 28	2828	683	65	1334
Beating-engine for pulping fibrous materials	J. Taylor	510,208	Dec. 5	612	144	65	1526
Bed	A. F. Conant	491,040	Feb. 7	30	8	62	754
Bed	C. M. Floyd	494,560	Apr. 4	39	8	63	9
Bed	O. G. Franks	491,243	Feb. 7	293	73	62	804
Bed	O. G. Franks	491,244	Feb. 7	294	73	62	805
Bed and cabinet-front. Combined folding	N. Odegaard and G. Kuhnle	510,084	Dec. 5	413	91, 92	65	1487
Bed and dressing-case. Combined folding	J. Flory	504,778	Sept. 12	776	196	64	1429
Bed and sofa. Folding.	G. Zislspurger	507,576	Oct. 31	3053	747	65	624
Bed and toilet-case. Folding	P. A. Sanguinetti.	490,888	Jan. 31	3055	784	62	674
Bed attachment	A. C. Wierenga.	492,249	Feb. 21	1891	472	62	1158
Bed attachment for handling invalids	S. Druet	505,821	Oct. 3	31	8, 9	65	9
Bed-bottom	S. G. Burleigh	495,690	Apr. 18	1880	471	63	320
Bed-bottom	A. A. Cameron	492,135	Feb. 21	1708	425	62	1121
Bed-bottom	H. B. Crandall	501,227	July 18	2461	509	64	404
Bed-bottom	A. W. Day	500,865	July 4	526	136	64	96
Bed-bottom	C. M. Hunt	503,540	Aug. 15	2150	539	64	987
Bed-bottom	W. L. Keephart and J. C. Hackett	503,323	Aug. 15	1820	451	64	917
Bed-bottom	G. M. Lortz	494,682	Apr. 4	240	61	63	49
Bed-bottom	C. E. McClintock	489,229	Jan. 3	386	106	62	86
Bed-bottom	G. B. Smith.	508,056	Nov. 7	116	32	65	780
Bed-bottom	J. W. M. Witt.	506,962	Oct. 17	1971	488	65	398
Bed-bottom. Spring	G. G. Baker and J. N. Wanich	507,057	Oct. 17	2124	527	65	426
Bed-bottom. Spring	G. W. Crowder	511,513	Dec. 26	2860	709	65	1985
Bed-bottom. Spring	W. Schmitt	499,941	June 20	1901	483	63	1766
Bed-bottom. Wire	M. L. Cross	505,267	Sept. 19	1564	408	64	1591
Bed-bottoms. Woven-wire fabric for	W. S. Seymour	496,908	May 9	857	226	63	792
Bed-brace	W. H. Fitzgerald	502,115	July 25	2526	633	64	505
Bed-brace	J. A. Fretwell	504,210	Aug. 29	3244	809	64	1225
Bed-brace	V. Humphrey	489,479	Jan. 10	771	204	62	178
Bed-brace	C. A. Hunt, Jr.	505,527	Sept. 26	2032	518	64	1691
Bed-brace	D. P. Pool	492,308	Feb. 21	191	493	62	1178
Bed-brace	D. L. Trexler.	489,347	Jan. 3	561	152	62	120
Bed-chair	J. C. Wood	500,091	June 20	2219	541	63	1805
Bedclothes-clamp	J. H. Schroeder	499,855	June 20	1864	452	63	1743
Bed. Combination folding	W. A. Sowden	496,327	Apr. 25	2867	715	63	580
Bed-couch	O. Bopp	490,423	Jan. 24	2297	596	62	509
Bed-couch	L. Woerner	493,418	Mar. 14	1008	260	62	1572
Bed-couch	J. C. Wood	499,902	June 20	1937	470	63	1756
Bed. Extension wardrobe.	L. Blumenthal	498,614	May 30	3598	891	63	1325
Bed. Folding	M. L. Barr	508,907	Nov. 21	1527	371	65	1074
Bed. Folding	J. A. Blackmer	506,662	Oct. 17	1470	370	65	306
Bed. Folding	A. M. Brainard	507,103	Oct. 24	2210	546	65	455

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Bed. Folding	A. M. Brainard	507,104	Oct. 24	2211	546	65	455
Bed. Folding	D. H. Brenner	492,706	Feb. 28	2623	649	62	1320
Bed. Folding	D. H. Brenner	492,707	Feb. 28	2625	650	62	1321
Bed. Folding	J. Christ	504,328	Sept. 5	26	8	64	1276
Bed. Folding	E. J. M. Clemens	497,751	May 16	2194	549	63	1046
Bed. Folding	J. David	495,109	Apr. 11	928	234	63	193
Bed. Folding	P. Flowers	502,291	Aug. 1	47	12	64	575
Bed. Folding	W. S. Gunn	493,419	Mar. 28	2628	674	62	1920
Bed. Folding	M. J. Hafgar	494,563	Apr. 4	52	11	63	11
Bed. Folding	F. C. Hannahs	506,316	Oct. 10	889	219	65	181
Bed. Folding	P. J. Harrah	484,711	Mar. 21	1505	385	62	1683
Bed. Folding	E. E. Herrinton	495,970	Apr. 25	2310	584	63	475
Bed. Folding	J. Lewin	494,179	May 23	2868	716	63	1180
Bed. Folding	E. G. Miller	489,489	Jan. 10	792	209	62	182
Bed. Folding	A. J. Morse	490,832	Jan. 31	2967	761	62	655
Bed. Folding	N. Odegard and G. Kuhnle	505,477	Sept. 26	1915	493	64	1670
Bed. Folding	R. Piper	493,043	Mar. 7	426	107	62	1443
Bed. Folding	W. A. Scott	503,989	Aug. 29	2889	722	64	1158
Bed. Folding	G. W. Shipman	496,172	Apr. 25	2615	658	63	533
Bed. Folding	I. C. Smith	496,915	May 9	866	228	63	794
Bed. Folding	H. Stevenson	508,058	Nov. 7	118	33	65	781
Bed. Folding	H. B. Young	497,156	May 9	1230	313	63	858
Bed. Folding	S. Zimmermann	498,602	May 30	3580	886	63	1321
Bed head-support	W. S. Seymour	493,303	Mar. 14	842	216	62	1540
Bed. Hydrostatic	J. T. Woods	489,517	Jan. 10	843	220	62	192
Bed. Invalid	A. Boden, J. Peers, and S. Saxon	504,515	Sept. 5	341	87	64	1333
Bed. Invalid	W. D. Dawdy and A. Herren	504,333	Sept. 5	33	10	64	1277
Bed. Invalid	B. Ottinger	509,674	Nov. 28	2839	686	65	1337
Bed-lounge	A. Kulich	508,548	Nov. 14	938	231	65	947
Bed-lounge	L. La Tour	490,480	Jan. 24	2387	618	62	527
Bed-lounge. Folding	E. Rossiter	506,262	Oct. 10	802	199	65	164
Bed or cot. Folding	C. S. Davis	504,202	Aug. 29	3229	804	64	1222
Bed or mattress. Inflatable air	S. Curlin	511,696	Dec. 26	3160	772	65	2035
Bed-pan	J. Tascher	501,852	July 18	2098	518	64	411
Bed-pan or commode	E. Phillips	494,079	Mar. 21	2127	543	62	1801
Bed-rail holder	A. G. McLaurin	507,326	Oct. 24	2615	643	65	529
Bed-slat support	G. Luppert	500,406	June 27	2759	679	63	1913
Bed. Sofa	P. F. Asker	500,792	July 4	414	109	64	77
Bed. Sofa	E. A. C. Heshe	501,602	July 18	1697	423	64	341
Bed. Sofa	J. Lewin	492,729	Feb. 28	2656	658	62	1327
Bed. Sofa	R. Lundberg	497,191	May 9	1274	323	63	866
Bed. Sofa	A. H. Moore	498,016	May 23	2626	567	63	1137
Bed. Spring	C. W. Flint	511,691	Dec. 26	3167	774	65	2036
Bed. Spring	O. S. Foster	493,581	Mar. 14	1299	332	62	1628
Bed. Spring	O. S. Foster	496,404	May 2	94	7	63	623
Bed. Spring	O. S. and W. S. Foster	493,427	Mar. 14	1026	266	62	1576
Bed. Spring	O. R. Gould	502,118	July 25	2530	634	64	506
Bed. Spring	D. Leonard	509,040	Nov. 21	1727	427	65	1114
Bed. Spring	G. E. Miller	506,246	Oct. 10	782	193	65	160
Bed. Spring	W. M. Myers	507,029	Oct. 17	2072	512	65	418
Bed-spring	J. T. Hood	509,471	Nov. 28	2522	608	65	1275
Bed-spring-coiling machine	G. I. Stark	489,550	Jan. 10	885	232	62	200
Bed. Time-alarm	E. C. Barnes, Jr	507,578	Oct. 31	3058	747	65	624
Bed table attachment	H. Ohlschlager	494,435	Mar. 28	2709	679	62	1924
Bed. Ventilated	S. P. Paletta	505,250	Sept. 19	1541	402	64	1586
Beds. Adjustable head and back rest for	P. A. Saum	499,147	June 6	675	162	63	1508
Beds. Adjustable ventilating canopy-frame for	W. N. Sherman	493,305	Mar. 14	851	216	62	1541
Beds, &c. Fanning-cover for	R. R. Parrish	494,426	Mar. 28	2783	698	62	1937
Beds. Leg for wardrobe	W. A. Morrison and C. L. Ames	505,411	Sept. 19	1809	467	64	1637
Bedstead	A. A. Cameron	506,468	Oct. 10	1174	292	65	236
Bedstead	T. R. Chambers	490,066	Jan. 17	1708	446	62	380
Bedstead	A. D. Cooke	503,196	Aug. 15	1606	394	64	889
Bedstead	A. D. Cooke and E. D. Shaw	498,968	June 6	384	92	63	1459
Bedstead	J. J. Dugan	500,867	July 4	530	137	64	96
Bedstead	W. Goodliffe	508,382	Nov. 7	661	162	65	880
Bedstead	W. H. Harrison	508,517	Nov. 14	892	220	65	939
Bedstead	M. Hofacker	490,201	Jan. 17	1926	501	62	424
Bedstead	C. C. Lockstaedt	498,399	May 30	3248	808	63	1262
Bedstead	G. G. J. Millar	506,056	Oct. 3	397	104	65	77
Bedstead attachment	W. B. Carter	504,557	Sept. 5	410	104	64	1346
Bedstead attachment	H. C. Loevenhart	511,340	Dec. 26	2585	630	65	1930
Bedstead-brace	M. M. Ritch	494,228	Mar. 28	2383	601	62	1864
Bedstead. Cabinet	J. C. Andresen	509,148	Nov. 21	1916	468	65	1149
Bedstead. Folding	T. Adams	511,330	Dec. 19	2390	582	65	1882
Bedstead. Folding	J. A. Dewey	499,287	June 13	894	216	63	1560
Bedstead. Folding	D. M. Stevenson	511,282	Dec. 19	2483	605	65	1898
Bedstead. Invalid	A. J. Goodwin	501,006	July 4	741	194	64	135
Bedstead. Sofa	I. A. Sturtevant	495,921	Apr. 18	2241	564	63	447
Bedstead. Wardrobe	H. Waddell	489,209	Jan. 3	347	98	62	79
Bedsteads. Folding leg for wardrobe	R. M. Hunter	496,829	May 2	698	184	63	743
Bee-escape	R. Porter	489,754	Jan. 10	1126	311	62	261
Bee-escape	R. J. Stead	507,506	Oct. 24	2910	716	65	584
Beehive	L. A. Aspinwall	493,466	Mar. 14	1095	281	62	1588

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Beehive	D. A. Dewey	502,486	Aug. 1	405	96	64	641
Beehive	J. D. Hawkins and F. M. Ray	493,864	Mar. 21	1761	448	62	1733
Beehive	T. O. Hines	507,070	Oct. 17	2142	531	65	429
Beehive	G. W. Stephens	491,669	Feb. 14	992	250	62	962
Beehive	W. G. Stewart	489,696	Jan. 10	1091	282	62	242
Beehive	L. Wismer	499,490	June 13	1254	299	63	1624
Beehive	H. C. Wolworth	510,751	Dec. 12	1543	383	65	1714
Bee-swarmers	E. A. Floyd	497,518	May 16	1838	463	63	981
Bee-swarmers, catcher, and separator. Combined.	N. P. Pluent	500,197	June 27	2432	594	63	1855
Bees. Device for preventing the swarming of	H. P. Langdon	509,438	Nov. 28	2456	591	65	1264
Beef-mangler. Combination	E. E. B. Shleppy	490,367	Jan. 24	2217	578	62	495
Beef stuffing machine	A. Weston	505,498	Sept. 26	1944	501	64	1676
Beer-barrels. Machine for maintaining a constant pressure in	F. S. Church	488,985	Jan. 3	15	4	62	6
Beer-cooler	R. Ledig	493,383	Mar. 14	964	248	62	1564
Beer-cooler	E. J. Rice	429,546	Jan. 10	880	230	62	199
Beer-cooler	E. Seitz	490,506	Jan. 24	2435	628	62	537
Beer-cooler	E. Seitz	506,608	Oct. 10	1382	347	65	277
Beer-distributing apparatus	J. Hartin	494,634	Apr. 4	171	41	63	35
Beer, &c. Distributing apparatus for	J. Hartin. (Reissue)	11,314	Mar. 21	2192	560	62	1814
Beer. Making	C. Rach	492,052	Feb. 21	1582		62	1095
Beer. Making	O. and O. B. Zwietusch	490,056	Jan. 17	1689	440	62	376
Beer. Manufacture of	A. Hummel	492,292	Feb. 21	1951	488	62	1172
Beer. Manufacture of	F. W. A. Wiesebrock	510,827	Dec. 12	1676		65	1738
Beer. Manufacture of	O. Zwietusch	504,145	Aug. 29	3129	782	64	1203
Beer-pipes. Apparatus for cleaning	C. J. O'Connor and C. Reisky	509,235	Nov. 21	2072	500	65	1179
Beer-saucer with registering attachment	E. Paproth and R. Aster	493,646	Mar. 21	1409	357	62	1664
Beer-tempering device	G. Kruse	505,421	Sept. 19	1838	473	64	1642
Beer, &c. Treating	A. Kreusler	489,018	Jan. 3	60	18	62	16
Behader. Chicken	J. C. Denham	507,792	Oct. 31	3407	835	65	691
Bell	I. H. Abell	505,284	Sept. 19	1601	416	64	1598
Bell	W. A. Barnes	495,129	Apr. 11	981	246	63	201
Bell	N. J. Busby	492,779	Mar. 7	9	3	62	1361
Bell	A. A. Page and W. E. Sparks	493,042	Mar. 7	424	107	62	1442
Bell	E. D. Rockwell	500,951	July 4	643	169	64	117
Bell. Alarm	A. Buegger	500,187	June 27	2417	588	63	1852
Bell. Alarm	A. P. Merrill	492,410	Feb. 28	2147	536	62	1223
Bell. Alarm	W. H. Polleys	509,679	Nov. 28	2845	687	65	1338
Bell alarm. Electric	G. L. Réenstierna	492,309	Feb. 21	1982	493	62	1178
Bell. Bicycle	O. B. Beach	504,902	Sept. 12	975	251	64	1468
Bell. Bicycle	L. E. Ericson	491,012	Jan. 31	3264	834	62	712
Bell. Bicycle	S. Goulden	507,604	Oct. 31	3430	842	65	696
Bell. Bicycle	J. D. Nesbitt	499,245	June 13	827	196	63	1548
Bell. Bicycle	A. J. Sandgren	501,625	July 18	1802	448 449	64	359
Bell. Call	R. W. Booth	494,914	Apr. 4	613	156	63	119
Bell. Door	C. M. Burgess	502,612	Aug. 1	608	145	64	678
Bell. Door	C. M. Burgess	507,992	Nov. 7	22	7	65	763
Bell. Door	A. A. Page	505,277	Sept. 19	1559	414	64	1595
Bell. Door	C. E. Van Wormer	492,070	Feb. 21	1604	399	63	1099
Bell. Electric	F. W. Manger and O. H. Hoebe	494,278	Mar. 28	2459	619	62	1877
Bell. Electric	J. L. Moore	499,305	June 13	923	223	63	1565
Bell. Electric	W. J. Murdock	500,027	June 20	2125	515	63	1789
Bell. Electric	W. J. Newman	501,292	July 11	1202	304	64	233
Bell. Electric	A. J. Oehring	511,451	Dec. 26	2789	675	65	1967
Bell. Electric	W. J. Schweiger	509,050	Nov. 21	1741	431	65	1116
Bell. Electrical	H. B. Porter	495,564	Apr. 18	1673	422	63	347
Bell. Gong	J. C. Wells	498,908	June 6	286	66	63	1413
Bell-hammer. Rotary	S. Goulden	507,805	Oct. 31	3431	842	65	696
Bell-pushes. Plate for mounting	J. F. Wollensak	510,663	Dec. 12	1403	345	65	1687
Bell-ringing device	W. J. Going	504,721	Sept. 12	667	169	64	1408
Bell. Table	C. Allen and S. Goulden	495,650	Apr. 18	1822	456	63	371
Bells. Device for operating door	H. C. Sutton	492,753	Feb. 28	2693	669	62	1334
Belt	J. A. Ferguson	499,978	June 20	2045	496	63	1775
Belt	J. Ross	506,375	Oct. 10	1009	250 251	65	204
Belt-bodice	C. Scherer	494,896	Apr. 4	588	148	63	114
Belt. Bodice	M. Scheuer	501,300	July 11	1214	307	64	235
Belt-clamp	E. B. Hawkes	505,103	Sept. 19	1318	340	64	1546
Belt-clamp	H. J. McKeon	511,710	Dec. 26	3192	782	65	2041
Belt-clasp	H. T. Rogers	499,146	June 6	674	162	63	1508
Belt-clasp	F. J. Herrick	494,293	Mar. 28	2487	627	62	1883
Belt. Concentrating	G. Gates	495,795	Apr. 18	2047	518	63	411
Belt. Conveyor	J. B. Adt	506,456	Oct. 10	1151	286	65	232
Belt. Conveyor	S. Jacoby	502,041	July 25	2406	643 644	64	482
Belt. Conveyor	R. Niedergesaess	507,156	Oct. 21	2318	569	65	474
Belt. Conveyor	T. Robins, Jr.	499,472	June 13	1225	292	63	1619
Belt. Conveyor	G. E. Stead	501,218	July 11	1091	277	64	214
Belt. Driving	J. D. Storie	508,153	Nov. 7	287	72	65	811
Belt. Driving	S. J. Wilbur	502,798	Aug. 8	948	231	64	755
Belt. Electric	D. P. Andrus	502,804	Aug. 8	954	232	64	756
Belt. Electric	A. D. Berliner	501,861	July 18	2110	521	64	413
Belt. Electric	J. W. Cummings	490,948	Jan. 31	3165	811	62	694
Belt. Electric	W. C. Ekholm	504,336	Sept. 5	38	11	64	1278
Belt. Electric	J. H. Se Cheverell	502,776	Aug. 8	909	221 222	64	748
Belt. Electric	B. H. Standish	501,849	July 18	2093	517	64	410
Belt. Electric	A. Stephenson and J. Backstrom	503,811	Aug. 22	2598	649	64	1086
Belt. Electric	G. F. Webb	495,861	Apr. 18	2151	540	63	430
Belt. Endless carrier	L. Z. Preston	491,953	Feb. 14	1431	357	62	1050
Belt-fastener	O. J. Baldwin	501,266	July 11	1185	296	64	227
Belt-fastener	C. D. Fuller	508,931	Nov. 21	1563	383	65	1081

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Belt-fastener	A. J. Gasking	496,255	Apr. 25	2746	687	63	556
Belt-fastener	G. P. Kenehan	507,622	Oct. 31	3132	766	65	640
Belt-fastener	D. Pásztor	508,970	Nov. 21	1623	398	65	1094
Belt-fastener	J. Stocker	506,083	Oct. 3	440	115	65	86
Belt-fastener	P. Thacher	495,439	Apr. 11	1474	371	63	290
Belt-fastening	C. D. Fuller	499,880	June 20	1907	463	63	1751
Belt for ore-concentrators	J. S. Brownell	501,557	July 18	1631	408	64	329
Belt-guide	W. L. Schwaller	489,334	Jan. 3	537	146	62	116
Belt-holder	C. Baumgarten	492,738	Feb. 28	2668	662	62	1329
Belt or garter fastening	B. S. Hoyt	495,633	Apr. 18	17-7	449	63	366
Belt-shifter	B. S. Redding	509,604	Nov. 28	2731	659	65	1316
Belt-shifter	C. Schraubstadter, Jr., and C. R. Schilling.	492,752	Feb. 28	2691	668	62	1333
Belt-shifter	A. V. M. Sprague	494,177	Mar. 28	2300	582	62	1848
Belt-shifting apparatus	F. H. Richards	493,409	Mar. 14	998	258	62	1571
Belt starting and stopping mechanism	E. A. Marsh	510,694	Dec. 12	1448	357	65	1695
Belt-stretcher	J. Wright	506,296	Oct. 10	864	213	65	176
Belt-support	L. Sanders	490,166	Jan. 17	1868	487	62	413
Belt-tightener	G. Lindsay	507,625	Oct. 31	3135	767	65	640
Belt-tightener	J. J. Miller	491,728	Feb. 14	10-2	273	62	981
Belt-tightener	J. B. Noble and J. B. Hensley	489,323	Jan. 3	518	141	62	112
Belt-tightener	J. S. Seeley	492,972	Mar. 7	317	80	62	1422
Belt-tightener	J. L. Ulsch	492,314	Feb. 21	1988	495	62	1179
Belt-tightener for cotton-gins	W. G. Beckwith	493,264	Mar. 7	665	170	62	1489
Belt-tightener for fans. Adjustable	W. Rabich	491,024	Jan. 31	3293	840	62	719
Belts on pulleys. Device for placing	S. Donkin	490,546	Jan. 24	2497	643	62	549
Belting	K. Kuchler	502,976	Aug. 8	1256	307	64	776
Belting	R. Temmel	505,142	Sept. 19	1377	333	64	1556
Belting	E. Todd	492,880	Mar. 7	172	42	62	1392
Belting. Leather link	J. K. Tullis	499,613	June 13	1461	349	63	1660
Belting. Link	O. Maxon	494,110	Mar. 21	2184	558	62	1813
Bench:							
See Laundry-bench. Work-bench.							
Tube-drawing bench.							
Bench-clamp	E. Olson	494,882	Apr. 4	570	143	63	110
Bench-dog	C. L. Bronk	504,962	Sept. 12	1074	274	64	1487
Bench-dog	A. Dudgeon and J. P. McKee	510,531	Dec. 12	1171	2-2	65	1644
Bending-machine	M. McMaster	505,475	Sept. 26	1912	492	64	1670
Bending-machine	C. Seymour	497,060	May 9	1081	277	63	832
Bending mechanism. Plate	F. H. Stillman and C. Wigtel.	504,310	Aug. 29	3399	851	64	1254
Bending-press	S. Swartz	500,974	July 4	697	183	64	127
Bending-press. Hydraulic	R. H. Tweddell, J. Platt, and J. Fielding.	509,265	Nov. 21	2116	509	65	1187
Bending-roll	W. Lewis	491,968	Feb. 14	1453	362	62	1055
Bending-roll	W. Lewis	500,286	June 27	2564	626	63	1878
Berry-picker	C. C. Read	500,613	July 4	125	33	64	25
Berth. Sleeping	A. R. T. Woods	496,765	May 2	592	158	63	725
Berth. Sleeping-car	A. E. Lard	511,533	Dec. 26	2909	708	65	1991
Bevel	C. G. Osteman	502,199	July 25	2663	673	64	532
Bevel. Protractor	H. J. Leighton	490,121	Jan. 17	1797	468	62	399
Beveling instrument. Stair	J. A. Caldwell	495,300	Apr. 11	1260	314	63	251
Beverages. Apparatus for carbonating and dispensing	P. E. Malmström	494,483	Mar. 28	2781	697	62	1937
Beverages. Method of and apparatus for making certain fermented	M. Warren	510,219	Dec. 5	637	150	65	1530
Beverages. Vessel for	J. M. Van Fleet	505,073	Sept. 12	1267	325	64	1523
Bib	W. H. Pollitt	497,340	May 16	1554	391	63	930
Bicycle	M. Acklin	510,227	Dec. 5	654	155	65	1534
Bicycle	L. Berry	494,839	Apr. 4	508	127	63	98
Bicycle	W. I. Bunker	499,009	June 6	473	110	63	1474
Bicycle	F. D. Cable	494,803	Apr. 4	445	110	63	86
Bicycle	G. F. Case	503,828	Aug. 22	2618	654	64	1090
Bicycle	A. H. Clark	506,626	Oct. 10	1407	353	65	282
Bicycle	W. Y. Cocken	505,753	Sept. 26	2426	613	64	1765
Bicycle	E. R. Corbett	501,056	July 11	825	214	64	166
Bicycle	S. A. Donnelly	506,105	Oct. 3	475	123	65	93
Bicycle	G. O. Draper	490,844	Jan. 31	2983	764	62	659
Bicycle	S. Elliott	509,429	Nov. 28	2420	586	65	1254
Bicycle	W. H. Erb	510,502	Dec. 12	1096	263	65	1631
Bicycle	G. R. Fenner	510,167	Dec. 5	514	126	65	1513
Bicycle	A. Fyberg	507,116	Oct. 24	2230	551	65	458
Bicycle	G. Harriott	499,109	June 6	622	149	63	1499
Bicycle	H. H. Hopkins	506,194	Oct. 3	648	165	65	125
Bicycle	F. W. Huenekens	498,394	May 30	3240	806	63	1261
Bicycle	A. D. Jenkins	490,252	Jan. 17	2014	527	62	441
Bicycle	G. W. Kortright and C. M. Craven	498,172	May 23	2257	714	63	1178
Bicycle	H. W. Libbey	509,919	Dec. 5	123	28	65	1433
Bicycle	H. Lind	502,232	July 25	2720	686	64	542
Bicycle	V. H. Nulle	500,938	July 4	625	164	64	114
Bicycle	J. B. Okey	496,093	Apr. 25	2505	632	63	512
Bicycle	C. S. Page	496,616	May 2	352	96	63	683
Bicycle	J. W. Prosser	507,081	Oct. 17	2159	535	65	432
Bicycle	G. B. Robinson and W. R. Roby	510,820	Dec. 12	1666	413	65	1736

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Bicycle	F. C. Rockwell	498,888	June 6	246	57, 58	63	1436
Bicycle	O. Schmiedel	502,866	Aug. 8	1055	259	64	776
Bicycle	E. W. Scott	496,007	Apr. 25	2366	598 599	63	486
Bicycle	L. Shapiro	509,692	Nov. 28	2861	691	65	1340
Bicycle	W. C. Smith	506,741	Oct. 17	1608	405	65	331
Bicycle	O. W. Squires	504,633	Sept. 5	513	133	64	1367
Bicycle	F. Sweetland	491,200	Feb. 7	228	58	62	791
Bicycle	R. T. Torkelson	496,803	May 2	662	175	63	737
Bicycle	E. Warwick	507,513	Oct. 24	2925	718 719	65	587
Bicycle	M. Westbrook	511,479	Dec. 26	2832	6-5	65	1975
Bicycle	S. A. White	505,738	Sept. 26	2404	608	64	1760
Bicycle	O. Widerborg and A. G. Garfield	509,966	Dec. 5	243	57	65	1455
Bicycle	H. S. Williams	503,513	Aug. 15	2108	528	64	979
Bicycle	C. A. Woodbury	506,454	Oct. 10	1148	2-5	65	232
Bicycle	W. A. Wright	489,112	Jan. 3	201	54	62	47
Bicycle, &c.	W. A. Wright	499,694	June 13	1574	379	63	1679
Bicycle	J. L. Yost	511,395	Dec. 26	2695	653	65	1950
Bicycle. Adjustable-speed	J. L. Morris	504,168	Aug. 29	3165	790	64	1210
Bicycle and other tubing	J. F. Palmer	489,714	Jan. 10	1117	289	62	247
Bicycle attachment	T. Cummins	491,040	Jan. 31	3321	847	62	725
Bicycle attachment	W. E. Lutz and T. Kopp	496,266	Apr. 25	2764	691	63	560
Bicycle attachment	T. K. S. McGriff	503,058	Aug. 8	1367	337	64	832
Bicycle attachment	W. C. Moore	510,924	Dec. 19	1884	462	65	1787
Bicycle attachment	I. Polhamus	499,581	June 13	1404	335	63	1650
Bicycle basket-carrier	C. M. Luebben	498,015	May 23	2625	656	63	1137
Bicycle-brake	O. B. Burns	502,949	Aug. 8	1204	296	64	802
Bicycle-brake	F. C. Weston	509,636	Nov. 23	2771	667	65	1324
Bicycle brake attachment	F. T. Snyder	504,490	Nov. 14	840	208	65	929
Bicycle-canopy	J. S. Barnes	504,900	Sept. 12	971	250	64	1467
Bicycle-canopy	H. Hohenstein and B. J. Apple	490,229	Jan. 17	1974	518	62	434
Bicycle-canopy	W. L. Thompson	496,073	Apr. 25	2472	624	63	505
Bicycle-chain lock	W. H. Hart, Jr.	505,292	Sept. 19	1615	419	64	1601
Bicycle chain-wheels. Adjusting device for	A. Featherstone	504,870	Sept. 12	926	238	64	1459
Bicycle clock attachment	S. C. Levy	493,254	Apr. 11	1187	297	63	238
Bicycle crank-shaft and bearing	P. Gendron	503,790	Aug. 22	2570	639	64	1081
Bicycle crank shield	G. R. Cheesman	504,121	Aug. 29	3088	773	64	1196
Bicycle driving-gear	R. B. Cunningham	501,874	July 18	2136	530	64	417
Bicycle driving-gear	R. Erver	506,685	Oct. 17	1507	379	65	312
Bicycle-frame, &c.	F. H. B. Ite	499,707	June 20	1587	3-6	63	1607
Bicycle-frame	A. Winton	500,177	June 27	2404	585	63	1250
Bicycle-gear	E. Gundlach	492,225	Feb. 21	1943	485 486	62	1170
Bicycle-gear	W. Mahoney	491,366	Feb. 7	511	131	62	845
Bicycle-gear	E. J. Swedlund	505,335	Sept. 19	1681	433	64	1612
Bicycle-gear	E. H. P. Taylor	501,381	July 11	1370	342	64	262
Bicycle-gearing	C. A. Snider	511,169	Dec. 19	2291	560	65	1864
Bicycle gun-carrier	P. Gendron	503,315	Aug. 15	1807	448	64	924
Bicycle gun-clip	J. S. Copeland	492,740	Feb. 28	2672	663	62	1330
Bicycle-handle	G. B. Goddard	499,103	June 6	610	146	63	1497
Bicycle-handle	W. J. Landis	496,834	May 2	706	187	63	745
Bicycle-handle. Adjustable	W. Lamb	505,273	Sept. 19	1580	412	64	1594
Bicycle-jack	W. H. Hart, Jr.	506,495	Oct. 10	1222	304	65	245
Bicycle-lock	E. Buysse	491,335	Feb. 7	458	118	62	835
Bicycle-lock	W. H. Hart, Jr.	505,522	Sept. 26	2013	515	64	1688
Bicycle-lock	J. W. Leonard	509,175	Nov. 21	1959	477	65	1158
Bicycle lock and support combined	J. E. Davis	499,876	June 20	1899	461	63	1750
Bicycle mud-guard	D. S. Hitchcock	509,032	Nov. 21	1714	423	65	1111
Bicycle mud-guard support	F. D. Cable	511,405	Dec. 26	2711	657	65	1953
Bicycle or tricycle	U. Fau-sereau	509,122	Nov. 21	1876	459	65	1142
Bicycle or velocipede saddle	W. L. Fish	499,379	June 13	1060	257	63	1590
Bicycle-padlock	A. Hubert	511,430	Dec. 26	2756	666	65	1961
Bicycle parcel-carrier	M. E. Blood. (Reissue)	11,341	Jan. 17	2026	529	62	444
Bicycle-pedal	A. L. Garford	503,206	Aug. 15	1620	397	64	892
Bicycle-pedal	P. Gendron	505,825	Oct. 3	35	10	65	10
Bicycle pedal-crank	W. C. Smith	510,620	Dec. 12	1326	324	65	1672
Bicycle pedal-movement	H. Bitner	510,671	Dec. 12	1416	349	65	1689
Bicycle roller-sprocket	R. J. Godbery	511,012	Dec. 19	2041	504	65	1815
Bicycle-saddle	J. Bethune	502,110	July 25	2518	631	64	503
Bicycle-saddle	F. D. Cable	494,408	Mar. 28	2675	671	62	1918
Bicycle-saddle	F. D. Cable	495,391	Apr. 11	1396	349	63	276
Bicycle-saddle	A. Cleveland	505,938	Oct. 3	207	52	65	41
Bicycle-saddle	H. McDonald	498,136	May 23	2-03	701	63	1169
Bicycle-saddle	A. Mecky	501,230	July 11	1110	282	64	217
Bicycle-saddle	C. J. Moore and G. A. Burwell	496,664	May 2	436	117	63	698
Bicycle-saddle	C. J. Moore and G. A. Burwell	496,665	May 2	437	117	63	698
Bicycle-saddle	S. L. Naly and M. S. Jones	499,244	June 13	826	196	63	1548
Bicycle-saddle	L. L. Richmond	502,017	July 25	2366	594	64	475
Bicycle-saddle	J. H. Sager	500,156	June 27	2367	573	63	1843
Bicycle-saddle	J. H. Sager	500,158	June 27	2370	574	63	1844
Bicycle-saddle	W. Steers	492,375	Feb. 21	2084	521	62	1197
Bicycle-saddle	R. S. Trine	495,442	Apr. 11	1476	372	63	291
Bicycle saddle or seat	J. Wilson	505,620	Sept. 26	2196	555	64	1723
Bicycle-saddle support	C. E. Luburg	510,275	Dec. 5	728	176	65	1547
Bicycle. Safety	J. E. Wright	501,454	July 11	1468	368	64	283
Bicycle-seat spring	H. Bergfels	490,097	Jan. 17	1757	458	62	391
Bicycle-seat spring	H. Bergfels. (Reissue)	11,350	July 11	1512	380	64	291
Bicycle-seat. Supplementary	J. H. Sager	500,157	June 27	2369	573	63	1844
Bicycle seat. Supplementary	M. S. Shipley	503,170	Aug. 15	1568	386	64	8-2
Bicycle self-timing attachment	M. Friedberger	499,221	June 13	796	188 189	63	1543
Bicycle sleigh attachment	W. H. Bendure and S. Tilbery	490,240	Jan. 17	1997	533	62	438

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Bicycle speed-gearing	J. L. Abbott	502,803	Aug. 8	952	232	64	756
Bicycle-stand	L. M. Devore	506,675	Oct. 17	1490	374	65	309
Bicycle-stand	I. D. Smead	495,210	Apr. 11	1108	276	63	224
Bicycle stand attachment	J. R. McCurdy	496,530	May 2	214	57	63	657
Bicycle stand. Safety	C. J. Whipple	498,598	May 30	3573	8-5	63	1321
Bicycle steering-bar handle	G. B. Goddard	497,519	May 16	1839	464	63	981
Bicycle-support	G. W. Bert	507,062	Oct. 17	2131	529	65	427
Bicycle-support	G. Finley	499,457	June 13	1207	2-8	63	1616
Bicycle-support	M. E. Hertel and A. Beck	505,162	Sept. 19	1409	363	64	1562
Bicycle-support	H. J. Hyams	502,298	Aug. 1	71	15, 16	64	579
Bicycle-support	W. Klages	497,798	May 23	2275	572	63	1076
Bicycle-support	J. Marks	506,600	Oct. 10	1372	344	65	275
Bicycle-support	C. M. Rider	497,549	May 16	1882	475	63	9-9
Bicycle-support. Adjustable	J. C. Hassey	508,311	Nov. 7	543	133	65	858
Bicycle-support. Adjustable	C. W. Smart	495,914	Apr. 18	2233	502	61	446
Bicycle tilting seat	W. R. Mercer	491,578	Feb. 14	849	215	62	933
Bicycle-tool	E. C. Fisher	498,051	May 23	2678	670	63	1146
Bicycle umbrella attachment	H. E. Baskerville	498,224	May 30	2956	737	63	1210
Bicycle umbrella-support	T. N. Heaney	508,418	Nov. 14	722	178	65	906
Bicycle-wheel	F. Douglas	511,595	Dec. 26	3011	733	65	2009
Bicycle-wheel	H. S. Owen	497,966	May 23	2545	635	63	1122
Bicycle-wheel	J. T. Oyler	498,688	May 30	3740	923	63	1349
Bicycle-wheel	J. L. Yost	511,394	Dec. 26	2694	653	65	1950
Bicycle-wheel hub	F. Nessel and F. McLish	504,888	Sept. 12	952	246	64	1464
Bicycle-wheel rim	A. C. Fairbanks and P. J. Berlo	496,971	May 9	942	247	63	807
Bicycles. Attachingsprocket-wheels to crank-shafts of	F. D. Cable	496,681	May 2	462	124	63	703
Bicycles. Changeable-speed device for	W. B. Swan	502,916	Aug. 8	1137	280	64	791
Bicycles. Combined coasting-pedal and lock for	W. G. Fav	491,342	Feb. 7	468	121	62	837
Bicycles. Folding mud-guard for	J. W. Shone	509,771	Nov. 28	2986	723	65	1363
Bicycles, &c. Mechanism for automatically operating the adjustable saddles of	R. W. Riess	510,993	Dec. 19	2017	498	65	1810
Bicycles, tricycles, &c. Spring-frame for	G. W. Gardiner	506,313	Oct. 10	834	218	65	180
Bill-board. Portable	F. R. Stone	503,812	Aug. 22	2599	649	64	1087
Bill-sheet	H. F. Vaughan	503,918	Aug. 22	2749	689	64	1116
Billet-conveyer	S. S. Balbitt	497,511	May 16	1830	461	63	979
Billet-loop	L. G. Allen	498,221	May 30	2950	735	63	1209
Billet-loop	F. J. Bringham	500,111	June 27	2257	549	63	1823
Billiard-ball holder	G. Rohrbach	501,257	July 11	1154	331	64	224
Billiard-balls. Triangle for	G. Rohrbach	501,256	July 11	1153	292	64	224
Billiard-chalk cup	H. Van Hoebenbergh	500,360	June 27	2696	661	63	1901
Billiard-chalk holder and protector	C. Munro	497,8-6	May 23	2425	604	63	1103
Billiard-cue	R. N. Barger	507,471	Oct. 24	2844	695	65	573
Billiard-cue	W. H. Shumaker	497,929	May 23	2491	621	63	1113
Billiard-cue tips. Securing	N. Bosmann	504,663	Sept. 5	537	142	64	1375
Billiard-cushion	C. Schullenburg	505,007	Sept. 12	1153	295	64	1502
Billiard-games. Automatic time-check for	C. B. Hopkins	508,473	Nov. 14	803	198	65	921
Billiard or pool table	H. A. Bereuter	503,261	Aug. 15	1709	420	64	908
Billiard-register	W. H. Woodruff	504,957	Sept. 12	1065	272	64	1485
Billiard-table	P. M. Cunningham	498,049	May 23	2676	669	63	1146
Billiard-table	W. H. Wiggins	511,571	Dec. 26	2973	724	65	2002
Billiard-table adjuster and leveler	W. D. Little	507,915	Oct. 31	3605	889	65	727
Bin: See Flour-bin.							
Bins or boxes. Automatic drop-lid for	B. Dailey	502,509	Aug. 1	440	106	64	648
Bins or pockets for containing coal, grain, &c. Construction of	T. E. Murray	490,258	Jan. 17	2023	528	62	443
Binder	H. N. Musser	498,481	May 30	3377	841	63	1286
Binder	R. R. Vernon	498,414	May 30	3268	814	63	1266
Binder	R. R. Vernon	499,899	June 20	1933	469	63	1756
Binder	R. R. Vernon	506,021	Oct. 3	338	90	65	66
Binder for loose sheets of paper, &c.	O. Assmann	504,317	Sept. 5	9	3	64	1272
Binder for sheet-music, &c. Portable	J. Samson	492,238	Feb. 21	1878	469	62	1155
Binder-knotter	G. W. Whittington	503,634	Aug. 22	2329	580	64	1033
Binder. Self	J. M. Lawrance	511,243	Dec. 19	2413	587	65	1886
Binder. Temporary	A. T. Abbott	494,833	Apr. 4	499	125	63	96
Binder. Temporary	W. E. Dyre	489,794	Jan. 10	1242	325	62	272
Binder. Temporary	F. D. Hastings and O. N. Durand	503,959	Aug. 29	2834	707	64	1149
Binder. Temporary	W. Lunley	499,432	June 13	1164	278	63	1608
Binder. Temporary	C. T. Rosenthal	507,388	Oct. 24	2716	667	65	548
Binder. Transfer	J. E. Ames	492,772	Mar. 7	1	1	62	1359
Binder. Twine	J. F. Fowler	503,844	Aug. 22	2639	661	64	1095
Binding	M. M. Beeman	490,819	Jan. 31	2946	756	62	651
Binding. Metal	C. R. Harris	507,002	Oct. 17	2028	501	65	410
Binding-strips. Machine for making	A. R. Keller	499,551	June 13	1358	322	63	1643
Bioproscope	C. H. Meddins	495,822	Apr. 18	2085	526	63	418
Bird-cages. Food-holder for	L. F. Shanovski and B. Rubenstein	502,146	July 25	2573	646	64	514
Bird-trap	L. K. Luntain	507,086	Oct. 17	2168	537	65	434
Bird-warbler	E. F. Long	491,571	Feb. 14	838	212	62	931
Biscuit-cutter	W. J. Grotenhuis and H. T. Sidway	504,834	Sept. 12	876	226	64	1449
Biscuit cutting and panning machine	J. T. and J. Vicars, Jr.	510,105	Dec. 5	444	99	65	1494
Bismuth gallate. Basic	A. Liebrecht	495,497	Apr. 18	1573	63	63	329

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Bit:							
See Anger-bit.	Drenching-bit.						
Bridle-bit.	Driving-bit.						
Channeling-machine bit.	Expansible bit.						
Check-bit.	Mortising-bit.						
	Reaming-bit.						
Bit.	W. Dodge	494,251	Mar. 28	2415	609	62	1869
Bit and saw. Combined	E. O. Lofdahl	505,712	Sept. 26	2365	597	64	1754
Bit-brace	J. E. Hitch	495,335	Apr. 11	1309	329	63	261
Bit-stock	W. S. Paiman	500,153	June 27	2358	570	63	1842
Bituminous rock. Apparatus for disintegrating	B. Hager	493,357	Mar. 14	921	237	62	1554
Bituminous rock. Apparatus for reducing	E. R. Thomason	502,211	July 25	2681	677	64	535
Bituminous rock. Apparatus for reducing and softening	E. Groat	502,416	Aug. 1	279	66	64	617
Bituminous rock. Machine for reducing and softening	E. Groat	502,417	Aug. 1	281	67	64	618
Bituminous-rock-reducing apparatus	E. R. Thomason	492,639	Feb. 28	2524	625	62	1300
Bituminous substances. Apparatus for reducing, refining, and separating	W. A. Doble	500,474	June 27	2852	702	63	1930
Bituminous substances. Apparatus for treating or reducing	J. B. Jardine	498,957	June 6	365	88	63	1456
Blackboard and desk	S. N. Utter	493,134	Mar. 7	565	141	62	1470
Blackboard. Artificial-slate	H. A. Newman, J. D. Werden, and O. A. Stempel	490,979	Jan. 31	3215	821	62	703
Blackboard chalk-rail	W. S. Terry	496,708	May 2	501	134	63	710
Blacking and polishing machine. Shoe	E. and G. P. Frazee	496,050	Apr. 25	2439	615	63	499
Blacking boots or shoes. Stand for use in	R. E. Linkfield	498,066	May 23	2700	675	63	1150
Blacking-box	J. M. Wheat	493,955	Mar. 21	1914	489	62	1761
Blacking machine. Automatic boot	F. G. Norton	496,437	May 2	77	32, 23	63	633
Blacking machine. Boot or shoe	T. H. Lever	500,502	June 27	2896	712	63	1937
Blacking outfit	A. C. Barler	491,974	Feb. 21	1465	365	62	1071
Blade. Flexible	F. O. Climer	505,100	Sept. 19	1449	373	64	1569
Blank-cutting machine	T. F. Tyler	492,342	Feb. 21	2032	506	62	1187
Blanks by electricity. Apparatus for making	G. D. Burton and E. E. Angell	496,591	May 2	310	84	63	676
Blanks. Mechanism for feeding headed	H. K. Jones	495,201	Apr. 11	1096	272	63	221
Blanket. Electro-magnetic	N. O. Renstrom	499,681	June 13	1557	375	63	1676
Blanket-retaining device	N. J. and E. J. Bissell	504,701	Sept. 12	643	163	64	1404
Blast-furnace	J. M. Hartman	500,387	June 27	2733	672	63	1908
Blast-furnace	H. Huber	495,675	Apr. 18	1857	464	63	377
Blast-furnace	J. W. Nesmith	507,031	Oct. 17	2076	512	65	418
Blast-furnace	D. Sheedy and M. W. Iles	505,538	Sept. 26	2046	522	64	1694
Blast-furnaces. Iron notch for	J. M. Hartman	500,386	June 27	2731	671	63	1908
Blast-holes. Apparatus for forming leaders in	J. Seitz	507,759	Oct. 31	3342	818	65	678
Blasting apparatus	J. Sawyer	506,136	Oct. 3	531	137	65	103
Blasting compound	J. E. Blomén	506,032	Oct. 3	353		65	69
Blasting compounds. Manufacture of	J. E. Blomén	506,031	Oct. 3	352		65	69
Blasting compounds. Making	J. E. Blomén	495,178	Apr. 11	1062		63	215
Bleaching	H. Thies and E. Herzig	496,072	Apr. 25	2469	623	63	505
Bleaching and dyeing apparatus	C. T. Clegg	507,995	Nov. 7	25	8	65	763
Bleaching, &c. Apparatus for and process of	E. Bentz, C. and A. Edmeston, and E. Grether	507,404	Oct. 24	2739	672	65	553
Bleaching cotton	C. J. Delescluse	499,184	June 6	740	176	63	1519
Bleaching-keirs. Automatic circulator for	T. Boardman	489,361	Jan. 3	579	157	62	124
Bleaching or dyeing textile materials. Method of and apparatus for	L. Le Blois	489,819	Jan. 10	1276	334	62	280
Blind-adjusting device. Window	J. Murray	497,810	May 23	2291	576	63	1079
Blind apparatus. Window	W. H. Nisbet and W. McLaren	507,747	Oct. 31	3319	813	65	675
Blind. Cinder and dust	G. W. Bohde	510,237	Dec. 5	608	159	65	1537
Blind-slat fastener	J. C. Stevens	511,000	Dec. 19	2026	500	65	1812
Blind-slat tenon	L. Steets and U. Bohren	501,810	July 18	2042	502	64	400
Blind-stile mortiser and borer	W. H. Brownfield	500,278	June 27	2552	623	63	1876
Blind-stop	R. Davis and A. Gartner	499,373	June 13	1052	255	63	1589
Blind-stop	W. W. Hoskins	502,362	Aug. 1	188	44	64	600
Blind-stop	S. E. Purdum	497,685	May 16	2096	523	63	1027
Blind-stop	L. C. Thorne	492,122	Feb. 21	1687	420	62	1116
Blind. Window	G. Poppert	492,993	Mar. 7	350	88	62	1428
Blind. Window	R. M. Wilson	496,287	Apr. 25	2795	699	63	567
Blinds. Guide-strip for inside	E. Dambach	489,937	Jan. 17	1486	388	62	336
Block:							
See Breech-block.	Musical block.						
Building-block.	Paving block.						
Expanding block.	Picture-block.						
Fuse-block.	Pulley-block.						
Hoisting-block.	Railway sleeper-block.						
Horse or carriage block.	Roof-block.						
Knife-block.	Snatch-block.						
Meat-block.	Tackle-block.						
Block-shaving machine	Thrust-block.						
	C. Schraubstadter, Jr., and C. R. Schilling	511,277	Dec. 19	2474	603	65	1897
Block-signal system	J. La Burt	494,007	Mar. 21	2010	512	62	1780
Block-signal system. Electric	J. La Burt	490,663	Jan. 31	2705	696	62	604
Blotter	W. S. Davis	497,492	May 16	1801	452	63	974
Blotter	E. E. Johnson	509,537	Nov. 28	2623	635	65	1294
Blotter	W. Meyer	489,823	Jan. 10	1283	335	62	281
Blotter	J. H. Russell	502,640	Aug. 1	656	160	64	688
Blotter-frame	A. Ludwig	506,520	Oct. 10	1259	315	65	253
Blotting-pad	J. C. Moginie	500,774	July 4	385	101	64	72
Blower. Centrifugal	M. R. Ruble	494,991	Apr. 4	721	183	63	138

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Blower. Concentrating.....	F. P. Smith.....	509,142	Nov. 21	1907	{ 466 467 693 694	{ 65	1148
Blower for carburetors.....	C. V. Best.....	502,244	July 25	2746	{ 694 295	{ 64	547
Blower. Positive-pressure.....	J. W. Wilson.....	497,108	May 9	1151	{ 295 296	{ 63	844
Blower. Positive-pressure.....	J. W. Wilson.....	497,109	May 9	1153	{ 296 297	{ 63	844
Blower. Rotary.....	E. P. Reichhelm.....	502,890	Aug. 8	1092	269	64	782
Blower. Suction.....	T. Marsden.....	509,321	Nov. 21	2217	535	65	1206
Blowers of carburetors. Weight-motor for.....	L. C. Huber.....	503,702	Aug. 22	2434	606	64	1054
Blowing apparatus. Water-pressure.....	J. Hillenbrand.....	495,333	Apr. 11	1306	328	63	260
Blowing-engine.....	W. E. Good.....	490,109	Jan. 17	1775	462	62	395
Blowing-engine.....	W. E. Good.....	511,013	Dec. 19	2041	505	65	1815
Board:							
See Artificial board. Kneading and cooling							
Bill-board. board.							
Blackboard. Matrix-board.							
Centerboard. Music-board.							
Chart-board. Organ reed-board.							
Chess and checker board. Paper-board.							
Composite board. Pitch-board.							
Drawing-board. Plaster-board.							
Drawing or plotting board. Press-board.							
Dry-goods board. Stove-board.							
Game-board. Tally-board.							
Ironing-board. Tray-board.							
Washboard.							
Board-punching machine.....	J. L. Clarke.....	497,566	May 16	1915	482	63	994
Board-siding joint.....	A. C. Betts.....	494,543	Apr. 4	7	1	63	4
Boat:							
See Collapsible and fold- Steamboat.							
ing boat. Steam passenger-boat.							
Ice-boat. Stone-boat.							
Life-boat. Submarine boat.							
Portable boat. War-boat.							
Portable nesting boat.							
Boat-disengaging gear.....	W. H. Wilson and W. J. Pirrie.....	503,637	Aug. 22	2336	582	64	1035
Boat for transporting railway-cars.....	A. McDougall.....	498,680	May 30	3726	{ 920 921	{ 63	1346
Bobbin.....	G. Pendleton, Jr.....	501,897	July 18	2177	540	64	424
Bobbin-builder.....	J. Wiggins.....	496,548	May 2	245	65	63	663
Bobbin-holder.....	C. A. Hawes.....	501,461	July 11	1479	372	64	284
Bobbin-holder. Spindle.....	E. and J. MacDuff.....	495,818	Apr. 18	2082	525	63	417
Bobbin or spool.....	R. Haynes and J. Wilcock.....	507,124	Oct. 24	2244	554	65	461
Bobbin-winding machine.....	C. S. Marshall.....	491,434	Feb. 7	607	{ 153 154 155	{ 62	865
Bodkin.....	M. E. G. M. Ward.....	510,943	Dec. 19	1927	470	65	1795
Boiler:							
See Asphalt-disintegrat- Range-boiler.							
ing boiler. Sectional boiler.							
Ceramic boiler. Steam-boiler.							
Circulating-boiler. Tubular boiler.							
Cooking-boiler. Upright boiler.							
Furnace-boiler. Vertical boiler.							
Hot-water boiler. Washboiler.							
Locomotive-boiler. Water-tube boiler.							
Marine boiler. Water-tube safety-boiler.							
Multitubular boiler.							
Boiler.....	S. G. Brosius.....	511,115	Dec. 19	2205	541	65	1848
Boiler.....	S. G. Brosius.....	511,116	Dec. 19	2206	541	65	1848
Boiler.....	J. R. Brownell.....	489,453	Jan. 10	732	{ 195 196	{ 62	169
Boiler.....	B. J. Collier.....	500,855	July 4	510	133	64	93
Boiler.....	J. E. Dever and C. A. Cotter.....	506,360	Oct. 10	973	242	65	196
Boiler.....	H. A. R. Dietrich.....	492,664	Feb. 28	2565	635	62	1308
Boiler.....	M. Higgins.....	494,861	Apr. 4	540	{ 136 137	{ 63	105
Boiler.....	M. and G. Hise.....	489,809	Jan. 10	1264	331	62	277
Boiler.....	W. Mooney.....	490,257	Jan. 17	2021	528	62	443
Boiler.....	C. R. Moore.....	500,814	July 4	446	117	64	82
Boiler.....	J. Player.....	499,587	June 13	1414	338	63	1651
Boiler.....	S. A. Pratt.....	505,673	Sept. 26	2298	{ 582 583	{ 64	1742
Boiler.....	F. Saxon.....	495,841	Apr. 18	2120	533	63	425
Boiler.....	G. S. Strong.....	505,542	Sept. 26	2050	523	64	1094
Boiler.....	G. S. Strong.....	505,543	Sept. 26	2051	{ 523 524	{ 64	1695
Boiler.....	F. J. Thrun.....	489,344	Jan. 3	555	{ 150 151	{ 62	119
Boiler.....	J. Vanes.....	505,735	Sept. 26	2399	606	64	1759
Boiler and boiler-furnace.....	E. A. Wheeler.....	489,725	Jan. 10	1136	294	62	251
Boiler and boiler-furnace.....	E. A. Wheeler.....	489,726	Jan. 10	1137	294	62	251
Boiler-alarm.....	G. B. Essex.....	496,557	May 2	264	70	63	667
Boiler attachment.....	F. X. Fischer.....	508,007	Nov. 7	43	13	65	766
Boiler attachment.....	E. B. Parkhurst.....	497,725	May 16	2157	{ 539 540	{ 63	1039
Boiler-brace.....	A. F. Huston.....	508,718	Nov. 14	1195	296	65	998
Boiler brace-jaws. Machine for making.....	C. E. Brown.....	507,878	Oct. 31	3548	873	65	717
Boiler-chimneys. Apparatus for controlling the draft in.....	G. L. Thiel.....	490,177	Jan. 17	1883	490	62	417
Boiler-cleaner.....	J. A. Maloney.....	496,318	Apr. 25	2855	712	63	578
Boiler-cleaner.....	G. F. Schmid.....	511,064	Dec. 19	2111	522	65	1820

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Boiler-cleaner	G. E. Truax	504,426	Sept. 5	188	49	64	1306	
Boiler-cleaner. Automatic	E. Benjamin	497,046	May 9	1952	269	63	826	
Boiler-cleaner. Automatic	J. J. Miner	498,854	June 6	185	45	63	1425	
Boiler-cleaner. Steam	J. D. McEachren	507,030	Oct. 17	2074	512	65	418	
Boiler-cleaning apparatus	E. E. Eldridge	495,457	Apr. 11	1502	377	63	295	
Boiler-cleaning apparatus	E. Horton and F. E. Fitch	507,710	Oct. 31	3274	800	65	666	
Boiler compound-feeder. Pneumatic	W. Brameld	497,298	May 16	1485	374	63	918	
Boiler-deflector.	E. S. T. Kennedy. (Reissue)	11,374	Oct. 10	1453	365	65	291	
Boiler-diaphragm	W. King	510,347	Dec. 5	831	201	65	1568	
Boiler-feeder	A. Sandino y Barcon	501,315	July 11	1235	{ 311 312 }	64	239	
Boiler-feeder. Automatic.	F. M. Ashley	493,237	Mar. 14	728	187	62	1519	
Boiler-feeder. Automatic.	J. H. Johnson	507,621	Oct. 31	3131	766	65	640	
Boiler-feeder. Steam.	J. Dean	504,151	Aug. 29	3138	785	64	1205	
Boiler-feeder. Steam.	J. Morehead	507,716	Oct. 31	3282	803	65	668	
Boiler fire-box. Steam.	M. E. Herbert	492,290	Feb. 21	1948	487	62	1171	
Boiler-furnace.	C. H. Allen, Sr	501,907	July 25	2203	549	64	445	
Boiler-furnace.	J. D. Ellis	501,709	July 18	1877	467	64	372	
Boiler-furnace.	J. Gilbert	494,137	Mar. 28	2234	569	62	1836	
Boiler-furnace.	T. J. Grosh	490,962	Jan. 31	3186	815	62	697	
Boiler-furnace.	J. Lister	511,536	Dec. 26	2917	710	65	1992	
Boiler-furnace.	S. T. Owens	492,943	Mar. 7	268	69	62	1412	
Boiler-furnace.	J. A. Palmer	495,264	Apr. 11	1198	300	61	240	
Boiler-furnace.	W. J. Richards	494,028	Mar. 21	2044	521	62	1766	
Boiler-furnace.	W. L. Teter	499,054	June 6	545	128	63	1486	
Boiler-furnace.	J. K. Thompson	505,144	Sept. 19	1382	354	61	1557	
Boiler-furnace.	J. W. Warner	508,790	Nov. 14	1293	{ 322 323 }	65	1018	
Boiler furnace. Locomotive.	J. Milton	503,155	Aug. 15	1540	378	64	877	
Boiler furnace. Locomotive.	J. Milton. (Reissue)	11,370	Oct. 3	680	172	65	128	
Boiler furnace. Locomotive or other	A. F. Kingsley	506,595	Oct. 10	1366	342	65	274	
Boiler-furnace. Smokeless	A. B. Crowder	490,544	Jan. 24	2493	643	62	548	
Boiler furnace. Steam.	E. M. Bosley	498,378	May 30	3222	801	63	1267	
Boiler furnace. Steam.	B. H. Dear	492,148	Feb. 21	1737	433	62	1126	
Boiler furnace. Steam.	J. Cleghorn	505,094	Sept. 19	1305	316	64	1543	
Boiler furnace. Steam.	A. B. Cosby	502,616	Aug. 1	613	147	64	679	
Boiler furnace. Steam.	A. B. Cosby	502,617	Aug. 1	615	147	64	679	
Boiler furnace. Steam.	L. Lawton	491,570	Feb. 14	877	212	62	931	
Boiler furnace. Steam.	J. E. Needham	501,729	July 18	1903	473	64	377	
Boiler furnace. Steam.	O. D. Orvis	503,214	Aug. 15	1638	402	64	895	
Boiler furnace. Steam.	C. Rinck	500,777	July 4	392	103	64	73	
Boiler furnace. Steam.	J. K. Rugg	490,454	Jan. 24	2341	606	62	517	
Boiler furnace. Steam.	J. and J. R. Scott	498,580	May 30	3546	879	63	1315	
Boiler furnace. Steam.	H. Sieben	507,938	Oct. 31	3643	901	65	735	
Boiler furnace. Steam.	J. Sutton and J. W. Buckley	494,041	Mar. 21	2062	527	62	1789	
Boiler furnace. Steam.	G. H. Watson	502,795	Aug. 8	944	230	64	754	
Boiler furnace. Steam-generating.	R. H. Alexander	491,918	Feb. 14	1377	343	62	1039	
Boiler gas-producing furnace. Steam.	O. W. Ketchum	491,359	Feb. 7	501	120	62	844	
Boiler incrustation. Device for preventing.	A. B. Fanne	505,942	Oct. 3	216	56	65	43	
Boiler saddles. Die for shaping steam.	C. A. Knight and C. P. Higgins	495,512	Apr. 18	1723	434	63	555	
Boiler safety-plug.	C. E. Van Auken	504,896	Sept. 12	964	{ 298 299 }	64	1466	
Boiler-scale. Apparatus for removing.	H. Baschy	507,203	Oct. 24	2405	593	65	459	
Boiler-scales. Removing	J. Draper	509,209	Nov. 21	2015	597	65	1169	
Boiler separator. Steam.	C. J. Larson	505,709	Sept. 26	2262	597	64	1753	
Boiler stay or brace	J. M. Wilson	503,514	Aug. 15	2109	523	64	979	
Boiler support. Kitchen.	W. Rowlinson	501,733	July 18	1911	475	64	378	
Boiler-tube cleaner.	A. W. Chesterton	492,935	Mar. 7	259	66	62	1410	
Boiler-tube cleaner.	J. M. Dunn	504,569	Sept. 5	427	108	64	1349	
Boiler-tube cleaner.	R. Thompson	503,359	Aug. 15	1680	466	64	938	
Boiler-tube cleaner. Steam.	R. Thompson	503,559	Aug. 15	2190	547	64	994	
Boiler tube-closer. Steam.	G. C. Hicks	495,700	Apr. 18	1897	477	63	383	
Boiler tube-closer. Steam.	G. C. Hicks	504,582	Sept. 5	441	113	64	1353	
Boiler-tube expander.	J. West	489,278	Jan. 3	457	{ 126 127 }	62	101	
Boiler tube or fine beader	M. A. Lanagan	498,277	May 30	3046	757	63	1226	
Boiler-tube protector	C. W. Whitney	508,793	Nov. 14	1299	324	65	1019	
Boiler-tube stopper	J. H. Pollard	509,678	Nov. 28	2843	687	65	1338	
Boiler tube. Tubular.	W. Eaves	493,376	Mar. 14	956	246	62	1562	
Boiler water-alarm. Steam.	P. A. Kirchner	511,529	Dec. 26	2902	706	65	1990	
Boiler water-regulator. Steam.	N. E. Nash and G. A. Eddy	504,234	Aug. 29	3280	{ 819 820 }	64	1232	
Boilers. Apparatus for manufacturing	W. Connelly	496,640	May 2	396	{ 107 108 }	63	691	
Boilers. Automatic feeder for steam-engine	J. N. Leach	498,397	May 30	3245	{ 807 808 }	63	1262	
Boilers. Blow-off basin for steam.	J. F. Cotter	489,602	Jan. 10	961	251	62	215	
Boilers. Device for attaching pressure-gages to	C. G. Ludlow	495,594	Apr. 18	1726	435	63	355	
Boilers. Lap-joint for steam.	J. T. Connelly	490,067	Jan. 17	1709	446	62	380	
Boilers. Leveler for road-engine	W. R. Hitchcock	506,591	Oct. 17	1516	340	65	314	
Boilers, &c. Making supporting-brackets for	G. H. Drake	494,370	Mar. 23	2612	656	62	1906	
Boilers. Pipe or flue connection for steam.	H. E. Harrington	507,321	Oct. 24	2609	642	65	527	
Boilers. Steam drying and superheating apparatus for steam.	B. W. Hoyt	490,965	Jan. 31	3191	816	62	699	
Boilers. Smoke-burning apparatus for steam.	R. Carey	497,305	May 16	1498	378	63	920	
Boilers. Steam-pressure and water-level recorder for	W. M. Lewis	495,815	Apr. 18	2077	524	63	416	
Boilers, &c. Uniting the heads to the bodies of	W. S. Shippe	508,351	Nov. 7	605	148	65	870	
Bolster-plate	H. A. Moyer	491,783	Feb. 14	1170	292	62	997	
Bolster-spring	G. S. and H. C. Neal	490,083	Jan. 17	1732	451	62	385	
Bolster-spring	A. G. North	494,158	Mar. 28	2268	576	62	1842	
Bolt.	See Door-bolt. Stay-bolt. Jail-bolt. Thill-coupling bolt.	A. Adams	504,262	Aug. 29	3324	831	64	1240

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Bolt.....	B. Bernstein.....	495,658	Apr. 18	1834	{ 458 459 }	{ 63 63 }	{ 373 1011 }
Bolt.....	J. Cathrein.....	497,628	May 16	2008	501	63	1011
Bolt.....	T. Lafon.....	507,277	Oct. 24	2527	623	65	510
Bolt.....	J. A. Leggatt.....	500,143	June 27	2343	567	63	1839
Bolt.....	O. C. Little.....	491,660	Feb. 14	979	247	62	960
Bolt.....	G. W. Manson.....	491,019	Jan. 31	3275	837	62	715
Bolt and nut.....	C. A. Higbee.....	501,941	July 25	2253	562	64	454
Bolt-cover. Expansion.....	N. H. Steward.....	508,254	Nov. 7	454	111	65	842
Bolt-cutter.....	C. L. Beers.....	500,184	June 27	2413	588	63	1851
Bolt-cutter.....	L. S. Grossman.....	500,887	July 4	559	145	64	102
Bolt-cutter.....	M. D. Luehrs.....	508,549	Nov. 14	939	231	63	948
Bolt-cutter.....	M. D. Luehrs.....	511,441	Dec. 26	2774	671	65	1964
Bolt-cutting machine.....	A. M. Baird.....	492,931	Mar. 7	252	64	62	1408
Bolt-fastening device. Expandible.....	C. J. Phillips.....	494,745	Apr. 4	346	88	63	68
Bolt for attaching articles to walls.....	O. F. Schumann.....	499,444	June 13	1186	283	63	1612
Bolt-forcer.....	D. T. and H. W. Young.....	503,188	Aug. 15	1594	392	64	887
Bolt-head-finishing machine.....	C. S. Seaton.....	503,879	Aug. 22	2686	673	64	1103
Bolt-machine attachment. Eye.....	C. Colhower and A. J. Grossmann.....	498,766	June 6	22	5, 6	63	1393
Bolt or rod cutter.....	E. Chabquette.....	496,396	May 2	13	4	63	621
Bolt-pointing machine.....	H. Crehan.....	495,395	Apr. 11	1402	352	63	277
Bolt-rolling machine.....	W. Vollmer.....	503,393	Aug. 15	1928	{ 478 479 }	{ 64 64 }	{ 947 1113 }
Bolt-threader.....	L. Kirchenbauer.....	509,039	Nov. 21	1725	{ 426 427 427 }	{ 65 65 65 }	{ 1113 1113 1113 }
Bolt-threading machine.....	F. S. Cook.....	492,140	Feb. 21	1715	{ 428 429 429 }	{ 62 62 62 }	{ 1122 1122 1122 }
Bolt-threading machine.....	H. Crehan.....	490,901	Jan. 31	3093	{ 793 794 794 }	{ 62 62 62 }	{ 680 680 680 }
Bolts. Machine for cutting stay.....	J. Player.....	501,296	July 11	1208	{ 305 306 306 }	{ 64 64 64 }	{ 234 234 234 }
Bolts or screws with threaded or gimlet points. Machine for providing.....	W. R. Wilbur.....	509,638	Nov. 28	2778	668	65	1324
Bolting and separating machine.....	H. Rasch.....	497,343	May 16	1559	392	63	931
Bolting apparatus.....	C. F. Hardy.....	494,952	Apr. 4	663	{ 170 171 171 }	{ 63 63 63 }	{ 128 128 128 }
Bolting-chest.....	F. J. Schupp.....	505,801	Sept. 26	2504	632	64	1780
Bolting flour, meal, &c. Method of and apparatus for.....	G. W. Combs.....	507,971	Oct. 31	3693	{ 917 918 918 }	{ 65 65 65 }	{ 744 744 744 }
Bolting-machine.....	S. A. Nordyke.....	501,155	July 11	1001	{ 255 256 256 }	{ 64 64 64 }	{ 197 197 197 }
Bolting-reel.....	F. J. Schupp.....	501,898	July 18	2178	540	64	424
Bolting-reel.....	F. J. Schupp.....	501,899	July 18	2180	540	64	424
Bolting-reel.....	J. P. Sterling.....	497,220	May 9	1319	336	63	875
Bond. Coupon.....	S. R. Hopkins.....	489,956	Jan. 17	1515	396	62	342
Bone-black. Revivifying.....	M. Weinrich.....	509,460	Nov. 28	2501	65	65	1272
Bone-cutting machine.....	J. L. Lilley.....	498,398	May 30	3247	808	63	1262
Bone-cutting machine.....	J. E. Wilson.....	489,774	Jan. 10	1216	319	62	267
Bone-cutting machine.....	J. E. Wilson.....	500,986	July 4	713	187	64	129
Bone-cutting mill.....	R. Poulson.....	508,528	Nov. 14	909	223	65	942
Bone. Manufacturing artificial.....	R. Reiman.....	494,891	Apr. 4	522	63	113	
Book.....	H. P. Parmelee.....	494,382	Mar. 28	2631	660	62	1910
Book. Account.....	W. H. Smith.....	507,601	Oct. 31	3098	756	65	633
Book and diary. Expense-account.....	D. Geraldine.....	498,931	June 6	323	76	63	1449
Book and package case. Portable.....	G. C. Magargal.....	490,132	Jan. 17	1798	469	62	399
Book-back protector.....	G. W. Crane and J. W. Bloomfield.....	497,441	May 16	1713	432	63	959
Book-backs. Machine for forming.....	F. Friedrichs and A. Brede.....	507,115	Oct. 24	2228	{ 550 551 551 }	{ 65 65 65 }	{ 458 458 458 }
Book. Bank-check.....	C. M. Bump.....	492,956	Mar. 7	292	74	62	1417
Book. Bank or check.....	S. R. Hopkins.....	489,561	Jan. 10	903	{ 235 236 236 }	{ 62 62 62 }	{ 204 204 204 }
Book. Bill.....	W. S. Decker.....	506,628	Oct. 10	1412	354	65	283
Bookbinder.....	J. B. Johnston.....	511,082	Dec. 19	2152	530	65	1837
Bookbinder.....	N. D. Wolfard.....	500,833	July 4	482	126	64	88
Bookbinder's beveling-machine.....	R. Gilmore, O. and A. Rapp.....	496,054	Apr. 25	2145	617	63	500
Bookbinding.....	L. Bailey.....	490,383	Jan. 24	2241	5-3	62	499
Bookbinding.....	A. Blome.....	496,992	May 9	975	253	63	812
Bookbinding.....	J. P. Brennan.....	493,396	Mar. 14	982	253	62	1567
Bookbinding.....	D. K. Howe.....	502,493	Aug. 1	415	98	64	643
Bookbinding.....	A. H. Kelly.....	506,512	Oct. 10	1249	311	65	251
Bookbinding.....	J. Kroger.....	505,049	Sept. 12	1218	314	64	1513
Bookbinding.....	J. W. Lewis and J. M. Irwin.....	506,125	Oct. 3	509	132	65	99
Bookbinding.....	W. P. Sloan.....	497,137	May 9	1199	306	63	852
Bookbinding.....	A. H. Tyrrell and G. A. Zibell.....	508,154	Nov. 7	288	72	65	811
Bookbinding and book.....	J. G. Bast.....	495,771	Apr. 18	2015	509	63	405
Bookbinding-press.....	C. Seybold.....	508,847	Nov. 14	1383	343	65	1033
Book. Blank.....	J. W. Hannen.....	506,634	Oct. 10	1419	356	65	285
Book. Blank.....	F. H. and H. H. Hoffmann.....	501,276	July 11	1182	299	64	230
Book. Blank.....	W. N. Wintfield.....	494,360	Mar. 28	2599	653	62	1904
Book-carrier.....	H. Tollner.....	509,631	Nov. 28	2767	667	65	1323
Bookcase.....	C. B. Godfrey.....	494,950	Apr. 4	658	170	63	127
Bookcase.....	J. Stimson.....	504,182	Aug. 29	3198	798	64	1217
Bookcase and washstand. Combined.....	L. Hennes.....	511,237	Dec. 19	2402	585	65	1884
Bookcase. Revolving.....	W. F. Berger.....	491,277	Feb. 7	342	87	62	814
Bookcase. Revolving.....	F. H. Haley.....	497,657	May 16	2051	{ 512 513 513 }	{ 63 63 63 }	{ 1019 1019 1019 }
Bookcase-shelf.....	W. I. Ohmer.....	506,829	Oct. 17	1755	{ 441 442 442 }	{ 65 65 65 }	{ 358 358 358 }
Bookcase shelf-roll.....	C. B. Godfrey.....	499,672	June 13	1541	371	63	1674
Book clasp and handle. Combined.....	M. T. Clancy.....	510,161	Dec. 5	537	124	65	1511
Book. Coupon.....	J. P. Forbes.....	508,212	Nov. 7	3-4	94	65	890
Book-cover.....	C. L'Enfant.....	492,925	Mar. 7	246	62	62	1407
Book-cover.....	T. E. B. Mason.....	489,970	Jan. 17	1536	401	62	346

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Book-cover machine	A. Bredenberg	490,895	Jan. 31	3067	787 788 789 790	62	676
Book-cover-making machine	W. P. Jackson	506,402	Oct. 10	1054	262 263 490	65	213
Book-covering machine	H. L. Arnold	493,959	Mar. 21	1919	491 492 493 318	62	1762
Book-covering machine.	C. W. Lovell and A. Bredenberg	493,553	Mar. 14	1241	319 320 321	62	1616
Book. Duplicating check.	J. Oldfield	490,038	Jan. 17	1665	432	62	371
Book-finishing machine	T. S. Murphy, Jr.	507,553	Oct. 31	3000	736 737	65	615
Book. Fireproof.	F. A. Hatton	509,533	Nov. 28	2618	633	65	1293
Book for bookkeeping	C. S. Hall	495,798	Apr. 18	2050	519	63	411
Book for bookkeeping.	G. D. Thomas	491,202	Feb. 7	231	58	62	791
Book-holder	C. S. Byrkit	488,983	Jan. 3	13	4	62	5
Book-holder	S. C. Johnson	494,574	Apr. 4	76	18	63	16
Book-holder and reading-stand. Combined	L. Ludgin	510,075	Dec. 5	335	87	65	1484
Book-holder or copy-stand	A. C. Prohl	506,015	Oct. 3	332	88	65	65
Book. Indexed	A. F. Dean	500,262	June 27	2540	619	63	1872
Book. Manifold memorandum.	W. W. O'Hara	490,675	Jan. 31	2730	702 703	62	609
Book. Manifold sales.	J. S. McDonald	493,894	Mar. 21	1803	459	62	1740
Book-mark and paper-cutter. Combined	H. J. Muller	497,454	May 16	1731	436	63	962
Book. Memorandum or copying	W. H. Rodden	503,914	Aug. 22	2744	688	61	1115
Book. Memorandum sales.	R. Gair	493,922	Mar. 21	1854	472	62	1750
Book. Note, account, or other.	A. W. P. Livesey	511,339	Dec. 26	2584	630	65	1930
Book or music holder. Adjustable	J. W. Marsh	506,825	Oct. 17	1719	410	65	357
Book or pad. Memorandum	G. W. Brown	500,736	July 4	328	87	64	61
Book-rack. Adjustable.	G. F. Sargent	489,693	Jan. 10	1087	281	62	242
Book. Record.	C. C. Krouse	495,253	Apr. 11	1185	297	63	238
Book. Record and index	P. Gruber	508,699	Nov. 14	1166	288	65	993
Book-rest	J. K. Brammer	510,323	Dec. 5	797	192	65	1561
Book-rest	C. L. Coudit and S. B. Ladd	498,156	May 23	2828	708	63	1174
Book-rest	D. C. Lehman	490,569	Jan. 24	2523	649	62	554
Book rest and holder	O. C. Mitchell	493,936	Mar. 21	1879	478	62	1755
Book. Sales or order	S. Shoup	499,046	June 6	530	125	63	1483
Book. Shipping receipt.	J. D. D. Mortimer	504,360	Sept. 5	68	18	64	1284
Book-stand. Coin-controlled	J. M. Sullivan	505,995	Oct. 3	301	78	65	59
Book-stapling machine	J. T. O. Orloff	503,271	Aug. 15	1724	425	64	910
Book-stapling machine	F. P. Rosback	493,298	Mar. 14	831	212 213 214	62	1537
Book-support	R. L. Hechler	495,585	Apr. 18	1709	430	63	353
Book-support	J. J. McVey and A. Rigling	504,233	Aug. 20	3279	819	64	1231
Book-support	A. H. Ward	490,379	Jan. 24	2236	582	62	498
Book-support. Adjustable	G. W. Poole	510,090	Dec. 5	419	93	65	1429
Book-trimming machine	C. W. Lovell and A. Bredenberg	490,877	Jan. 31	3031	779 780	62	669
Books, &c. Adjustable back for.	E. Schäfer	508,988	Nov. 21	1648	405	65	1099
Books. Machine for securing backing-strips to and folding	A. L. Garver	509,215	Nov. 21	2022	490 491	65	1171
Boomerang.	C. W. Renear	510,290	Dec. 5	752	182	65	1552
Boot	N. Herzog	511,141	Dec. 19	2252	553	65	1856
Boot cleaning and polishing machine	S. Bonné	497,624	May 16	2000	500	63	1009
Bootjack	L. Even	504,838	Aug. 22	2631	658	64	1093
Bootjack	W. H. Hugo	506,782	Oct. 17	1678	423	65	344
Boot-nailing machine	R. W. Bateman	507,472	Oct. 24	2845	696 697 688	65	573
Boot or shoe	H. C. Gros	501,830	July 18	2064	509	64	405
Boot or shoe	J. W. Packard	509,241	Nov. 21	2077	501	65	1180
Boot or shoe	E. Roche	495,373	Apr. 11	1367	341	63	270
Boot or shoe	W. Wass	499,616	June 13	1463	350	63	1661
Boot or shoe	G. L. Williams	503,302	Aug. 15	1781	440	64	920
Boot or shoe and making same	G. W. Young	507,574	Oct. 31	3049	746	65	623
Boot or shoe creaser	R. F. Gordon and G. T. Davis	489,630	Jan. 10	998	260	62	223
Boot or shoe dresser	S. A. Richards	507,845	Oct. 31	3503	861	65	708
Boot or shoe heel.	M. W. Allen	497,158	May 9	1232	314	63	858
Boot or shoe heels. Machine for breasting	H. A. Webster	504,854	Sept. 12	902	232 233	64	1454
Boot or shoe jack.	A. F. Preston	502,756	Aug. 8	873	213	64	741
Boot or shoe scouring-wheel	W. H. Roche	497,821	May 23	2311	581	63	1082
Boot or shoe slip-sole.	G. W. Dixon	491,731	Feb. 14	1068	275	62	982
Boot or shoe smoothing device	C. H. Krebs	506,049	Oct. 3	385	101	65	75
Boot or shoe sole	L. S. Pfouts and L. D. Ball	498,942	June 6	340	81	63	1452
Boot-pull and trousers-guard	J. Walden	506,958	Oct. 17	1963	486	65	397
Boot tree	J. Bowler	497,164	May 9	1241	315	63	860
Boot-tree	C. W. Clark	501,133	July 11	961	245	64	190
Boot-tree	M. Spuhr	499,761	June 20	1704	408	63	1715
Boot-tree	G. H. Stephens	510,654	Dec. 12	1383	340	65	1684
Boot-treeing machine	J. Warren	504,765	Sept. 12	750	186 187	64	1425
Boot. Ventilated	D. B. Whitehill	490,703	Jan. 31	2769	712	62	617
Boots or shoes. Making	G. W. Day	491,258	Feb. 7	313	79	62	808
Boots or shoes. Making	J. J. Page	489,196	Jan. 3	330	90	62	75
Boots or shoes. Making	B. A. Pickering	497,527	May 16	1853	467	63	984
Border for walks, &c.	J. E. Chapman	489,792	Jan. 10	1240	325	62	272
Border or edging for fabrics.	J. M. Merrow	507,234	Oct. 24	2455	605	65	498

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Gr.	Vol.	Page.
Boring apparatus for deep borings.	A. Raky	510,366	Dec. 5	858	207	65	1573
Boring cylinders and turning the flanges thereof.	W. A. and F. Pearn	504,742	Sept. 12	714	178	64	1418
Machine for					179		
Boring device. Multiple.	F. H. Miller	495,050	Apr. 11	815	206	63	171
Boring-machine	C. M. Collins	494,845	Apr. 4	514	129	63	100
Boring-machine	E. Fischer	510,595	Dec. 12	1279	310	65	1664
Boring-machine	C. F. Hotchkiss	491,110	Feb. 7	75	21	62	763
Boring-machine	A. J. and F. L. Kelchner	492,555	May 30	3515	870	63	1310
Boring-machine	B. Lobee	499,027	June 6	501	117	63	1478
Boring-machine. Double.	C. H. Purdy	494,082	Mar. 21	2132	545	62	1802
Boring-machine. Horizontal.	A. J. Frith	494,100	Mar. 21	2158	551	62	1807
Boring-mill	A. Wood	497,738	May 16	2172	543	63	1042
Boring-mill	A. Wood	497,739	May 16	2174	543	63	1042
Boring-mill attachment	C. L. Libby	511,736	Dec. 26	3236	793	65	2049
Boring or drilling machine.	W. S. Sherman	497,434	May 16	1701	429	63	957
Boring spherical cavities. Device for.	J. Riddell	508,640	Nov. 14	1081	267	65	977
Boring-tool.	J. W. Batcheller	508,803	Nov. 14	1313	327	65	1021
Boring-tool.	S. Bowman	505,746	Sept. 26	2415	610	64	1762
Boring-tool.	F. Federschmidt	496,253	Apr. 25	2745	686	63	556
Bottle	H. I. Leith	489,965	Jan. 17	1527	400	62	345
Bottle	H. I. Leith	489,966	Jan. 17	1530	400	62	345
Bottle	H. I. Leith	489,967	Jan. 17	1532	400	62	345
Bottle	H. I. Leith	505,469	Sept. 26	1903	490	64	1668
Bottle	A. L. Straus	491,198	Feb. 7	926	57	62	790
Bottle and stopper	R. S. Wiesenfeld	490,729	Jan. 31	2208	720	62	624
Bottle and stopper therefor	E. E. Ellis	511,600	Dec. 26	3027	738	65	2011
Bottle box or case	F. W. Becker	511,672	Dec. 26	3133	766	65	2030
Bottle-case	H. H. Higham	497,877	May 23	2409	601	63	1099
Bottle-case	J. H. Nellis	511,643	Dec. 26	3092	755	65	2023
Bottle-corking-machine compressor	E. Ermold	492,540	Feb. 28	2364	587	62	1268
Bottle-filling apparatus	A. M. Donally. (Reissue)	11,300	Jan. 17	2024	529	62	443
Bottle-filling apparatus	J. Jackson	502,969	Aug. 8	1247	305	64	809
Bottle-filling device	F. H. Stallings	498,863	June 6	196	48	63	1428
Bottle. Flexible water.	F. M. Underhill	504,058	Aug. 29	2986	746	64	1176
Bottle for glue, &c.	C. H. Leggett	501,282	July 11	1188	301	64	231
Bottle holder. Ink.	D. B. Corley	492,143	Feb. 21	1727	431	62	1124
Bottle-labeling machine	C. Campini	507,673	Oct. 31	3218	787	65	655
Bottle-making tool.	R. S. Wiesenfeld	511,033	Dec. 19	2066	512	65	1820
Bottle-molding apparatus	C. D. and H. F. Crickler	493,924	Mar. 21	1971	503	62	1771
Bottle-neck and tool for threading same.	G. Gray	509,525	Nov. 28	2606	630	65	1291
Bottle nipple. Nursing.	L. B. Truslow	497,994	May 23	2590	648	63	1131
Bottle-opening implement.	G. M. Casey	492,570	Feb. 28	2410	601	62	1278
Bottle or vessel holder	F. G. Kammerer	502,365	Aug. 1	192	45	64	601
Bottle package of packing-box	A. H. Meech	492,305	Feb. 21	1976	492	62	1177
Bottle-packing device.	W. Eggers and S. Mueller	511,130	Dec. 19	2232	547	65	1853
Bottle. Perfumery or other.	G. W. Bean	493,962	Mar. 21	1936	493	62	1764
Bottle pour-out or discharger	J. W. Carter	500,260	June 27	2527	618	63	1871
Bottle. Self-sealing	W. Hayes and H. P. Roberts	500,499	June 27	2892	711	63	1936
Bottle-stopper	G. F. Atwood	490,405	Jan. 24	2270	590	62	505
Bottle-stopper	G. F. Atwood	500,182	June 27	2411	587	63	1851
Bottle-stopper	W. P. Bonwick	494,361	Mar. 28	2600	633	62	1904
Bottle-stopper	J. Brooks	511,114	Dec. 19	2203	541	65	1847
Bottle-stopper	A. Carrara	495,663	Apr. 18	1-39	460	63	374
Bottle-stopper	A. Carrara	495,664	Apr. 18	1841	461	63	374
Bottle-stopper	G. S. Chamberlin	498,003	May 23	2608	652	63	1134
Bottle-stopper	D. F. Doody	508,509	Nov. 14	865	214	65	934
Bottle-stopper	G. H. Gillette	493,701	Mar. 21	1491	342	62	1680
Bottle-stopper	W. P. Guilfoyle	510,478	Dec. 12	1053	252	65	1624
Bottle-stopper	F. L. von Hirsch	489,637	Jan. 10	1005	262	62	224
Bottle-stopper	K. Hutter	491,113	Feb. 7	79	22	62	764
Bottle-stopper	J. Lauthoff	491,119	Feb. 7	86	24	62	765
Bottle-stopper	B. F. McIntyre	492,098	Feb. 21	1648	410	62	1108
Bottle-stopper	D. O'Kane	502,423	Aug. 1	294	70	64	620
Bottle-stopper	H. Spiegel	501,333	Aug. 15	1839	456	64	930
Bottle-stopper	F. S. Towle	499,898	June 20	1932	469	63	1736
Bottle stopper attachment. Ink.	G. R. Weed	500,982	July 4	708	186	64	129
Bottle-stopper extractor	G. W. Gardner	491,306	Feb. 7	409	105	62	825
Bottle-stopper fastener	B. Gunnorson	505,291	Sept. 19	1614	419	64	1600
Bottle-stopper fastener	C. Schroeder	509,526	Nov. 28	2699	653	65	1310
Bottle-stopper fastening and extractor. Combined.	G. F. Atwood	507,669	Oct. 31	3214	786	65	655
Bottle stopper. Water.	G. H. F. Schrader	504,138	Aug. 29	3116	780	64	1201
Bottle-uncapping tool.	A. L. Bernardin	501,050	July 11	816	212	64	164
Bottle-washer	C. W. Hamann	499,021	June 6	494	115	63	1477
Bottle-washer	F. G. Littell	510,866	Dec. 12	1789	439	65	1756
Bottle-washer	C. Pease	498,725	May 30	3819	942	63	1362
Bottle-washer	R. Rushmore	507,330	Oct. 24	2621	645	65	530
Bottle-washer	E. A. Wadsworth	498,371	May 30	3213	799	63	1255
Bottle-washing machine	L. A. Enzinger	491,414	Feb. 7	582	146	62	859
Bottle-washing machine.	H. Reuter	511,361	Dec. 26	2624	638	65	1938
Bottle-wrapper	A. H. Meech	492,306	Feb. 21	1978	492	62	1177
Bottle-wrapper	A. H. Meech	495,422	Apr. 11	1440	363	63	284
Bottles, &c. Antifilling device for	E. S. Reed	508,342	Nov. 7	585	144	65	867
Bottles. Apparatus for injecting sirup to and filling with aerated waters internal-stoppered	T. Ferguson	511,267	Dec. 19	2454	599	65	1893
Bottles, &c. Apparatus for polishing the caps of.	H. Roemer	490,682	Jan. 31	2739	706	62	610
Bottles. Apparatus for preventing the refilling of	E. Guerbais	505,461	Sept. 26	1893	488	64	1666
Bottles. Brush-cleaning attachment for	C. Klein	498,475	May 30	3370	839	63	1285
Bottles closed by screw-stoppers. Machine for filling.	J. J. Varley	508,357	Nov. 7	617	151	65	872
Bottles. Corking	C. Schroeder	505,677	Sept. 26	2304	585	64	1743

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Bottles. Device for preventing the fraudulent filling of	J. J. Dufour	500,057	June 20	2172	528	63	1797
Bottles. Device for shaking crated	P. H. Shumway	493,046	Mar. 7	429	108	62	1443
Bottles. Dropping-stopper for	C. Hartwig	500,892	July 4	566	147	64	103
Bottles. Machinery for inserting stopper-retainers into	A. J. Sands	495,640	Apr. 18	1798	451 452 453	63	367
Bottles. Stoppering	C. Schroeder	505,300	Sept. 19	1633	422	64	1604
Bottles. Stoppering	C. Schroeder	505,301	Sept. 19	1634	422	64	1604
Bottles. Stoppering wine	W. Watson	507,862	Oct. 31	3527	867	65	713
Bottles. Tool for finishing the necks and mouths of	C. H. Beach	491,069	Feb. 7	11	4	62	751
Bottles. Tool for securing corks in	K. Kirschner, Jr.	500,395	June 27	2745	675	63	1910
Bottles, &c. Wrapper for	R. G. Brenack	494,364	Mar. 28	2603	654	62	1905
Bottling apparatus	C. B. and C. H. Beardsley	509,647	Nov. 28	2791	671 672	65	1327
Bottling apparatus	M. E. Donally	500,866	July 4	527	137	64	96
Bottling apparatus	H. W. Simms	496,141	Apr. 25	2568	646	63	524
Bottling carbonated fluids	H. Robertson	490,681	Jan. 31	2738	705	62	610
Bottling-machine	G. Feltman	503,840	Aug. 22	2633	659	64	1093
Bottling-machine	E. T. Jones	491,753	Feb. 14	1118	283	62	988
Bottling-machine	C. F. Mack	503,094	Aug. 8	1426	352	64	843
Bottling-machine	J. G. Watkin	496,461	May 2	116	31	63	640
Bottling-machine. Liquid	M. P. Heddy	490,020	Jan. 17	1635	426	62	365
Bouquet-holder	C. A. Burbank	500,469	June 27	284-	701	63	1929
Bouquet holder	J. Mathison	501,287	July 11	1197	302	64	233
Bouquets, &c. Holder for	H. C. Wiedenmann	501,392	July 11	1385	347	64	265
Boutonnère	H. W. Fishel	489,671	Jan. 10	1048	273	62	234
Boutonnère	H. W. Fishel. (Reissue)	11,329	May 2	715	190	63	747
Boutonnère	H. W. Fishel. (Reissue)	11,330	May 2	716	190	63	747
Boutonnère	H. W. Fishel	497,407	May 16	1656	418	63	949
Boutonnère	H. W. Fishel	500,195	June 27	2430	593	63	1854
Boutonnère	H. W. Fishel	502,552	Aug. 8	1035	253	64	771
Boutonnère	H. W. Fishel	502,853	Aug. 8	1036	254	64	771
Boutonnère	H. W. Fishel	502,854	Aug. 8	1036	254	64	771
Boutonnère	H. W. Fishel	502,855	Aug. 8	1037	254	64	772
Boutonnère	H. W. Fishel	507,533	Oct. 31	2969	728	65	609
Bow-sockets. Covering	R. H. Pfaff and F. K. Lewis	505,278	Sept. 19	1590	414	64	1596
Bowl. Wash-	A. P. Creque	492,192	Feb. 21	1801	449 450	62	1140
Bowling-alley	H. Montgomery	490,916	Jan. 31	3114	799	62	684
Bowling-alley ball-retarder	J. H. Winn	499,075	June 6	572	137	63	1491
Bowling-alley. Electric	P. P. Nelson	504,087	Aug. 29	3029	756 757	64	1185
Bowling-alley pin Box:	J. Austin and F. G. Molitor	496,106	Apr. 25	2522	637	63	515
See Axle-box.	Musical box.						
Bait-box.	Necktie-box.						
Ballot-box.	Newspaper lock-box.						
Blacking-box.	Oil-box.						
Bottle-box.	Packing-box.						
Call-box.	Paper box.						
Card-box.	Patrol-box.						
Cigar-box.	Pocket-box.						
Cigarette-box.	Post-office lock-box.						
Cracker-box.	Powder-box.						
Cube-box.	Propagating-box.						
Delivery-box.	Refrigerator-box.						
Dice-box.	Resistance-box.						
Display-box.	Salt-box.						
Feed-box.	Sample-box.						
Fire-box.	Self-closing box.						
Folding box.	Shipping and display box.						
Fruit-box.	Signal-box.						
Hat-box.	Snuff-box.						
Journal-box.	Spice-box.						
Junction-box.	Stamp-box.						
Knockdown box.	Stuffing-box.						
Letter-box.	Telescopic box.						
Letter and bread box.	Tobacco and packing box.						
Lunch-box.	Tool-box.						
Mail box.	Tooth-powder box.						
Match-box.	Turpentine-box.						
Miter-box.	Wooden box.						
Music-box.	Work-box.						
Box	J. M. Baker	510,761	Dec. 12	1565	390	65	1718
Box	D. S. Clark	499,654	June 13	1517	364 365	63	1669
Box	J. Holley	489,253	Jan. 3	425	118	62	94
Box	H. H. Howard	505,900	Oct. 3	157	40	65	31
Box	J. M. Leaver	501,088	July 11	879	226	64	176
Box	J. H. O'Neil	505,533	Sept. 26	2037	520	64	1692
Box	F. F. Sanborn	505,253	Sept. 19	1545	403	64	1587
Box-handing implement	T. G. Harding	493,330	Mar. 14	888	227	62	1517
Box-cover	H. C. Fischer and L. A. Schmidt	505,943	Oct. 3	217	56	65	43
Box-covering machine	W. Brandstaedter	504,551	Sept. 5	401	102	64	1344
Box-fastener	M. Badoni	493,203	Mar. 7	665	169	62	1489
Box-fastener	C. W. Beehler	492,057	Mar. 7	442	111	62	1447
Box-fastener	T. Cole	508,285	Nov. 7	502	122	65	851
Box-fastener	C. N. Fisher	490,228	Jan. 17	1974	517	62	434
Box-fastener	F. E. Heywood	489,740	Jan. 10	1163	302	62	256
Box-fastener	H. C. Kitching	489,535	Jan. 10	865	226	62	196
Box-fastener	D. R. Knox	490,567	Jan. 24	2521	619	62	553
Box-fastener	W. H. Lowry	503,285	Aug. 15	1752	433	64	915

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Box-fastener	J. Miracle	506,370	Oct. 10	993	247	65	201
Box-folding-machine plunger	J. W. Hutt and A. J. Phillips	494,811	Apr. 4	463	{ 114 115 }	63	89
Box for preserving articles of food, &c.	G. F. Palm	495,162	Apr. 11	1035	258	63	210
Box-forming machine	W. S. Rice	502,320	Aug. 1	114	26, 27	64	586
Box-lid fastener	N. T. Hand	489,531	Jan. 10	862	225	62	195
Box-lid. Packing	T. Tucker	505,012	Sept. 12	1160	298	64	1503
Box-lid support	V. MacVeagh	498,401	May 30	3251	809	63	1263
Box-lifter	E. R. Fletcher	497,780	May 23	2255	565	63	1072
Box-machine	H. W. Morgan	496,431	May 2	63	19, 20	63	630
Box-making Expansible form for	W. Watt and E. C. Peterson	497,901	May 23	2448	{ 611 612 }	63	1106
Box-making machine	B. F. Mason	508,032	Nov. 7	80	23	65	772
Box-nailing machine	W. S. Doig	492,086	Feb. 21	1630	{ 405 406 }	62	1105
Box or canister	J. H. Sieber	492,778	Mar. 7	169	40	62	1392
Box or case	W. Robinson	506,795	Oct. 17	1695	426	65	347
Box-stay	J. G. Mibelitch	509,753	Nov. 28	2959	716	65	1358
Box strap. Packing	W. J. Pierpont	506,837	Oct. 10	933	232	65	190
Boxes. Machine for affixing elastic to	L. Goumand	490,386	Jan. 24	2245	584	62	500
Boxes. Machine for attaching elastic bands to	J. Pou	510,706	Dec. 12	1466	{ 362 363 }	65	1699
Boxes. Machinery for pasting strips of paper on paste-board	G. Patureau	507,035	Oct. 17	2087	{ 516 517 518 }	65	420
Boxes. Manufacture of hooped	H. H. Higham	497,876	May 23	2408	{ 600 601 }	63	1099
Boxes, &c. Material for forming	E. T. Kepner	508,723	Nov. 14	1200	298	65	999
Brace:							
See Bed-brace. Gate-brace.							
Bedstead-brace. Rail-brace.							
Bit-brace. Railway-rail brace.							
Boiler-brace. Ratchet-brace.							
Corner-brace. Shoulder-brace.							
Dredge-brace. Vehicle-hound brace.							
Drill-brace.							
Brace	H. L. Bradley	494,622	Apr. 4	155	37	63	32
Brace	G. S. Miller	504,604	Sept. 5	475	122	64	1358
Brace	G. M. Pilcher	503,437	Aug. 15	1988	493	64	957
Bracelet and whistle. Combined	E. W. Streeter	496,543	May 2	239	63	63	662
Bracket:							
See Coffin-bracket. Insulator-bracket.							
Dental bracket. Lamp-bracket.							
Dental-engine bracket. Paper-bracket.							
Roof-bracket.							
Easel-bracket. Shade-banger bracket.							
Folding bracket. Shelf-bracket.							
Garment-supporting bracket. Shingling-bracket.							
Staging-bracket.							
Incandescent-light bracket. Supporting-bracket.							
Window-bracket.							
Bracket	J. R. Barry	500,525	June 27	2942	732	63	1946
Bracket	W. H. Higgins	501,618	July 18	1726	430	64	346
Bracket	F. Reecht	498,027	May 23	2645	661	63	1140
Bracket	J. A. Sellers	510,194	Dec. 5	500	138	65	1521
Braid-frame	E. A. Perkins	506,130	Oct. 3	518	134	65	101
Braid-rack	A. H. Marten	503,488	Aug. 15	2073	517	61	972
Braiding-machine	A. Bayler	500,685	July 4	244	66	64	46
Braiding-machine	J. McCahey	494,379	Mar. 28	2628	{ 659 660 }	62	1909
Braiding-machine	J. W. Schloss	492,437	Feb. 28	2183	546	62	1230
Braiding-machine carrier	J. McCahey	494,380	Mar. 28	2629	660	62	1909
Brake:							
See Air-brake. Locomotive-brake.							
Automatic brake. Machine-brake.							
Bicycle-brake. Pressure-brake.							
Capstan-brake. Pulley-brake.							
Car-brake. Railway-brake.							
Car emergency-brake. Railway-rail brake.							
Railway slot-brake.							
Carriage-brake. Safety-brake.							
Dental-engine brake. Ship's brake.							
Electric brake. Sled-brake.							
Electro-magnetic brake. Train-brake.							
Elevator-brake. Truck-brake.							
Flax or hemp brake. Vehicle-brake.							
Friction-brake. Vehicle gravity-brake.							
Gun-carriage brake. Velocipede-brake.							
Harvester-brake. Wagon-brake.							
Lock-brake. Windmill-brake.							
Brake	R. F. Bartel	508,269	Nov. 7	481	116	65	846
Brake-adjuster. Automatic	M. E. McKee	489,494	Jan. 10	800	211	62	184
Brake-beam	P. B. Harrison	508,040	Nov. 21	1577	386	65	1083
Brake-beam	C. K. Pickles	492,747	Feb. 28	2683	666	62	1332
Brake-beam	C. K. Pickles	492,748	Feb. 28	2684	666	62	1332
Brake-beam	W. A. Robertson and H. Carlton	497,728	May 16	2161	540	63	1039
Brake-beam	H. B. Robischung	494,709	Apr. 4	290	73	63	58
Brake-beam	H. B. Robischung	495,838	Apr. 18	2114	532	63	424
Brake-beam	H. B. Robischung	504,621	Sept. 5	497	128	64	1363
Brake-beam	H. B. Robischung	508,051	Nov. 7	104	30	65	772
Brake-beam	H. B. Robischung	508,531	Nov. 14	913	224	65	943
Brake-beam	T. H. Simpson	503,441	Aug. 15	1993	494	64	958
Brake-beam chafing-plate	H. B. Robischung	497,130	May 9	1189	304	63	851

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Brake for bicycles, &c.	I. A. and W. L. Cochran	510,407	Dec. 12	935	225	65	1602
Brake for cycles or other carriages having rubber-tired wheels.	A. C. Roper	509,183	Nov. 21	1970	479 480	65	1160
Brake-handle.	S. A. Burns	500,529	June 27	2946	723	63	1947
Brake-handle.	J. Kirby, Jr.	508,025	Nov. 7	67	19	65	770
Brake-lever.	F. P. Pileghar	503,385	Aug. 15	1917	475	64	945
Brake mechanism.	H. Bolthoff	494,518	Mar. 28	2-45	712	62	1049
Brake mechanism.	D. C. McGregor	507,834	Oct. 31	34-4	5-57	65	705
Brake mechanism.	R. O. Wood	495,717	Apr. 18	1926	4-44 4-45	63	388
Brake-piston indicator.	W. J. Devers	511,046	Dec. 19	20-4	516	65	1-24
Brake-piston indicator.	E. V. Mattice and J. E. Dunwell	506,787	Oct. 17	1683	424	65	345
Brake-rod fork.	G. W. Kelly	510,267	Dec. 5	713	172	5	1545
Brake shoe.	M. Y. Baldwin	491,667	Feb. 14	1037	262	62	972
Brake shoe.	A. Brake	499,509	June 13	1301	305	63	1632
Brake shoe.	J. T. Hall	511,298	Dec. 19	2512	612	65	1904
Brake shoe.	E. Hoffstaetter, Jr., and H. Stillgebauer.	503,138	Aug. 15	1511	371	64	871
Brake-shoe.	H. B. Robischung	495,269	Apr. 11	1210	304	63	241
Brake-shoe.	F. Sargent	490,756	Jan. 31	2852	732	62	632
Brake-shoe.	W. W. Whitcomb	490,701	Jan. 31	2766	711	62	616
Brake-shoe.	W. W. Whitcomb	490,702	Jan. 31	2768	711	62	617
Brake-shoe key.	W. D. Sargent	492,839	Mar. 7	100	25	62	1377
Brake-support.	J. A. Brill	499,709	June 20	1600	386 387	63	1698
Brake-wheel lever attachment.	B. Crawford	490,543	Jan. 24	2193	642	62	518
Brand-packer.	J. S. Cameron	501,326	July 11	1263	317	64	242
Brand. Stock.	N. Rozell	495,270	Apr. 11	1211	304	63	242
Branding device.	J. Edson	508,375	Nov. 7	648	158 159	65	878
Branding-tool. Auto-caloric.	J. S. Fitzmaurice	493,078	Mar. 7	474	119	62	1453
Brandy-mash and composition for same. Making.	M. Wool	493,460	Mar. 14	1087		62	1586
Brass by electricity. Working.	G. D. Burton	496,592	May 2	311	84	63	676
Brazing.	F. P. Crosby	507,974	Oct. 31	3701	919	65	746
Bread-cutter.	L. R. Quigg	495,999	Apr. 25	2354	595	63	484
Bread-knife.	J. Breitenbach	499,650	June 13	1511	362	63	1668
Bread or cake pan.	T. S. Peacock	493,335	Mar. 21	1714	437	62	1723
Bread or cake warmer.	A. W. Davis	499,285	June 13	891	216	63	1559
Bread-raiser.	A. J. Nicholls	494,018	Mar. 21	2031	517	62	1784
Bread-raiser.	A. J. Grush and H. B. Sooy	510,536	Dec. 12	1179	284	65	1646
Bread-drill.	W. H. Wilkinson	491,624	Feb. 14	927	233	62	949
Bread-train.	J. Frielberger	499,356	June 13	1027	248	63	1584
Bread-t-strap.	H. D. Stoddard	491,264	Feb. 14	1299	320	62	1023
Bread-strap attachment.	H. B. Forbes	497,647	May 16	2036	507	63	1016
Bread-supporter.	M. Tucek	494,397	Mar. 28	2659	667	62	1914
Breach-block.	F. M. Garland	505,568	Sep. 26	2118	536	64	1709
Brewer's grain drier.	M. T. F. Wiesebrock	504,099	Aug. 29	3056	764	64	1190
Brewing apparatus.	C. Rach	493,342	Mar. 14	901	231	62	1550
Brewing beer.	G. H. Schneider	503,168	Aug. 15	1563	385	64	881
Brick.	W. Lenderoth	508,428	Nov. 14	734	181	65	908
Brick.	J. Mohlberg	491,248	Feb. 7	299	76	62	806
Brick.	J. L. Stevenson	490,720	Jan. 31	2802	718 719	62	623
Brick and making same. Composition.	T. A. Edison	509,428	Nov. 28	2419		65	1254
Brick and tile machines. Automatic cutter for.	D. Brown	503,524	Aug. 15	2124	532 533	64	982
Brick. Building.	J. B. Griswold	489,898	Jan. 10	1391	362	62	302
Brick-cutting machine.	J. A. Snell	496,982	May 9	955	250 251	63	809
Brick-cutting machine.	J. A. Snell	496,983	May 9	959	251 252	63	810
Brick-cutting machinery.	J. C. Schroeder	505,678	Sept. 26	2306	585	64	1743
Brick. Device for protecting unburned.	A. Schlegel and H. Mayer	500,620	July 4	134	36	64	26
Brick drier.	I. Stripe	510,491	Dec. 12	1074	258	65	1628
Brick drying and burning machine. Continuous.	S. Ainsworth	496,840	May 9	719	191	63	767
Brick-drying pallet.	C. Chambers, Jr.	506,811	Oct. 17	1725	434	65	353
Brick. Gutter.	J. P. Gaffney	510,016	Dec. 5	303	68	65	1467
Brick-kiln.	J. Conley	491,037	Jan. 31	3316	846	62	724
Brick-kiln.	W. A. Evans	498,050	May 23	2677	669 670	63	1146
Brick-kiln.	W. H. Francis and L. F. Gerding	506,906	Oct. 17	1820	469	65	381
Brick-kiln.	J. Gaffney	510,967	Dec. 19	1969	4-3 4-4	65	1803
Brick-kiln.	R. Garret	498,642	May 30	3653	905	63	1335
Brick-kiln.	P. Gouder	509,890	Dec. 5	73	18, 19	65	1424
Brick-kiln.	J. B. Griswold	489,805	Jan. 10	1258	329 330	62	276
Brick-kiln.	N. B. Heafer	495,134	Apr. 11	987	218	63	201
Brick-kiln.	A. B. Horne	493,930	Mar. 21	1864	475 476	62	1752
Brick-kiln.	C. Moellenhoff	508,960	Nov. 21	1608	395	65	1090
Brick-kiln.	B. Swenson	489,617	Jan. 10	9-0	255	62	219
Brick-kiln.	P. L. Youngren	492,251	Feb. 21	1-95	473	62	1159
Brick-kiln. Circular.	J. Conley	491,038	Jan. 31	3318	846	62	724
Brick-kiln. Continuous.	J. Henney	510,135	Dec. 5	494	112	65	1503
Brick-kiln. Continuous.	C. F. Kaul	507,274	Oct. 24	2521	622	65	509
Brick-kiln. Continuous.	J. O. Neil	492,965	Mar. 7	306	78	62	1420
Brick-kiln. Continuous.	W. and J. Oakes	494,687	Apr. 4	247	63	63	50
Brick-kiln. Continuous.	J. P. Veirs	493,951	Mar. 21	1907	4-6 4-7	62	1760
Brick-kiln. Downdraft.	W. A. Eudaly	508,003	Nov. 7	37	11, 12	65	765
Brick-kiln. Downdraft.	L. H. Reppell	510,819	Dec. 12	1664	413	65	1736
Brick-kiln furnace.	F. E. Swift	501,380	July 11	1369	341 342	64	262

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Brick-kiln furnace	I. C. Wheeler	501,980	July 25	2305	576	64	463
Brick-kiln. Reversible-draft	A. L. Plasters, W. F. Rankin, and J. M. Wolfe.	504,998	Sept. 12	1140	292	64	1499
Brick-machine	W. Acton	505,285	Sept. 19	1602	416 417	64	1598
Brick-machine	H. L. Balson	494,911	Apr. 4	610	155 156	63	118
Brick-machine	H. C. Barker	498,203	May 23	2918	726	63	1188
Brick-machine	G. Carnell	507,648	Oct. 31	3184	779 780	65	649
Brick-machine	E. Fernholtz	509,302	Nov. 21	2182	524 525	65	1200
Brick-machine	D. P. Guise	510,066	Dec. 5	381	84	65	1481
Brick-machine	S. E. Haskin	503,958	Aug. 29	2832	707	64	1148
Brick-machine	C. H. Horton	497,322	May 16	1525	384	63	925
Brick-machine	V. F. Lanouette	491,657	Feb. 14	974	245 246	62	959
Brick-machine	H. Martin	510,077	Dec. 5	399	88	65	1485
Brick-machine	J. B. Mowry	489,974	Jan. 17	1542	403 404	62	346
Brick-machine	D. H. Rice	500,510	June 27	2911	715	63	1939
Brick-machine	A. D. Thomas	504,141	Aug. 29	3123	781	64	1202
Brick-machine	J. J. Whittaker	510,493	Dec. 12	1076	258 260	65	1628
Brick-machine attachment	S. J. Van Stavoren	509,976	Dec. 5	219	50 51 52 53	65	1451
Brick-machine auger	R. C. Penfield	508,337	Nov. 7	579	142	65	866
Brick-machine cut-off	J. Creager	492,390	Feb. 28	2114	527	63	1216
Brick-machine. Dry-press	G. W. Blanks and B. Lefebvre	507,477	Oct. 24	2852	699	65	574
Brick-machine. Reciprocating	W. Johnson	499,230	June 13	807	191 192	63	1545
Brick-machine reciprocating cut-off mechanism	O. W. Johnson	510,344	Dec. 5	824	199 200 640 641	65	1566
Brick-machine. Re-press	D. J. C. Arnold	500,315	June 27	2623	641	63	1888
Brick-machine. Re-press	G. Carnell	507,649	Oct. 31	3186	781	65	649
Brick-machine separator	T. B. Campbell	509,361	Nov. 28	2290	556	65	1231
Brick-machines. Method of and machinery for operating the pressing-plungers of	J. C. Anderson	500,047	June 20	2156	523 524	63	1795
Brick-mills. Pug-mill for	H. J. Bond and L. Hilling	495,389	Apr. 11	1393	344	63	275
Brick-mold	C. F. Kaul	510,265	Dec. 5	712	172	65	1544
Brick-mold	E. C. G. W., and H. L. McGraw	490,160	Jan. 17	1861	465	62	412
Brick-mold	J. B. Mowry	503,667	Aug. 22	2378	593	64	1043
Brick-mold	C. A. Shultz	511,098	Dec. 19	2175	536	65	1842
Brick-mold sander	J. A. Buck	499,206	June 13	778	184 185	63	1540
Brick-mold-sanding machine	G. Carnell	507,647	Oct. 31	3182	779	65	619
Brick-mold-sanding machine	W. Lamb	493,098	Mar. 7	504	126 127	62	1459
Brick or slab. Fire	C. Olsen	510,610	Dec. 12	1309	319	65	1669
Brick or tile cutter	J. Cornelius and E. R. Collins	492,663	Feb. 28	2563	635	62	1307
Brick or tile cutter	H. A. Riggs	504,364	Sept. 5	74	19 20 21	64	1285
Brick or tile cutting machine	S. Jefferies	501,620	July 18	1728	430 431	64	347
Brick or tile cutting machine	J. Thompson	491,747	Feb. 14	1110	280 281	62	986
Brick or tile cutting machine	J. Thompson	496,286	Apr. 25	2792	698 699	63	566
Brick or tile kiln	L. Falasconi	491,995	Feb. 21	1496	373	62	1078
Brick or tile kiln	E. F. Stephenson	492,064	Feb. 21	1596	396 397	62	1097
Brick or tile machine	J. D. Fate	505,975	Oct. 3	269	71	65	53
Brick or tile machine	E. M. Freese	507,798	Oct. 31	3414	837 838	65	692
Brick or tile machine	W. S. Hight	504,781	Sept. 12	782	197 198	64	1430
Brick or tile machine	J. E. Marquardt	508,230	Nov. 7	412	100	65	835
Brick or tile machine	G. S. Tiffany	507,248	Oct. 24	2476	610	65	502
Brick or tile machines. Roller-die for	J. Thompson	497,839	May 23	2319	586	61	1087
Brick or tile structures. System of	D. A. Straw	508,446	Nov. 14	761	187	65	913
Brick-press. Automatic	T. B. Lewis	491,712	Feb. 14	1059	268	62	977
Brick-press. Rotary	F. L. H. Sims	507,638	Oct. 31	3163	775 776	65	645
Brick-pressing apparatus	J. G. Naylor and H. Williams	490,412	Jan. 24	2279	592 593	62	506
Brick-protector	N. Olson	502,987	Aug. 8	1273	311	64	814
Brick protector. Undried	A. C. Contant	492,388	Feb. 28	2110	526 527	62	1215
Brick. Refractory	A. E. Hunt	504,524	Sept. 5	448		64	1353
Brick structure	J. J. Heszi	497,959	May 23	2537	633 634	63	1121
Brick-truck	J. F. Mock	502,738	Aug. 8	844	205 206	64	736
Bridge	J. W. Balet	495,621	Apr. 18	1767	445 446	63	363
Bridge	C. H. Ball	502,165	July 25	2608	656	64	521
Bridge	D. M. Eddy	510,064	Dec. 5	378	84	65	1481
Bridge	R. Gray	489,946	Jan. 17	1503	392 393	62	339

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Bridge	W. S. Palmer	501,534	July 18	1588	399	64	320
Bridge	L. Pulliam	495,005	Apr. 4	743	188	63	142
Bridge	C. L. Strobel	498,993	June 6	440	103	63	1468
Bridge	C. L. Strobel	498,994	June 6	441	103 104	63	1468
Bridge and door. Combined stock	H. O. Dorn	502,510	Aug. 1	441	106	64	648
Bridge and tail-piece	W. P. Owen	509,240	Nov. 21	2076	501	65	1180
Bridge. Cantilever	T. C. Clarke	504,569	Sept. 5	412	105	64	1346
Bridge construction	B. M. Kash	510,264	Dec. 5	709	171	65	1344
Bridge-counterbalance	R. P. Lamont	503,377	Aug. 15	1909	473	64	943
Bridge. Draw	G. H. Thomson	496,074	Apr. 25	2473	624 625	63	505
Bridge. Draw	C. A. P. Turner and P. A. Warner	500,633	July 4	153	40	64	30
Bridge. Draw	C. A. P. Turner and P. A. Warner	503,273	Aug. 15	1726	425 426	64	911
Bridge driving mechanism	R. P. Lamont	503,378	Aug. 15	1910	473	64	943
Bridge-gate	W. J. Brown and J. K. Walker	506,099	Oct. 3	464	121	65	91
Bridge-gate	T. F. Conklin	492,387	Feb. 28	2109	526	62	1215
Bridge-gate	E. C. Dittmann	498,463	May 30	3353	835	63	1282
Bridge-gate	C. E. Follett and G. Simpson	502,664	Aug. 1	698	167	64	694
Bridge-gate	G. W. Green	505,707	Sept. 26	2358	586	64	1753
Bridge-gate	B. Habertur and J. Mandel	500,654	July 4	194	51	64	38
Bridge-gate	A. Jungmann	501,947	July 25	2260	565	64	455
Bridge-gate	A. Kohler	502,975	Aug. 8	1255	307	64	810
Bridge-gate	A. J. Lagerquist	501,516	July 18	1566	394	64	316
Bridge-gate	H. Meyer	501,523	July 18	1576	396 397	64	318
Bridge-gate	L. Napion	500,290	June 27	2571	628	63	1879
Bridge-gate	H. Roessing	494,796	Apr. 4	435	107	63	84
Bridge-gate	S. Simon and J. Pletka	502,779	Aug. 8	914	223	64	749
Bridge-gate. Automatic	A. H. Myers	504,169	Aug. 29	3170	790 791	64	1211
Bridge gate. Draw	H. W. Yerrington	499,867	June 20	1880	456 457	63	1745
Bridge-gate. Safety draw	A. Hoeffler and F. L. G. Chapman	491,177	Feb. 7	192	49	62	784
Bridge-gate-operating device	E. Zarembo	489,113	Jan. 3	202	54, 55	62	47
Bridge gates. Automatic operator for draw	R. L. Paddock	496,893	May 9	825	219	63	786
Bridge. Lift	W. Scherzer	511,713	Dec. 26	3198	784 785	65	2042
Bridge. Lift	J. A. L. Waddell	506,571	Oct. 10	1331	334 335	65	267
Bridge-post	J. B. Marsh	493,559	May 30	3520	871	63	1310
Bridge. Self-anchoring suspension	G. W. Frederick	511,605	Dec. 26	3034	740	65	2012
Bridge-truss	G. T. Hawes	499,631	June 13	1483	356	63	1664
Bridge. Winter	E. Fontaine	508,929	Nov. 21	1560	362	65	1080
Bridges. Apparatus for recording the flexure of	E. Parenthou	500,775	July 4	386	102	64	72
Bridges. Element for building	J. Weiss	509,781	Nov. 28	3008	727 728	65	1369
Bridges. Side rail for suspension	E. E. Runyon	493,788	Mar. 21	1639	417 418	62	1710
Bridle	W. Friedrich	494,196	Mar. 28	2329	590	62	1854
Bridle	G. C. Hale	505,762	Sept. 26	2446	616	64	1769
Bridle	H. S. Hill	505,658	Sept. 26	2269	575	64	1737
Bridle	G. M. Smith	507,852	Oct. 31	3512	864	65	710
Bridle-bit	E. T. Bartraff	501,927	July 25	2318	579	64	466
Bridle-bit	E. R. Caboone	510,890	Dec. 19	1828	451	65	1776
Bridle-bit	W. T. Coburn	498,106	May 23	2760	690	63	1161
Bridle-bit	J. E. Driscoll	492,666	Feb. 28	2568	636	62	1308
Bridle-bit	G. A. Gilbert	496,222	Apr. 25	2695	676	63	547
Bridle-bit	D. H. Gillespie	498,644	May 30	3659	906	63	1335
Bridle-bit	I. Z. Merriam	506,244	Oct. 10	779	192	65	159
Bridle-bit	O. H. Muntz	506,526	Oct. 10	1268	318	65	255
Bridle-bit	C. W. Phillips	493,339	Mar. 14	898	230	62	1549
Bridle-bit	R. Sears and L. B. Lindsey	492,241	Feb. 21	1981	470	62	1156
Bridle-bit	C. H. Shepard	506,834	Oct. 17	1761	443	65	360
Bridle-bit	C. H. Smith	505,280	Sept. 19	1594	415	64	1596
Bridle-bit	W. C. Wittmann	500,831	July 4	479	125	64	87
Bridle-bit	H. Zahl	504,959	Sept. 12	1069	273	64	1486
Bridle-bits. Die or mold for covering	G. Brockington	509,293	Nov. 21	2170	521	65	1197
Bridle-blind	L. Loeser	502,197	July 25	2660	672	64	531
Bridle-check	J. M. Quilleash and W. F. Bacon	489,545	Jan. 10	879	230	62	199
Brine-cooler	H. C. Strout	505,908	Oct. 3	172	44	65	34
Broiler	J. O. Boggs	505,433	Sept. 26	1850	476	64	1658
Broiler. Electric	S. B. Jenkins	497,790	May 23	2268	569	63	1074
Broiler. Meat	F. M. Blamyer	503,307	Aug. 15	1786	441	64	921
Broiling apparatus	T. J. Miller	495,507	Apr. 12	1526	399	63	331
Broiling apparatus. Meat	J. G. Weldon	493,501	Mar. 21	1671	426	62	1716
Bronze	J. D. Becker	490,706	Jan. 31	2772	852 853	62	618
Bronze-dusting machine	E. Jaeck and M. Auerbach	491,034	Jan. 31	3343	853	62	730
Bronzing-machine	F. R. A. Franke	504,718	Sept. 12	664	168	64	1408
Bronzing-machine	G. Newsom	494,017	Mar. 21	2029	517	62	1784
Brooder	G. Ertel	501,775	July 15	1929	492	64	394
Brooder	A. B. Shaub	505,676	Sept. 26	2303	585	64	1742
Brooder. Chicken	N. Holloway	493,586	Mar. 14	1305	333	62	1629
Brooder. Poultry	D. E. Bricker	494,056	Mar. 21	2082	532	62	1793
Brooder. Poultry	E. P. Snyder	503,172	Aug. 15	1570	386 387	64	883
Broom	J. A. Cook	493,483	Mar. 14	1124	283	62	1593
Broom	E. Shaw	501,370	July 11	1351	337	64	259
Broom attachment	C. J. Clements	490,472	Jan. 24	2378	615	62	525
Broom clasp or clamp	S. Grossman	497,656	May 16	2050	512	63	1019
Broom-corn cleaner	F. W. Reese	505,128	Sept. 19	1355	348 349	64	1553

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Broom-corn-sizing machine.	M. Bassett	511,494	Dec. 26	2852	690	65	1979
Broom-corn stems. Device for grading.	C. R. Lee	492,032	Feb. 21	1554	387	62	1088
Broom-handle	A. B. Thomas	501,383	July 11	1374	343	64	263
Broom-head	A. A. Willets	489,841	Jan. 10	1312	342	62	288
Broom-holder	C. N. Addison	502,843	Aug. 8	1030	219	64	769
Broom-holder, &c.	C. E. Bentley	497,402	May 16	1645	416	63	947
Broom-holder	W. Christ	502,033	July 25	2396	603	64	480
Broom-holder	A. J. Gulich and W. T. Humphrey	496,563	May 2	273	72	63	669
Broom-holder	T. B. Stone, C. C. and P. A. Smith	504,183	Aug. 29	3199	798	64	1217
Broom moistener and bridle	L. W. Benjamin	497,747	May 16	2189	548	63	1045
Broom or brush holder	W. W. Moore	504,887	Sept. 12	951	246	64	1464
Broom-rack	W. M. Denniston and W. P. Wall-heiser.	495,789	Apr. 18	2039	516	63	410
Broom-rack	W. C. Jones	490,851	Jan. 31	2993	766	62	661
Broom-rack	W. C. Jones	497,667	May 16	2065	515 516	63	1021
Broom-rack	W. C. P. Jones	491,891	Feb. 14	1338	331	62	1031
Broom scraper or cleaning machine	D. A. Devendorf and F. F. Burtch	505,754	Sept. 26	2429	613	64	1765
Brooms, brushes, &c. Manufacture of.	J. T. C. Stech	501,219	July 11	1092	277	64	215
Brooms. Handle-clamp for street or stable	P. H. Lynch	508,522	Nov. 14	900	221	65	940
Brush	W. K. Long	499,678	June 13	1552	373	63	1676
Brush	S. Palmer	500,719	July 4	305	82	64	57
Brush	C. W. Parks	492,584	Feb. 28	2431	605	62	1283
Brush	J. E. Provine	489,034	Jan. 3	84	24	62	22
Brush	H. Olsen and J. F. Miller	509,237	Nov. 21	2074	500	65	1180
Brush	C. Smith	493,414	Mar. 14	1005	259	62	1572
Brush	E. L. Wohlgenuth	503,821	Aug. 22	2611	652	64	1089
Brush	A. C. Wright	493,050	Mar. 7	435	110	62	1445
Brush and box-holder. Blacking.	J. S. Moore	499,436	June 13	1173	280	63	1609
Brush. Blacking.	T. Haswell	491,105	Feb. 7	69	19	62	762
Brush. Blacking.	T. Haswell	499,538	June 13	1337	317	63	1639
Brush blocks or backs. Machine for shaping	J. Cook	492,660	Feb. 28	2559	634	62	1307
Brush-bridle	W. Lewis	498,065	May 23	2609	675	63	1150
Brush-bridle. Adjustable	C. F. Hardcastle and A. H. Bardsley	497,788	May 23	2264	568	63	1074
Brush bristle-fastener	C. M. Kimball	503,795	Aug. 22	2577	641	64	1082
Brush-burner	H. S. Gaylord	505,099	Sept. 19	1311	338	64	1545
Brush. Dauber.	W. T. Kellogg	497,721	May 16	2152	538	63	1038
Brush. Dauber.	W. T. Kellogg	497,722	May 16	2154	538	63	1038
Brush drying attachment. Scrubbing.	J. S. McGuire and J. B. Beemer	503,668	Aug. 22	2379	593	64	1043
Brush. Dust.	J. J. Hassard	497,175	May 8	1254	319	63	862
Brush. Electric	R. E. Williams	494,359	Mar. 29	2597	652	62	1904
Brush, flask, and drinking-cup. Combined clothes.	T. W. Helm	490,964	Jan. 31	3190	815	62	698
Brush. Flesh.	W. Y. A. Boardman	506,869	Oct. 17	1817	455	65	369
Brush. Flue.	J. H. Davis	497,636	May 16	2018	503	63	1013
Brush. Fly.	D. W. Conard	503,945	Aug. 29	2792	700	64	1141
Brush for cleaning chimneys or flues.	A. J. Fludder and F. M. Sisson	505,761	Sept. 26	2145	615	64	1768
Brush for washing and wiping windows	J. P. Giles	502,000	July 25	2336	585	64	469
Brush. Fountain marking.	D. W. Whitaker	491,000	Jan. 31	3244	828	62	709
Brush. Hat or clothes.	H. J. Sims	489,694	Jan. 10	1089	282	62	242
Brush-holder	J. R. Coffman	510,892	Dec. 19	1830	452	65	1777
Brush-holder	I. L. Landis	501,084	July 11	866	225	64	173
Brush-holder	S. H. Libby	500,144	June 27	2344	567	63	1839
Brush. Horse.	S. Giesecke	502,513	Aug. 1	446	108	64	648
Brush-machine.	M. Hellwig	506,397	Oct. 10	1038	259	65	210
Brush-machine.	A. H. Wolcott	490,181	Jan. 17	1895	493	62	419
Brush-making-machine handle.	J. Cook	492,661	Feb. 28	2561	634 635	62	1307
Brush-making tool.	M. Young	500,247	June 27	2508	613	63	1769
Brush. Metallic	E. E. Rice	511,062	Dec. 19	2108	521	65	1928
Brush-mold. Sectional	W. Morrison	491,757	Feb. 14	1124	284	62	989
Brush-mounting	P. Louchet	511,152	Dec. 19	2267	555	65	1859
Brush or tool holder	C. H. Lewis	504,452	Sept. 5	224	60	64	1412
Brush. Paint.	L. J. McGregor and C. M. Carpenter	495,702	Apr. 18	1900	477	63	384
Brush. Paint.	S. B. Hills	498,392	May 30	3239	806	63	1260
Brush. Paint.	D. W. Long	499,842	June 20	1837	446	63	1738
Brush. Rotary	H. G. Rockwell	497,989	May 23	2585	647	63	1130
Brush. Rotary air.	J. S. Wertsbaugher and G. H. McCune.	506,450	Oct. 10	1141	283 284	65	230
Brush. Scrubbing.	G. T. V. Regan	494,761	Apr. 4	368	93	63	73
Brush. Sewer-cleaning	S. E. Johnston	498,659	May 30	3688	912	63	1340
Brush. Shaving.	G. L. Belcher	510,152	Dec. 5	525	121	65	1509
Brush. Shaving.	H. J. Smith	507,462	Oct. 24	2830	692	65	571
Brush spoon. Air.	G. E. Bell	498,327	May 30	2960	738	63	1211
Brush. Steel-wire	F. Paquet	511,356	Dec. 26	2617	636	65	1937
Brush. Tooth.	H. Lohers	490,831	Jan. 31	2966	761	62	655
Brush. Tooth.	D. W. Tower	499,612	June 13	1459	349	63	1660
Brushes, &c. Making metal mounts for	A. Wolff	492,177	Feb. 21	1780	445	62	1136
Brushes, &c. Making sheet-metal mounts for	J. Lines	492,216	Feb. 21	1844	461 462	62	1149
Brushing-machine	S. A. Sague	500,219	June 27	2471	602	63	1862
Buckboard	C. Thomas	499,057	June 6	549	129	63	147
Buck-rake	C. Coulthard	507,998	Nov. 7	29	9	65	764
Bucket and trap. Combined minnow	L. W. Himmer	504,526	Sept. 5	353	91	64	1337
Bucket. Automatic dumping.	A. N. Simperly	506,081	Oct. 3	438	115	65	85
Bucket. Drop-bottom	G. H. Hullett	494,294	Mar. 28	2487	627	62	1883
Bucket. Dumping.	J. A. Quinn	500,426	June 27	2792	687 688	63	1918
Bucket-dumping apparatus	F. B. Wineland	491,958	Feb. 14	1438	358	62	1052
Bucket. Lunch.	L. Mangione	504,358	Sept. 5	65	18	64	1283
Bucket or other vessel. Covered	E. Ames	493,145	Mar. 7	580	145	62	1473
Bucket. Well.	G. S. Ullom	490,052	Jan. 17	1684	438	62	375
Buckle	G. M. Aylsworth	492,256	Feb. 21	1904	475	62	1161
Buckle	J. Barkley	491,462	Feb. 7	662	166	62	875
Buckle	W. L. Braddock	508,675	Nov. 14	1130	279	65	926
Buckle	J. A. Brown	504,076	Aug. 29	3009	751	64	1181

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Buckle.	F. Califf	503,898	Aug. 22	2719	683	64	1110
Buckle.	J. Cantner	493,818	Mar. 21	1695	432	62	1719
Buckle.	F. R. Derrick and A. S. Moore	500,705	July 4	276	75	64	52
Buckle.	W. B. Draper	504,867	Sept. 12	921	238	64	1458
Buckle.	L. Dyer	489,859	Jan. 10	1329	347	62	291
Buckle.	A. Dyke	490,551	Jan. 24	2503	644	62	550
Buckle.	J. N. Faust	491,241	Feb. 7	291	73	62	504
Buckle.	F. Kelly	495,115	Apr. 11	948	239	63	196
Buckle.	E. J. Kraetzer	496,161	Apr. 25	2599	654	63	530
Buckle.	A. E. McClure	491,123	Feb. 7	92	25, 26	62	767
Buckle.	R. Monday	495,899	Apr. 18	2208	556	63	441
Buckle.	G. W. Moores	489,656	Jan. 10	1028	268	62	229
Buckle.	P. Mullane	510,358	Dec. 5	844	204	65	1570
Buckle.	P. W. Odom	509,937	Dec. 5	154	36	65	1438
Buckle.	W. F. Osborne	495,117	Apr. 11	952	239	63	196
Buckle.	W. F. Osborne	495,118	Apr. 11	953	239	63	196
Buckle.	W. F. Peet	510,987	Dec. 19	2006	495	65	1809
Buckle.	L. B. Prahar	508,752	Nov. 14	1239	309	65	1007
Buckle.	P. A. Raymond	494,086	Mar. 21	2136	546	62	1803
Buckle.	M. L. Schoch	505,992	Oct. 3	299	77	65	58
Buckle.	D. W. Simmons	510,052	Dec. 5	360	80	65	1477
Buckle.	D. L. Smith	506,949	Oct. 17	1951	483	65	395
Buckle.	P. B. Southworth	510,824	Dec. 12	1672	415	65	1737
Buckle.	F. W. Swigart	502,787	Aug. 8	930	226	64	752
Buckle and cast-off.	W. B. Draper	499,214	June 13	787	187	63	1541
Buckle and snap.	W. H. Pugh	511,310	Dec. 19	2528	615	65	1907
Buckle and snap-hook combined.	T. B. Stone and C. C. Smith	490,047	Jan. 17	1677	436	62	374
Buckle. Back-band.	W. F. Anthony	493,744	Mar. 21	1576	401	62	1697
Buckle. Back-band.	T. B. and W. F. Doris	490,643	Jan. 31	2668	687	62	597
Buckle. Blanket.	F. J. Herrick	500,894	July 4	568	147	64	103
Buckle. Cast-off.	G. E. Adams	491,630	Feb. 14	936	235	62	951
Buckle-frame. Detachable.	T. Wand	496,804	May 2	664	176	63	737
Buckle-guard.	W. F. Leutz	497,547	May 16	1880	473	63	928
Buckle. Harness.	J. G. Hoyt	504,693	Sept. 5	628	159	64	1388
Buckle. Horse-blanket.	F. J. Herrick	499,458	June 13	1208	288	63	1616
Buckle or metallic fastener.	G. E. Adams	507,705	Oct. 31	3266	799	65	664
Buckle or metallic garment-supporter.	G. E. Adams	507,704	Oct. 31	3265	798	65	664
Buckle. Protective.	F. W. Swigart	504,895	Sept. 12	963	248	64	1465
Buckle. Rope.	C. W. Baker	511,576	Dec. 26	2982	727	65	2004
Buckle-shield.	F. D. Behrens	509,718	Nov. 28	2905	703	65	1748
Buckle-shield.	F. L. Thompson	502,057	July 25	2434	612	64	487
Buckle. Shoe.	D. F. Dalton	494,464	Mar. 28	2755	691	62	1932
Buckle. Snap.	G. F. C. Schröter	503,499	Aug. 15	2086	521	64	975
Buckle. Suspender.	R. C. Harris	501,067	July 11	839	218	64	168
Buckle. Suspender.	A. E. Jones	499,836	June 20	1328	445	63	1737
Buckle. Suspender.	W. F. Osborne	495,119	Apr. 11	955	240	63	197
Buckle. Suspender.	W. W. Riley	508,121	Nov. 7	236	60	65	802
Buckle. Suspender.	H. D. Shackelford	499,893	June 20	1926	467	63	1754
Buckle. Trace.	O. Mallory	496,319	Apr. 25	2857	712	63	578
Buckle. Trace.	T. H. Mehring	505,473	Sept. 26	1910	492	64	1669
Buckle. Trace.	T. Rogers	510,488	Dec. 12	1069	257	65	1627
Buckle. Trace.	M. Walker	500,087	June 20	2211	540	63	1804
Buckle. Wire.	C. R. Harris	500,764	July 4	372	75	64	52
Buckles, &c. Fastener for.	J. M. Lewis	496,421	May 2	46	13	63	627
Budding-knife.	A. J. Speare	510,204	Dec. 5	607	143	65	1525
Buffer-plate.	F. P. Davidson	500,227	June 27	2483	606	63	1864
Buffing-machine.	H. A. Webster	490,419	Jan. 24	2293	595	62	508
Buffing or polishing wheel.	J. Chase	507,214	Oct. 24	2431	599	65	493
Buffing-pad.	H. A. Webster	505,644	Sept. 26	2251	570	64	1734
Buffing-roll.	H. A. Webster	493,001	Mar. 7	363	91	62	1430
Buffing-wheel.	H. A. Webster	493,002	Mar. 7	364	91, 92	62	1431
Bug exterminator.	S. Bartholomew	495,654	Apr. 18	1827	457	63	372
Buggy-body.	C. M. Contant	501,924	July 25	2232	557	64	450
Buggy-top.	J. T. Bibb	489,451	Jan. 10	729	195	62	169
Buggy-top.	R. C. Groom	497,173	May 9	1253	318	63	862
Buggy-top. Folding.	T. P. Chamberlin	491,983	Feb. 21	1479	368	63	1074
Buggy-top raising or lowering device.	J. F. Collins	496,861	May 9	763	202	63	775
Buggy-top spring-support.	S. Bougie	502,606	Aug. 1	602	143	64	676
Buggy-top support.	S. Bougie	502,607	Aug. 1	604	143	64	676
Builder's jack.	J. Callahan	494,842	Apr. 4	512	128	63	99
Building.	W. E. Stearns	495,070	Apr. 11	818	216 } 217 }	63	177
Building.	J. M. Thompson and J. C. Ball	498,891	June 6	253	60	63	1437
Building-block.	J. Heatley	495,411	Apr. 11	1425	358	63	281
Building-block.	W. O. Myers	508,577	Nov. 14	991	242	65	958
Building-block and making same.	T. S. Pierce	509,822	Nov. 28	3077		65	1382
Building construction.	T. O'Shea	509,446	Nov. 28	2473	595	65	1266
Building for protection against cyclones, &c.	C. Zimmerman	490,779	Jan. 31	2893	742	62	640
Building or paving blocks. Sectional mold for.	G. M. Graham	493,767	Mar. 21	1609	409	62	1703
Building-shield.	W. Durkin	494,848	Apr. 4	523	131	63	101
Buildings. Batten and padding for closing joints in.	G. Knowler	503,426	Aug. 15	1972	469	64	954
Buildings. Construction of.	E. V. Johnson	495,634	Apr. 18	1789	449 } 450 }	63	366
Buildings. Construction of.	W. M. Myers	506,062	Oct. 3	405	106	65	79
Buildings. Construction of.	E. F. Wells	508,455	Nov. 14	774	191	65	916
Buildings. Entrance for refuse-conduits in.	M. L. Ryder	503,685	Aug. 22	2399	599	64	1047
Buildings. Facing.	J. W. Graham	507,430	Oct. 24	2785	682	65	561
Buildings. Fireproof partition for.	I. C. Johnson	494,866	Apr. 4	549	139	63	107
Bullet-covering machine.	C. R. Richards	493,519	Mar. 14	1176	301 } 302 } 303 }	62	1602
Bullet-mold.	J. H. Barlow	489,580	Jan. 10	929	241	62	208
Bung.	A. Brubaker	504,060	Aug. 29	2988	747	64	1177
Bung.	A. J. Diebolt	501,058	July 11	829	215	64	166

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Bung.	T. Marple	490,153	Jan. 17	1850	483	62	410
Bung, Barrel.	F. Otto and O. Reinacher	506,334	Oct. 10	929	231	65	189
Bung for barrels, &c.	G. W. Smith	506,278	Oct. 10	840	207	65	171
Bung or tenon extractor.	R. Cameron	507,611	Oct. 31	3114	761	65	636
Bung, Self-venting.	H. W. Stone	511,065	Dec. 19	2113	522	65	1829
Bung, Self-venting.	H. W. Stone	511,101	Dec. 19	2179	536	65	1843
Bung, valve, or stopper, &c.	T. C. Barracrough and T. T. Heaton	505,587	Sept. 26	2151	544	64	1715
Bung, Vent.	H. W. Stone	511,102	Dec. 19	2182	537	65	1813
Buoy, Signal.	J. Bigler	508,400	Nov. 14	699	172	65	901
Buoyant fabric.	J. G. Heinze and C. H. Reinmuth	503,373	Aug. 15	1902	471	64	942
Bureaus, &c. Mirror-attaching device for.	F. S. Sprague	511,680	Dec. 26	3117	762	65	2028
Burglar-alarm.	C. H. Dedrick	498,708	May 30	3752	933	63	1355
Burglar-alarm.	C. J. Fisher	501,777	July 18	1991	492	64	392
Burglar-alarm.	J. Ganzfried	492,792	Mar. 7	33	8	62	1365
Burglar-alarm.	A. Hartman	506,040	Oct. 3	368	97	65	72
Burglar-alarm.	T. H. Lovell and G. Buckingham	493,037	Mar. 7	418	104	62	1441
Burglar-alarm.	C. H. Pratt	493,647	Mar. 21	1410	357	62	1664
Burglar-alarm.	W. H. Reiff	499,365	June 13	1039	252	63	1587
Burglar-alarm.	P. H. Rucker	497,347	May 16	1566	394	63	932
Burglar-alarm.	J. F. Stürsky	511,370	Dec. 26	2641	642	65	1941
Burglar-alarm, Electric.	W. H. Carr	490,870	Jan. 31	3020	776	62	667
Burglar-alarm, Electric.	J. Kamsler	492,330	Feb. 21	2011	500	62	1184
Burglar-alarm, Electric.	T. S. Patty	507,925	Oct. 31	3622	895	65	730
Burglar-alarm, Electric.	C. F. A. Sturts	492,478	Feb. 28	2251	563	62	1245
Burglar-alarm system.	A. Stromberg	499,261	June 13	847	203	63	1551
Burglar and fire alarm.	W. C. Dillman and G. A. Seib	496,724	May 2	524	140	63	714
Burglar-guard for protection of bank officials.	A. W. Taft	496,492	May 2	155	44	63	647
Burial apparatus.	L. S. May	502,888	Aug. 8	1088	268	64	781
Burial apparatus.	F. C. Rockwell	509,585	Nov. 28	2627	652	65	1309
Burial apparatus.	M. C. Scherer	507,043	Oct. 17	2103	521	65	422
Burial apparatus.	J. C. Stevens	498,319	May 30	3122	779	63	1240
Burial-case.	A. Freschl	497,446	May 16	1720	434	63	960
Burial-case.	C. H. Georgeson and W. Konrad	498,511	May 30	3432	852	63	1296
Burial-casket.	J. A. Lakin	500,809	July 4	439	115	64	81
Burial-casket lid.	L. Stein and N. Rappleyea	507,292	Oct. 24	2549	628	65	514
Burial-robos. Former for.	O. E. Scaney	508,846	Nov. 14	1382	343	65	1033
Burner:							
See Bagasse-burner.	Hydrocarbon-vapor burn-						
Brush-burner.	er.						
Flash-light burner.	Lamp-burner.						
Fuel-burner.	Oil-burner.						
Furnace gas-burner.	Petroleum-fluid burner.						
Gas-burner.	Smoke-burner.						
Gas or oil burner.	Smoke and gas burner.						
Gas or vapor burner.	Stove-burner.						
Gas-regulating burner.	Vapor-burner.						
Gasoline-burner.	Vapor-generating burner.						
Hydrocarbon-burner.	Vaporizing-burner.						
Burner for lighting or heating with natural or artificial gas.	G. W. Zeigler	492,179	Feb. 21	1783	446	62	1136
Burner for sawdust or refuse fuel.	R. H. Nogar	503,328	Aug. 15	1829	453	64	928
Burning fluid fuel. Apparatus for.	B. Brazelle	510,153	Dec. 5	526	121	65	1509
Burning fuel.	E. B. Coxé	499,715	June 20	1609	389	63	1700
Burning fuel.	E. B. Coxé	510,567	Dec. 12	1230	298	65	1655
Burning fuel.	E. B. Coxé	510,578	Dec. 12	1253	304	65	1659
Burning garbage, &c. Apparatus for.	W. H. Garretson and S. B. Tainter	503,845	Aug. 22	2644	662	64	1095
Burnisher.	T. Lloyd	494,872	Apr. 4	560	140	63	108
Burnishing.	J. F. Thompson	494,943	Apr. 4	650		63	125
Burnishing-machine.	G. B. Kelley	493,033	Mar. 7	411	103	62	1440
Burnishing-machine.	A. L. F. Mitchell	495,746	Apr. 18	1970	497	63	397
Burnishing-machine jack.	G. Sumner	497,505	May 16	1823	460	63	978
Burnishing-machines. Burner for rolls of.	J. S. George, Jr	489,299	Jan. 3	483	134	62	105
Burnishing-tool.	Z. Beaudry	510,398	Dec. 12	922	222	65	1599
Burr-wheel.	R. W. Gormly	491,345	Feb. 7	472	121	62	838
Bush and bung. Combined.	J. Phillips and J. Deurlam	499,932	June 20	1979	481	63	1764
Bush or weed puller.	J. W. Snapp	496,452	May 2	100	28	63	637
Bushing.	D. Burkard	488,932	Jan. 3	12	3	62	5
Bushing.	J. B. Snider	504,460	Sept. 5	237	63	64	1314
Bushing.	I. M. Willie	501,982	July 25	2307	577	64	464
Bushing and faucet.	G. H. Merrick	502,572	Aug. 1	540	129	64	665
Bushing and faucet. Barrel.	G. H. Merrick	503,767	Aug. 22	2538	631	64	1074
Bushing-withdrawing tool.	R. Gregg	511,610	Dec. 26	3042	741	65	2013
Bushings. Manufacture of.	E. H. Bache	500,463	June 27	2841	699	63	1928
Busk. Spring.	E. Chabre	494,843	Apr. 4	512	128	63	99
Busk-steel.	F. L. Suckley	497,142	May 9	1207	308	63	854
Bust-form.	E. and A. Merle	500,926	July 4	610	159	64	112
Bust-pad.	M. M. Parrell	498,812	June 6	109	29	63	1410
Bust-support.	H. Schindler	504,054	Aug. 29	2982	745	64	1175
Bust-supporter.	L. Lendry	507,373	Oct. 24	2698	662	65	544
Bust-supporter.	I. M. Rew	505,003	Sept. 12	1148	294	64	1500
Butchering appliance.	L. J. Peachey	501,691	July 18	1846	459	64	367
Butchering-derrick.	J. Ulfers	494,398	Mar. 28	2660	667	62	1915
Butter-cutting apparatus.	W. H. Grant	497,319	May 16	1520	383	63	924
Butter-extractor. Centrifugal.	O. Anderson	503,731	Aug. 22	2478	616	64	1062
Butter-extractor. Centrifugal.	T. T. A. Hansen	498,470	May 30	3364	838	63	1284
Butter-extractor. Centrifugal.	O. Ohlsson	499,392	June 13	1082	263	63	1594
Butter-extractor. Centrifugal.	O. Ohlsson	508,744	Nov. 14	1229	306	65	1005
Butter-extractor. Centrifugal.	E. G. N. Salenius	509,185	Nov. 21	1974	481	65	1161
Butter-extractor. Centrifugal.	P. M. Sharples	497,417	May 16	1670	421	63	952
Butter-extractor. Centrifugal.	P. M. and D. T. Sharples	497,416	May 16	1668	421	63	951

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Butter-extractor. Centrifugal.....	A. Wahlin.....	491,501	Feb. 7	716	181	62	886
Butter-extractor. Centrifugal.....	A. Wahlin.....	492,828	June 6	132	33	63	1415
Butter-firkin.....	F. S. Osgood.....	492,470	Feb. 28	2241	560	62	1243
Butter from milk. Compound for increasing the yield of.....	S. C. Wilson.....	489,775	Jan. 10	1218		62	267
Butter. Making.....	V. Storch.....	495,381	Apr. 11	1380	344	63	273
Butter. Manufacture of.....	D. W. Hudson, F. La Strong, and G. D. Bunch.....	489,814	Jan. 10	1271		62	279
Butter-mold.....	J. E. Brenneisen.....	496,635	May 2	388	105	63	690
Butter-mold.....	W. Mann and G. C. Johnson.....	489,566	Jan. 10	910	237	62	205
Butter molding and cutting machine.....	P. O. Andreasen.....	491,792	Feb. 14	1184	297	62	1000
Butter-molding apparatus.....	P. O. Andreasen.....	509,714	Nov. 28	2897	701	65	1346
Butter-molding machine.....	J. Tobin.....	510,453	Dec. 12	1010	242	65	1616
Butter-packer.....	D. C. Thomas.....	508,191	Nov. 7	343	85	65	821
Butter-printer.....	A. H. Reid.....	493,517	Mar. 14	1173	300	62	1601
Butter. Treating.....	J. H. Stebbins, Jr.....	505,137	Sept. 19	1371	352	64	1555
Butter-worker.....	D. W. Curtis.....	501,993	July 25	2325	581	64	468
Butter-worker.....	P. Embree.....	492,325	Feb. 21	2004	499	62	1183
Butter-worker.....	C. Owens.....	511,274	Dec. 19	2466	601	65	1895
Butter worker and mold.....	E. S. Boynton.....	502,428	Aug. 1	300	72	64	621
Button.....	J. W. Beaumont.....	508,498	Nov. 14	850	210	65	931
Button.....	C. S. Comstock.....	489,288	Jan. 3	471	130	62	103
Button.....	M. F. Godfrey.....	498,712	May 30	3789	935	63	1356
Button.....	C. S. Gooding.....	495,220	Apr. 11	1121	280	63	226
Button.....	F. E. Hall.....	496,155	Apr. 25	2593	652	63	529
Button.....	F. E. Hall.....	496,357	Apr. 25	2929	731	63	592
Button.....	F. E. Hall.....	496,408	May 2	28	8	63	624
Button.....	W. L. King.....	504,437	Sept. 5	205	53	64	1309
Button.....	C. T. McClintock.....	492,418	Feb. 28	2157	539	62	1225
Button.....	I. G. Platt.....	495,754	Apr. 18	1982	501	63	400
Button.....	J. F. Platt.....	505,479	Sept. 26	1918	494	64	1671
Button.....	S. W. Shorey.....	505,962	Oct. 3	250	67	65	49
Button.....	J. E. Swain and Y. R. Conner.....	498,225	June 6	129	32	63	1415
Button and link. Combination cuff.....	L. S. Sampson.....	502,586	Aug. 1	565	135	64	670
Button-attaching machine.....	I. G. Platt.....	495,753	Apr. 18	1980	500	63	399
Button-attaching machine.....	I. H. Sisson.....	507,082	Oct. 17	2162	536	65	433
Button-backs. Machine for making.....	G. W. Lieb.....	492,534	Feb. 28	2351	583 584 585	62	1265
Button blanks. Machine for cutting out pearl.....	C. Workheiser.....	508,795	Nov. 14	1303	324	65	1019
Button-cabinet.....	A. R. Ingalsbe.....	492,683	Feb. 28	2589	640	62	1312
Button. Collar.....	M. Henry.....	506,399	Oct. 10	1048	261	65	212
Button. Collar.....	G. H. Strong.....	511,371	Dec. 26	2643	643	65	1942
Button-cover. Detachable.....	G. Pilbeam.....	502,201	July 25	2666	673	64	532
Button-cutting machine.....	H. W. Terry.....	492,997	Mar. 7	354	89	62	1429
Button-detaching device.....	J. J. Goldman.....	496,407	May 2	27	8	63	624
Button-detaching machine.....	T. H. Seymour.....	510,197	Dec. 5	598	140	65	1523
Button-drilling machine.....	R. J. Ostlick.....	507,384	Oct. 24	2710	666	65	547
Button-fastener.....	R. Blascke.....	494,456	Mar. 28	2742	688	62	1929
Button-fastener.....	W. Howard.....	509,436	Nov. 28	2449	590	65	1262
Button-fastener.....	W. C. Jones.....	505,768	Sept. 26	2456	619	64	1771
Button-fastener.....	G. W. Prentice.....	506,860	Oct. 17	1801	452	65	366
Button-fastener.....	G. W. Prentice.....	506,862	Oct. 17	1803	452	65	366
Button-fastener.....	E. L. Torsch.....	491,788	Feb. 14	1179	295	62	999
Button-fastener.....	F. E. Williams.....	511,482	Dec. 26	2836	686	65	1976
Button-fastener and key for detaching.....	G. Kohl.....	489,127	Jan. 3	223	60	62	51
Button-fasteners into the eyes of buttons. Machine for threading.....	A. W. Ham.....	491,103	Feb. 7	62	17, 18	62	761
Button for shoes or other articles.....	E. T. Allan.....	490,595	Jan. 24	2559	659	62	561
Buttonhole-cutter.....	J. G. Greene.....	492,796	Mar. 7	38	9	62	1366
Buttonhole-cutter.....	A. M. Wright.....	492,452	Feb. 28	2209	552	62	1236
Buttonhole-facing.....	M. W. Lowinsky.....	492,731	Feb. 28	2657	658	62	1327
Buttonhole-finishing machine.....	F. D. Benedict.....	490,062	Jan. 17	1700	443 444	62	378
Buttonhole-stay.....	G. W. Prentice.....	506,863	Oct. 17	1804	453	65	367
Button-hooks. Forming.....	G. Havell.....	492,607	Feb. 28	2472	614	62	1290
Button. Link cuff.....	W. Ballou.....	493,468	Mar. 14	1099	282	62	1588
Button-loop.....	C. J. White.....	497,847	May 23	2353	529	63	1089
Button-machine.....	A. Strauss and R. Ripp.....	498,411	May 30	3265	813 814	63	1266
Button-making machine.....	D. B. Shantz.....	511,364	Dec. 26	2630	639 640	65	1939
Button-making machine.....	J. T. Sheridan and J. Draher.....	493,794	Mar. 21	1648	420	62	1711
Button-making machines. Feeding mechanism for.....	C. Wooster.....	490,421	Jan. 24	2295	596	62	509
Button-polishing machine.....	S. B. Eshleman.....	497,714	May 16	2140	535	63	1035
Button-polishing machine.....	S. B. Eshleman.....	497,715	May 16	2142	536	63	1036
Button. Reversible-head.....	J. S. Klebes.....	496,417	May 2	41	12	63	626
Button-setting instrument.....	F. H. Richards.....	501,661	July 18	1796	447	64	358
Button-setting machine.....	G. W. Altman.....	503,891	Aug. 22	2705	678	64	1107
Button-setting machine.....	E. O. Ely.....	494,740	Apr. 4	338	85	63	67
Button-setting machine.....	F. E. Hall.....	491,016	Jan. 31	3270	835 836	62	714
Button-setting machine.....	A. W. Ham.....	492,397	Feb. 28	2121	529 530	62	1218
Button-setting machine.....	J. Mathison.....	493,634	Mar. 21	1390	352 353	62	1660
Button-setting tool.....	J. Mathison.....	501,286	July 11	1195	302	64	223
Button. Shank.....	F. H. Hardman.....	489,864	Jan. 10	1337	349	62	293
Buttonshanks and fasteners. Machine for connecting.....	E. Christensen.....	500,993	July 4	721	189 190	64	131
Button. Sleeve.....	C. R. Smith.....	490,836	Jan. 31	2972	762	62	656
Button. Sleeve or collar.....	T. W. F. Smitten.....	502,834	Aug. 8	1009	246	64	767
Button. Suspender.....	J. F. Staiger and C. Schnur.....	491,197	Feb. 7	225	57	62	790
Button-turning machine.....	D. B. Shantz.....	497,349	May 16	1568	395	63	932

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Button-turning machine	M. Woods	490,937	Jan. 31	3142	806	62	690
Buttons. Device for removing shoe	P. H. Nielsen	491,948	Feb. 14	1426	356	62	1049
Buttons. Link for sleeve or cuff	G. F. Kursh	501,725	July 18	1900	472	64	376
Buttons. Machine for forming pearl	G. Carlyle	490,471	Jan. 24	2374	614	62	524
Buttons. Machine for turning pearl or other	F. Doellbor	495,314	Apr. 11	1276	319	63	251
Buttons. Machine for turning pearl or other	F. Doellbor	507,794	Oct. 31	3410	836	65	691
Buttons of mother-of-pearl. Drilling-machine for	E. Koenig	500,540	June 27	2967	728	63	1950
Buttons of mother-of-pearl. Drilling-machine for	E. Koenig	506,177	Oct. 3	613	157	65	119
Buttons of mother-of-pearl. Machine for shaping	E. Koenig	506,178	Oct. 3	614	158	65	119
Buttons to fabrics. Machine for securing	E. T. Allan	490,619	Jan. 24	2603	671	62	570
Buttons to fabrics. Securing	H. H. Cummings	502,034	July 25	2397	603	64	480
Buttuner	J. R. Latham and F. E. Williams	511,534	Dec. 26	2912	708	65	1992
Buttuner	F. E. Williams	511,481	Dec. 26	2835	6-5	65	1976
Buzz	E. R. McCall	509,044	Nov. 21	1734	428	63	1115
Cab	G. S. Smallwood	497,352	May 16	1575	396	63	934
Cabbage-cutter	E. S. Laughlin	492,814	Mar. 7	68	16	62	1371
Cabinet	M. A. Owen	511,741	Dec. 26	3246	796	65	2051
Cabinet	W. S. Stanlev	503,444	Aug. 15	1997	495	64	959
Cabinet-clamp	W. F. Russell	497,550	May 16	1883	475	63	969
Cabinet for holding money, coupons, &c	W. F. Beck	511,231	Dec. 19	2391	583	65	1882
Cabinet. Parcel	H. B. Taylor	491,145	Feb. 7	129	35	62	774
Cabinet. Portable	G. A. Raisbeck	499,247	June 13	829	197	63	1549
Cabinet. Wall	A. B. Schermerhorn	506,554	Oct. 10	1308	327	65	262
Cable arch support	S. D. Stephens	501,969	July 25	2292	573	64	461
Cable. Chain	G. Lindenthal	500,267	June 27	2538	621	63	1874
Cable-crossing	W. W. Bailey	510,151	Dec. 5	522	120	65	1508
Cable-crossing guard	J. W. Hentz	507,497	Oct. 24	2889	711	65	581
Cable-grip	A. O. Babendreier and F. P. Davis	491,934	Feb. 14	1403	350	62	1044
Cable-grip	J. C. Dean	507,887	Oct. 31	3559	876	65	720
Cable-grip	S. A. and O. Kneidler	493,551	Mar. 14	1237	317	62	1615
Cable-grip	J. Kratz	498,517	May 30	3443	854	65	1297
Cable-grip	R. A. McLellan	501,467	July 11	1485	373	64	286
Cable-grip	J. S. Patten	493,514	Mar. 14	1169	299	62	1601
Cable-grip	J. S. Peden	506,014	Oct. 3	330	87, 88	65	65
Cable-grip	F. J. Scanlan	497,555	May 16	1894	477	63	991
Cable-grip	H. A. Shipp	495,843	Apr. 18	2123	534	63	425
Cable-gripper	J. Walsh, Jr.	492,248	Feb. 21	1889	472	62	1158
Cable haul mechanism	J. H. Hahn, Jr.	503,908	Aug. 22	2736	686	64	1114
Cable-protector	A. W. Lackey	500,399	June 27	2751	677	63	1911
Cable-rack	A. C. Gray	496,381	Apr. 25	2972	741	63	601
Cable releasing device and crossing	A. Jeff eys	500,903	July 4	579	151	64	106
Cable-road grip	W. C. Coddington	506,979	Oct. 17	1997	494	65	404
Cable-road signal	E. W. Edwards	510,593	Dec. 12	1276	310	65	1663
Cable-support	G. P. Wern	492,648	Feb. 28	2539	629	62	1303
Cable tramway	W. N. Colau	510,469	Dec. 12	1041	249	65	1621
Cable-tramway grip	A. Rosenholz	495,374	Apr. 11	1368	342	63	371
Cables. Device for lifting traction	J. B. Brown	506,972	Oct. 17	1982	491	65	401
Cables, &c. Electrical testing outfit for	E. W. Stevenson	496,801	May 2	656	175	63	736
Cables for multiple switchboards. Manufacture of	O. A. Bell	505,798	Sept. 26	2500	631	64	1780
Cables for multiple switchboards. Preparing	O. A. Bell	501,859	July 18	2107	521	64	412
Caddy	W. H. Wood	494,093	Mar. 21	2148	549	62	1805
Caddy. Measuring	T. C. Keeler	502,124	July 25	2536	636	64	507
Caisson-driver	T. F. Perrenot	494,886	Apr. 4	574	145	63	111
Cake-coating machine	D. M. Holmes	493,403	Mar. 14	990	255	62	1569
Cake-cutter	W. P. McAlister	492,417	Feb. 28	2156	539	62	1225
Cake-cutter	U. D. Seltzer	499,149	June 6	678	162	63	1509
Cake-cutter	A. A. Soderberg	490,993	Jan. 31	3237	827	62	707
Cake-machine	S. L. Hall	500,655	July 4	197	51, 52	64	38
Cake-machine	P. D. Harton	501,274	July 11	1176	298	64	229
Cake-machine	J. H. Mitchell	492,220	Feb. 21	1850	463	62	1150
Cake or biscuit cutter	T. B. Stone	501,903	July 18	2187	543	64	426
Cake or pudding stirrer	A. C. Bull	502,066	July 25	2147	615	64	490
Cake rest or holder	W. I. Leggett	508,176	Nov. 7	326	79	65	817
Calaminating-machine	W. Peterson	489,828	Jan. 10	1287	337	62	282
Calaminating apparatus	W. S. Pierce	505,956	Oct. 3	237	63	65	47
Calculating and recording machine	G. Richmond	503,986	Aug. 29	2870	720	64	1155
Calculating device	J. S. Duret	504,776	Sept. 12	774	195	64	1428
Calculating device. Mechanical	D. L. Albert	502,217	July 25	2693	680	64	538
Calculating-machine	W. S. Burroughs	504,963	Sept. 12	1075	275	64	1487
Calendar	W. K. David	502,483	Aug. 1	391	93, 94	64	638
Calendar	C. N. Hoyt	509,166	Nov. 21	1940	475	65	1154
Calendar	C. E. Hudson	510,268	Dec. 5	707	171	65	1543
Calendar	G. E. Matthews	498,069	May 23	2706	676	63	1151
Calendar	J. Wallin	490,618	Jan. 24	2602	670	62	569
Calendar and stamp-holder. Combined rotary	C. C. Stallman	498,088	May 23	2733	683	63	1156
Calendar. Perpetual	G. Dreyfus	506,003	Oct. 3	315	83	65	62
Calendar. Perpetual	D. A. Holtzman	505,313	Sept. 19	1653	427	64	1607
Calendar. Perpetual	H. L. Weed	508,454	Nov. 14	771	190	65	915
Calendar-table and calendar	C. N. Hoyt	505,901	Oct. 3	158	41	65	31
Calendar. Watch-charm, pocket, and wall display	S. P. V. Arnold	500,314	June 27	2622	640	63	1888
Calender-roll	H. J. Frink	511,606	Dec. 26	3036	740	65	2012
Calender-roll doctor	R. Smith	497,610	May 16	1979	495	63	1006
Calendering-machine	C. Moore	509,930	Dec. 5	134	31, 32	65	1435
Calipers	J. Bath	499,199	June 13	766	182	63	1538
Calipers	J. C. Reimann	499,039	June 6	517	122	63	1481

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Index.	Vol.	Page.
Calipers. Beam.....	A. Barker.....	496,579	May 2	459	123	63	703
Calipers. Beam.....	J. E. Clough.....	492,783	Mar. 7	15	5	62	1362
Calipers. Beam.....	G. A. Colnon.....	493,683	Mar. 21	1469	374	62	1676
Calipers for measuring distances.....	C. W. Preston.....	509,096	Nov. 21	1839	450	65	1135
Calipers. Micrometer.....	F. W. Parsons.....	498,813	June 6	110	29	63	1410
Calipers. Vernier.....	J. H. Lynch.....	506,703	Oct. 17	1538	384	65	318
Calking-strip. Metallic.....	F. W. Fincher.....	491,417	Feb. 7	586	147	62	860
Calking-tool.....	J. O. Walton.....	494,516	Mar. 28	2841	711	62	1948
Call and telephone. Combined messenger.....	G. E. Christie.....	508,563	Nov. 14	960	236	65	952
Call apparatus. Coin-controlled electric.....	G. Poore.....	505,724	Sept. 26	2382	{ 601 602 603 }	{ 64 64 64 }	{ 1757 1757 1757 }
Call-box.....	H. H. Cutler.....	504,488	Sept. 5	289	74, 75	64	1324
Call-box. Electrical.....	W. F. Banks.....	499,003	June 6	457	107	63	1471
Cam.....	G. Parebo.....	490,982	Jan. 31	3219	823	62	704
Cam.....	W. A. Swift and W. E. Mitchell.....	497,835	May 23	2331	584	63	1086
Cam-gear. Rotary.....	C. W. and W. F. Hunt.....	492,552	May 30	3512	{ 867 868 869 }	{ 63 63 63 }	{ 1309 1309 1309 }
Camera: See Aerial camera. Photographic camera. Magazine-camera. Photographic magazine-camera. Panoramic camera. Photograph-camera. Roll-holder camera.							
Camera.....	E. R. Bullard.....	505,813	Oct. 3	15	4, 5	63	6
Camera.....	W. S. Loughton and A. P. Hitchcock.....	490,117	Jan. 17	1785	{ 465 466 }	{ 62 62 }	{ 397 397 }
Camera-lens.....	E. Decker.....	494,128	Mar. 28	2222	566	62	1834
Camera-plate-holder attachment.....	B. L. Turner.....	489,512	Jan. 10	833	218	62	190
Camera-shutter.....	T. H. Blair and F. H. Kelley.....	491,921	Feb. 14	1382	{ 345 346 }	{ 62 62 }	{ 1040 1040 }
Camera-shutter.....	E. Decker.....	507,790	Oct. 31	3402	834	65	690
Camera-shutter.....	A. Entwistle.....	496,512	May 2	189	52	63	653
Camera-shutter.....	W. H. Lewis.....	494,256	Mar. 28	2428	612	62	1872
Camera-shutter.....	E. J. Molera.....	490,031	Jan. 17	1654	429	62	369
Camera-shutter.....	O. J. Schramm.....	504,425	Sept. 5	187	49	64	1306
Camera-shutter.....	W. F. Torrey.....	498,963	June 6	378	90	63	1458
Camera shutter. Photographic.....	H. Casler.....	509,841	Nov. 28	3105	750	65	1387
Camera shutter. Photographic.....	W. H. Lewis.....	510,805	Dec. 12	1633	406	65	1730
Camera shutter. Photographic.....	W. Shakespeare, Jr., and G. W. Low.....	495,066	Apr. 11	840	{ 213 214 }	{ 63 63 }	{ 175 175 }
Camera-stand.....	J. H. Green.....	507,807	Oct. 31	3434	843	65	696
Camera-stand for bicycles.....	C. H. Campbell.....	511,043	Dec. 19	2078	515	65	1822
Cameras. Ground-glass adjuster for.....	G. W. Low and W. Shakespeare, Jr.....	493,365	Mar. 14	942	242	62	1559
Cameras. Ground-glass attachment for.....	M. Bauer.....	503,518	Aug. 15	2114	530	64	980
Cam-chair. Folding.....	J. Harpfer.....	493,709	Mar. 21	1502	384	62	1682
Can: See Garbage and ash can. Oil or gasoline can. Ice-cream can. Oiling-can. Jacketed can. Preserving-can. Key-opening can. Reversible can. Lamp-filling can. Self-closing can. Measuring-can. Sheet-metal can. Milk-can. Tank-can. Milk or other can. Tin can. Oil-can.							
Can.....	G. Brinton.....	495,012	Apr. 11	757	193	63	160
Can.....	C. Freeman and C. B. Emmerich.....	506,589	Oct. 10	1357	340	65	272
Can.....	W. Pratt.....	492,105	Feb. 21	1663	413	62	1111
Can.....	L. P. True.....	490,418	Jan. 24	2292	593	62	508
Can.....	C. N. Tyler.....	495,073	Apr. 11	852	218	63	178
Can-bodies. Machine for forming polygonal.....	J. Zimmermann and J. K. Underdown.....	511,486	Dec. 26	2839	687	65	1977
Can-body-forming machine.....	R. D. Hume.....	493,588	Mar. 14	1307	{ 333 334 335 }	{ 62 62 62 }	{ 1629 1629 1629 }
Can-body-forming machine.....	A. W. Livingston.....	489,969	Jan. 17	1535	401	62	346
Can-body-forming, soldering, and heading machine.....	R. D. Hume.....	506,878	Oct. 17	1828	{ 458 459 }	{ 65 65 }	{ 371 371 }
Can-body-making machine.....	J. H. Murch and J. A. Gray.....	495,426	Apr. 11	1448	366	63	226
Can-bottom.....	W. C. Winfield.....	504,547	Sept. 5	393	100	64	1343
Can-cap.....	G. J. Record.....	509,098	Nov. 21	1842	450	65	1135
Can-cap fastening.....	G. J. Record. (Reissue).....	11,382	Nov. 7	683	167	65	885
Can-capping machine.....	F. P. and I. Goode.....	501,334	July 11	1277	321	64	245
Can cleaning attachment. Oil.....	C. E. Drury.....	494,702	Apr. 4	273	70	63	55
Can-cover. Ventilated.....	S. Ilgen.....	497,961	May 23	2539	634	63	1121
Can-filler.....	S. B. Parker.....	496,617	May 2	354	96	63	684
Can-filling machine.....	J. Baker.....	503,029	Aug. 8	1328	{ 326 327 }	{ 64 64 }	{ 825 825 }
Can-filling machine.....	J. Baker.....	503,030	Aug. 8	1330	327	64	825
Can-filling machine.....	T. O. Ballard and J. C. Stewart.....	510,953	Dec. 19	1944	{ 474 475 }	{ 65 65 }	{ 1799 1799 }
Can-filling machine.....	J. S. Moore.....	490,033	Jan. 17	1656	430	62	370
Can-filling machine.....	G. Roth.....	505,005	Sept. 12	1151	{ 294 295 571 }	{ 64 64 63 }	{ 1501 1501 1842 }
Can-filling machine.....	J. R. Rowland and J. F. Helm.....	500,155	June 27	2360	{ 572 573 }	{ 63 63 }	{ 1842 1842 }
Can-filling machine.....	C. W. Shedd.....	510,652	Dec. 12	1382	339	65	1683
Can-filling machine.....	F. W. Smith.....	506,137	Oct. 3	532	{ 137 138 }	{ 65 65 }	{ 103 103 }
Can-filling machine.....	H. R. Stickney.....	510,618	Dec. 12	1322	322	65	1672
Can floating pots. Supporting attachment for.....	J. B. Holsten.....	498,653	May 30	3678	909	63	1338
Can-heading machine.....	J. B. Footo.....	494,674	Apr. 4	229	57	63	47
Can-heading machine.....	M. A. Wheaton.....	499,949	June 20	2001	486	63	1768

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. i.	Vol.	Page.
Can-holder	A. L. Whittemore	502,897	Aug. 8	1110	273	64	786
Can-jacket	I. Sexton	496,140	Apr. 25	2567	646	63	523
Can-labeling machine	A. S. Boifenillet	506,095	Oct. 3	456	119 120	65	89
Can-labeling machine	C. A. Burt	502,480	Aug. 1	385	92	64	637
Can-labeling machine	P. Crittenden and H. W. Pease	497,368	May 16	1596	403 404	63	938
Can-labeling machine	W. A. and F. M. Dunn	500,566	July 4	46	14	64	10
Can-lacquering machine	R. D. Hume	489,903	Jan. 10	1409	364	62	305
Can locking attachment. Oil	C. H. James	502,477	Nov. 14	816	202	65	924
Can-making machine	R. Gregg	489,250	Jan. 3	419	116 117	62	94
Can-making machine	R. Gregg	491,015	Jan. 31	3269	834 835	62	714
Can-making machine	E. Norton and F. M. Leavitt	498,810	June 6	94	23 24 25 26 27 28	63	1406
Can-opener	W. G. Browne	501,322	July 11	1258	315	64	241
Can-opener	R. J. Jones	495,041	Apr. 11	801	203	63	169
Can-opener	C. Morgan	508,332	Nov. 7	573	141	65	864
Can-opener	D. B. Sanford	507,171	Oct. 24	2344	577	65	479
Can-opener	W. L. Scoville	496,448	May 2	94	27	63	636
Can-opener	E. Weston	497,698	May 16	2121	529	63	1032
Can-opener	E. B. Williams	504,381	Sept. 5	109	24	64	1291
Can-opener	W. Yerdon	498,346	May 30	3177	791	63	1248
Can opening attachment. Tin	L. Fischbach	495,669	Apr. 18	1848	462	63	375
Can or jar closing device	W. J. Graham	488,999	Jan. 3	35	10	62	9
Can-receptacle	F. H. Page	492,101	Feb. 21	1656	411	62	1109
Can-swing. Adjustable automatic	A. Knoecker and J. L. Rinker	498,981	June 6	411	96	63	1464
Can tap and filler. Oil	N. Harldoin	491,349	Feb. 7	489	125	62	841
Can-testing machine	C. B. McDonald	506,182	Oct. 3	619	159	65	120
Can-testing machine	G. Roth	498,408	May 30	3260	812	63	1265
Can top. Sheet-metal	W. L. Eisengart	497,976	May 23	2562	637	63	1126
Can-unsealing attachment	S. W. Simmons	503,500	Aug. 15	2087	521	64	375
Can-wiping machine	C. A. Burt	490,100	Jan. 17	1761	459	62	392
Can wrench. Fruit	J. H. Dean	492,714	Feb. 28	2636	653	62	1323
Cans. Fluxing device for square-end	C. B. McDonald	506,183	Oct. 3	624	160	65	121
Cans. Lamp-filling attachment for oil	J. C. H. Lynn	508,730	Nov. 14	1208	300	65	1001
Cans. Machine for fluxing	C. B. McDonald	506,184	Oct. 3	626	160	65	121
Cans. Machine for hermetically closing	P. Willame	489,356	Jan. 3	571	154 155	62	123
Cans or other receptacles. Device for securing	J. W. Walker	501,552	July 18	1626	407	64	329
Cans. Punch for forming tongues in blanks for key-opening	J. Zimmerman and J. K. Underdown	504,187	Aug. 29	3207	800	64	1219
Cans. Side-seaming strip for	H. C. Hunter	492,805	Mar. 7	53	13	62	1369
Canning and preserving. Preparing fruit for	I. L. McDermett	511,709	Dec. 26	3191	...	65	2040
Canal-digger	J. McMullen, H. Krusi, and H. S. Wood	494,113	Mar. 21	2188	559	62	1813
Candelabrum	C. S. Kochler	505,316	Sept. 19	1637	428	64	1608
Candelabrum	S. Szigethy	497,036	May 9	1041	266	63	824
Candle-holder	A. Nowotny and N. Vlasak	499,568	June 13	1387	331	63	1647
Candle shade-holder	W. E. P. French	510,907	Dec. 19	1855	457	65	1781
Candle shade-holder	W. R. Wearn	493,198	Mar. 7	658	167	62	1487
Candlestick	T. J. and O. Q. Stille	501,473	July 11	1494	376	64	287
Candy. Apparatus for warming or heating the constituents of	F. P. Ziegler	501,310	July 11	1229	310	64	238
Candy-casting machine	J. M. Demerath	506,981	Oct. 17	1999	495	65	404
Candy, &c. Machine for rolling, cutting, and shaping	L. P. Dobyns and A. Brown	503,230	Aug. 15	1661	408 409	64	899
Candy-making machine	B. Thoens	498,142	May 23	2811	703	63	1170
Candy-mold	M. M. June	493,729	Mar. 21	1546	394	62	1691
Candy-molding apparatus	E. Rosenberger	502,864	Aug. 8	1053	259	64	775
Candy-working machine	P. J. G. Firschau	511,011	Dec. 19	2040	504	65	1815
Cane	R. W. Meily and G. W. Buchanan	489,325	Jan. 3	617	166 167	62	133
Cane	O. C. Pugh	490,722	Jan. 31	2797	717	62	622
Cane and camp-stool. Combined	E. A. Nixon	494,303	Mar. 28	2499	631	62	1886
Cane and camp-stool. Combined	J. L. Sutton and C. R. Reed	490,416	Jan. 24	2288	594	62	507
Cane and camp-stool. Combined	W. Ward	497,617	May 16	1989	498	63	1008
Cane and seat. Combined	C. Efransson	489,294	Jan. 3	476	132	62	104
Cane and stool. Combined	J. A. Nixon	493,285	Mar. 14	812	208 209	62	1534
Cane and umbrella. Combined	W. B. Blake	500,051	June 20	2163	525	63	1796
Cane and umbrella. Combined	E. Weber	506,229	Oct. 10	854	210	65	174
Cane-juice-bleaching apparatus	L. E. Gaudé	511,608	Dec. 26	3038	740	65	2013
Cane-loading apparatus	G. W. Bennett	506,967	Oct. 17	1976	489	65	390
Cane, &c. Machine for cutting or slicing sugar	W. R. Watson	494,946	Apr. 4	654	167 168	63	126
Cane. Machine for splitting the ends of	H. G. Dunlap	489,225	Jan. 3	377	104	62	85
Cane-mill pressure-regulator	J. Buchel	497,301	May 16	1493	376	63	919
Cane or similar article	O. C. Pugh	494,187	May 23	2885	720	63	1183
Cane-stripper	G. Hiatt	494,743	Apr. 4	344	87	63	68
Cane. Umbrella	R. Waples, Jr	489,351	Jan. 3	566	153	62	121
Canister. Soap	F. H. Richards	510,294	Dec. 5	757	183	65	1553
Cannon. Pneumatic	J. Rapieff	502,759	Aug. 8	877	214 215	64	742
Cannula for tracheotomy	E. Hartstein	507,813	Oct. 31	3444	846	65	699
Canopy. Bolstead folding	T. T. Woodruff	503,954	Aug. 29	2826	705	64	1147
Can-hook	D. W. Reed	492,107	Feb. 21	1666	414	62	1111
Caoutchouc sheets. Machine for cutting	G. L. Hille	490,824	Jan. 31	2956	758 759	62	653

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Cap-making machine.....	H. Schaafe.....	493,525	Mar. 14	1198	306	62	1606
Capo tasto.....	H. Dahlman.....	489,525	Jan. 10	855	223	62	194
Capstan.....	W. F. Murray.....	498,075	May 23	2713	679	63	1152
Capstan and apparatus for plowing.....	A. L. Grinnell.....	509,028	Nov. 21	1708	422	65	1109
Capstan-brake.....	E. H. Whitney.....	507,953	Oct. 31	3669	908	65	740
Capsule-filling apparatus.....	W. F. Young.....	507,870	Oct. 31	3537	869 870	65	715
Capsule-mold.....	H. M. Ferry.....	495,406	Apr. 11	1420	357	63	280
Capsule-stripping machine.....	H. M. Ferry.....	495,407	Apr. 11	1420	357	63	280
Car.....	A. S. Desha.....	492,277	Feb. 21	1935	483	62	1168
Car.....	C. A. Patten.....	503,707	Aug. 22	2439	607 608	64	1055
Car.....	T. E. Pope.....	509,325	Nov. 21	2223	536 537	65	1207
Car.....	T. K. Shea.....	497,829	May 23	2323	583	63	1084
Car and air-brake coupling. Combined.....	G. A. Klahr, J. A. Petty, and M. H. Foy.....	504,222	Aug. 29	3260	813	64	1228
Car and air-brake coupling. Combined.....	W. Mable.....	495,502	Apr. 18	1579	397	63	330
Car and air-brake coupling. Combined.....	P. Pelton.....	501,624	July 18	1737	432 433	64	348
Car and air-brake coupling. Combined.....	G. Rohrbach.....	508,764	Nov. 14	1256	313	65	1011
Car and air-brake coupling. Combined.....	J. C. Smith.....	491,227	Feb. 7	270	67.68 373	62	799
Car and train. Railway.....	F. U. Adams.....	489,911	Jan. 17	1425	374 375	62	324
Car-attacher.....	W. H. Adams.....	496,215	Apr. 25	2685	673	63	545
Car attachment. Electric.....	I. H. Davis.....	508,373	Nov. 7	641	157	65	877
Car attachment. Railway.....	H. Henthorne.....	495,801	Apr. 18	2056	520	63	412
Car automatic safety-guard.....	I. P. Clarke.....	510,675	Dec. 12	1422	351	65	1690
Car-axles to dynamos. Means for transmitting power from.....	M. Moskowitz and S. Young.....	504,132	Aug. 29	3106	777 778	64	1290
Car-body bolster.....	L. K. Jewett.....	510,429	Dec. 12	970	232	65	1608
Car-bolster.....	C. T. Westlake.....	500,983	July 4	708	186	64	129
Car-brake.....	W. B. Anderson and G. L. Dangherty.....	504,313	Sept. 5	1	1	64	1271
Car-brake.....	T. J. Barrow.....	496,245	Apr. 25	2734	684	63	554
Car-brake.....	H. P. Bassett.....	505,381	Sept. 19	1760	456	64	1627
Car-brake.....	N. C. Bassett.....	494,751	Apr. 4	357	90	63	71
Car-brake.....	S. A. Bemis and G. M. Hoadley.....	497,514	May 16	1833	462	63	980
Car-brake.....	J. A. Brill.....	503,121	Aug. 15	1484	365	64	866
Car-brake.....	M. Butler.....	495,165	Apr. 11	1042	260	63	211
Car-brake.....	M. E. Campany.....	494,505	Mar. 28	2823	708	62	1945
Car-brake.....	M. E. Campany.....	495,960	Apr. 25	2296	580	63	472
Car-brake.....	A. Campbell.....	497,119	May 9	1177	301	63	849
Car-brake.....	C. W. Carter.....	506,768	Oct. 17	1654	414 415	65	340
Car-brake.....	J. J. Cassidy.....	495,084	Apr. 11	866	221	63	180
Car-brake.....	J. F. Class.....	496,600	May 2	322	88	63	678
Car-brake.....	D. N. Cook.....	508,409	Nov. 14	712	175	65	904
Car-brake.....	J. W. Cooper.....	500,250	June 27	2511	614	63	1869
Car-brake.....	J. R. Cribbs.....	507,311	Oct. 24	2590	637	65	524
Car-brake.....	H. A. Crossley.....	494,672	Apr. 4	226	56	63	46
Car-brake.....	O. W. Dean.....	498,774	June 6	38	8	63	1395
Car-brake.....	W. J. Devers.....	508,872	Nov. 14	1431	355	65	1042
Car-brake.....	J. Donovan.....	511,198	Dec. 19	2341	573	65	1873
Car-brake.....	J. T. Duff.....	500,649	July 4	183	48	64	36
Car-brake.....	M. E. Ellsworth.....	491,094	Feb. 7	48	13	62	757
Car-brake.....	G. J. Ferguson.....	493,491	Mar. 14	1135	291	62	1595
Car-brake.....	G. J. Ferguson.....	499,725	June 30	1629	393	63	1704
Car-brake.....	F. Gabler.....	490,554	Jan. 24	2506	645	62	550
Car-brake.....	G. E. Gav and J. H. Parsons.....	501,333	July 11	1276	320	61	245
Car-brake.....	H. Goodwin.....	496,086	Apr. 25	2493	629	63	509
Car-brake.....	C. H. Grambs.....	498,167	May 23	2814	711	63	1176
Car-brake.....	H. B. Hammore and T. N. McLean.....	495,799	Apr. 18	2053	519	63	412
Car-brake.....	W. H. Hansell.....	505,763	Sept. 26	2448	616	64	1769
Car-brake.....	J. C. Henry.....	497,544	May 16	1876	473	63	998
Car-brake.....	O. P. Hix.....	508,109	Nov. 7	214	56	65	798
Car-brake.....	W. W. Hodges.....	490,711	Jan. 31	2780	714	62	619
Car-brake.....	J. C. Hunsinger and W. Ensminger.....	508,316	Nov. 7	550	135	65	859
Car-brake.....	A. H. Kirker.....	499,553	June 13	1361	323	63	1643
Car-brake.....	N. Lombard.....	492,891	Mar. 7	187	46	62	1396
Car-brake.....	P. Maechling and C. F. Porter.....	498,356	May 30	3190	794	63	1250
Car-brake.....	A. P. Massey.....	501,017	July 4	757	198	64	138
Car-brake.....	J. McGee.....	510,702	Dec. 12	1460	360 361	65	1697
Car-brake.....	A. Miller.....	489,023	Jan. 3	66	19	62	17
Car-brake.....	A. Miller.....	490,079	Jan. 17	1726	450	62	384
Car-brake.....	F. Roediger.....	500,952	July 4	644	169	64	118
Car-brake.....	A. B. Rote.....	501,103	July 11	916	234 235	64	182
Car-brake.....	J. W. Schoaf.....	503,003	Aug. 8	1292	316	64	817
Car-brake.....	H. J. Small.....	510,300	Dec. 5	601	141	65	1523
Car-brake.....	W. J. Stahl.....	491,381	Feb. 7	534	136	62	850
Car-brake.....	D. H. Sullivan and W. H. Osborn.....	502,476	Aug. 1	379	91	64	636
Car-brake.....	P. Walsh.....	497,561	May 16	1908	481 482	63	993
Car-brake.....	W. C. Whitacre.....	494,503	Mar. 28	2820	707	62	1945
Car-brake.....	F. K. Wilson and J. F. Fetzner.....	507,469	Oct. 24	2840	694 695	65	572
Car-brake.....	A. Young.....	489,842	Jan. 10	1313	342	62	288
Car-brake adjuster.....	F. and J. W. Cyr.....	491,535	Feb. 14	776	198	62	918
Car-brake adjuster.....	F. Slater.....	509,958	Dec. 5	184	43.44	65	1444
Car-brake adjuster.....	T. E. Thompson.....	495,191	Apr. 11	1081	269	63	219
Car-brake air-pressure apparatus.....	M. B. Mills.....	497,475	May 16	1763	444	63	967

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. sc.	Vol.	Page.
Car-brake. Automatic	E. W. Luce	493,100	Mar. 7	510	128	62	1460
Car-brake-beam. Railway	F. J. Cole	503,263	Aug. 15	1711	{ 421 422 }	64	908
Car-brake. Electric	N. J. Clute	498,624	May 30	3628	898	63	1329
Car-brake. Electric	W. C. Fletcher	492,492	Feb. 28	2290	569	62	1251
Car-brake. Electric	J. H. McEvoy	507,589	Oct. 31	3076	752	65	628
Car-brake. Electric	A. C. Miller	489,972	Jan. 17	1539	402	62	347
Car-brake. Electro-magnetic	J. C. Henry	499,543	June 13	1347	{ 319 320 }	63	1640
Car-brake hand-wheel	F. J. Pfenigar	509,448	Nov. 28	2476	597	65	1267
Car-brake handle	C. D. Lyon	491,969	Feb. 14	1455	363	62	1055
Car-brake mechanism	F. L. Clark	496,815	May 2	680	180	63	740
Car-brake mechanism	L. Roberts and J. Wheeler	491,664	Feb. 14	983	248	62	961
Car-brake mechanism. Railway	J. E. Loughridge	495,255	Apr. 11	1187	298	63	238
Car-brake-operating apparatus	M. E. Ellsworth	489,122	Jan. 3	218	58.59	62	50
Car-brake-operating device	H. H. Bierbaum	503,118	Aug. 15	1482	364	64	866
Car-brake. Railway	T. A. Ainscough	503,027	Aug. 8	1326	{ 325 326 }	64	824
Car-brake. Railway	G. F. Brandau	505,435	Sept. 26	1853	477	64	1658
Car-brake. Railway	W. Leatch	494,816	Apr. 4	471	118	63	91
Car-brake slack-adjuster	F. J. Cole	509,018	Nov. 21	1693	{ 417 418 }	65	1107
Car-brake slack-adjuster	H. Hinckley	496,606	May 2	332	91	63	680
Car-brake slack-adjuster	W. W. Holmes	490,352	Jan. 24	2198	{ 572 573 }	62	491
Car-brake slack-adjuster	W. H. Marshall	490,357	Jan. 24	2203	574	62	492
Car-brake slack-take-up	H. Hinckley	496,607	May 2	335	92	63	680
Car-brake. Street	H. A. Crossley	489,465	Jan. 10	755	200	62	174
Car-brakes. Compensating device for	M. J. Grier	507,654	Oct. 31	3193	782	65	651
Car-brakes. Hand-shaft for	J. H. Surtin	501,031	July 4	780	204	64	142
Car-buffer	W. R. S. Jones	506,116	Oct. 3	489	{ 125 127 }	65	96
Car-buffer	T. L. McKeen	491,371	Feb. 7	518	133	62	847
Car-buffer	T. L. McKeen	500,414	June 27	2771	683	63	1915
Car-buffer	W. F. Richards	495,060	Apr. 11	829	{ 210 211 }	63	173
Car-buffer	W. F. Richards	495,061	Apr. 11	831	{ 211 212 }	63	174
Car-buffer	M. E. Wallace	489,135	Jan. 3	231	62.63	62	53
Car buffer and end sill	J. Timms	493,371	Mar. 14	951	{ 244 245 }	62	1561
Car buffer. Railway	T. L. McKeen	490,977	Jan. 31	3213	820	62	703
Car buffing and draw gear	G. W. Ettenger	510,334	Dec. 5	811	196	65	1564
Car buffing mechanism	G. Westinghouse, Jr.	499,335	June 13	972	{ 234 235 }	63	1573
Car bumper. Mine	D. Bennett	496,846	May 9	728	193	63	768
Car. Cattle	F. E. Canda	509,192	Nov. 21	1988	483	65	1164
Car. Coal-dumping	W. G. Lane	501,148	July 11	988	252	64	194
Car. Combination open and closed	J. A. and G. M. Brill	493,013	Mar. 7	379	95.96	62	1433
Car construction	S. A. Jennings	496,881	May 9	805	211	63	782
Car construction	G. W. McNear	495,261	Apr. 11	1195	299	63	210
Car controlling device. Electric	J. H. Neal	494,344	Mar. 28	2567	{ 646 647 }	62	1898
Car-coupling	J. L. Adcock, W. L. Tippet, and H. G. Moss	508,265	Nov. 7	475	115	65	845
Car-coupling	M. J. Althouse	491,503	Feb. 7	719	182	62	887
Car-coupling	M. J. Althouse	491,504	Feb. 7	721	182	62	887
Car-coupling	J. E. Ament	508,797	Nov. 14	1305	324	65	1020
Car-coupling	A. P. Anderson	505,621	Sept. 26	2197	{ 555 556 }	64	1723
Car-coupling	F. Anderson	500,731	July 4	321	86	64	60
Car-coupling	J. Anderson	505,933	Oct. 3	201	51	65	40
Car-coupling	J. N. Armour and A. J. Hancock	505,892	Oct. 3	146	38	65	29
Car-coupling	J. R. Avery	504,690	Sept. 5	617	158	64	1386
Car-coupling	A. G. Baken	497,044	May 9	1051	269	63	826
Car-coupling	A. W. Ball	495,954	Apr. 25	2289	577	63	471
Car-coupling	C. A. Ballreich	505,378	Sept. 19	1750	454	64	1625
Car-coupling	D. L. Barnes	496,810	May 2	672	178	63	738
Car-coupling	R. S. Barnum	503,939	Aug. 29	2784	698	64	1140
Car-coupling	J. B. Baum and O. F. Sensabaugh	492,376	Feb. 21	3085	521	62	1197
Car-coupling	T. P. Beadle	509,590	Nov. 28	2703	654	65	1311
Car-coupling	W. C. Beal	507,982	Nov. 7	8	3	65	760
Car-coupling	C. E. Bean	497,066	May 9	1089	279	63	833
Car-coupling	L. B. Beck	508,127	Nov. 7	245	62	65	804
Car-coupling	G. Beekman	495,655	Apr. 18	1828	{ 457 458 }	63	372
Car-coupling	D. Bellon	502,650	Aug. 1	674	163	64	690
Car-coupling	T. C. Benbow	495,449	Apr. 11	1488	374	63	293
Car-coupling	F. Bender	491,976	Feb. 21	1468	366	62	1072
Car-coupling	J. C. Bishop	495,874	Apr. 18	2175	546	63	434
Car-coupling	W. J. Black and G. H. Ligo	507,707	Oct. 31	3268	799	65	665
Car-coupling	T. G. Blackman, Jr.	502,274	Aug. 1	15	4	64	569
Car-coupling	G. Blair	509,719	Nov. 28	2906	703	65	1348
Car-coupling	P. Bogler	496,849	May 9	732	194	63	769
Car-coupling	G. W. Bolton	494,776	Apr. 4	397	98	63	78
Car-coupling	E. D. Bond	507,102	Oct. 24	2209	515	65	454
Car-coupling	E. D. Bond	511,399	Dec. 26	2702	654	65	1951
Car-coupling	W. H. Brill	490,799	Jan. 31	2919	750	62	645
Car-coupling	J. W. Brook	495,578	Apr. 18	1703	429	63	352
Car-coupling	A. A. Brower	503,646	Aug. 22	2345	{ 585 586 }	64	1037
Car-coupling	A. C. Brown	495,721	Apr. 18	1935	487	63	390
Car-coupling	A. L. Brown	504,862	Sept. 12	914	236	64	1457
Car-coupling	C. Brown	495,958	Apr. 25	2292	578	63	472

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Car-coupling	I. L. Brown	511,042	Dec. 19	2078	515	65	1822
Car-coupling	J. H. Brown	491,467	Feb. 7	670	168	62	876
Car-coupling	J. H. Brown	511,233	Dec. 19	2396	584	65	1883
Car-coupling	P. C. Brown	494,246	Mar. 28	2411	608	62	1869
Car-coupling	S. C. Brown	511,117	Dec. 19	2208	541	65	1848
Car-coupling	T. H. Brown	492,370	Feb. 21	2075	518	62	1196
Car-coupling	W. J. Brush and H. C. Fayette	495,779	Apr. 18	2026	512	63	407
Car-coupling	H. C. Buhoup	491,207	Feb. 7	237	60	62	793
Car-coupling	H. C. Buhoup	498,381	May 30	3226	802	63	1258
Car-coupling	J. M. Bunch	489,924	Jan. 17	1454	380	62	331
Car-coupling	B. Burglin	509,872	Dec. 5	32	8	65	1416
Car-coupling	W. B. Burns	507,781	Oct. 31	3389	830	65	688
Car-coupling	W. H. Bush	497,859	May 23	2370	{ 593 594 }	63	1092
Car-coupling	E. N. and J. J. Byers	508,277	Nov. 7	492	118	65	849
Car-coupling	M. L. Cable	490,800	Jan. 31	2920	750	62	645
Car-coupling	B. F. Cadenhead	504,556	Sept. 5	408	104	64	1345
Car-coupling	J. C. Campbell	497,047	May 9	1054	269	63	827
Car-coupling	J. N. Campbell	490,634	Jan. 24	2653	683	62	580
Car-coupling	W. S. Campbell	497,626	May 16	2006	500	63	1010
Car-coupling	A. Carlson	491,668	Feb. 14	1038	263	62	973
Car-coupling	T. P. Carroll	489,791	Jan. 10	1239	324	62	272
Car-coupling	W. A. Cassidy and T. F. McGee	508,085	Nov. 7	180	48	65	791
Car-coupling	J. E. Catterson	495,580	Apr. 18	1704	429	63	352
Car-coupling	C. Christensen	510,160	Dec. 5	536	124	65	1511
Car-coupling	F. H. Clark and R. C. Turnbull	498,621	May 30	3624	897	63	1329
Car-coupling	H. D. Clark	493,481	Mar. 14	1120	287	62	1592
Car-coupling	W. P. Clark	491,835	Feb. 14	1247	311	62	1014
Car-coupling	S. M. Coffman	489,894	Jan. 10	1382	{ 359 360 }	62	301
Car-coupling	G. H. Conrad and A. Winter	498,625	May 30	3630	898	63	1330
Car-coupling	E. Corey	508,088	Nov. 7	184	49	65	792
Car-coupling	C. Cousy	501,871	July 18	2126	526	64	415
Car-coupling	F. M. Cox	493,251	Mar. 14	750	192	62	1523
Car-coupling	W. H. Crackel	504,021	Aug. 29	2930	734	64	1166
Car-coupling	G. H. Crowley	488,987	Jan. 3	17	5	62	6
Car-coupling	J. J. Crowley	505,287	Sept. 19	1607	417	64	1599
Car-coupling	W. W. Culbreath	493,072	Mar. 7	464	117	62	1451
Car-coupling	M. Cundiff	498,242	May 30	2987	744	63	1216
Car-coupling	H. F. Dailey and J. Poffenbarger	499,661	June 13	1527	368	63	1671
Car-coupling	C. H. Dale	494,125	Mar. 28	2219	565	62	1834
Car-coupling	C. H. Dale and F. A. Fox	494,736	Apr. 4	332	84	63	66
Car-coupling	F. P. Dark	506,583	Oct. 10	1351	339	65	271
Car-coupling	N. Darrow and J. A. Roosevelt	509,365	Nov. 28	2296	557	65	1232
Car-coupling	I. David	491,924	Feb. 14	1389	347	62	1041
Car-coupling	J. F. Davidson	502,068	July 25	2450	615	64	490
Car-coupling	L. Davis, Jr.	492,275	Feb. 21	1932	482	62	1167
Car-coupling	C. C. Davison	497,668	May 23	2398	599	63	1097
Car-coupling	C. C. Davison	509,299	Nov. 21	2176	523	65	1199
Car-coupling	A. Dean	495,150	Apr. 11	1019	254	63	207
Car-coupling	S. L. Denney	510,903	Dec. 19	1847	455	65	1780
Car-coupling	H. W. Dennis	497,637	May 16	2018	503	63	1013
Car-coupling	J. S. Derrough	494,327	Mar. 28	2533	638	62	1892
Car-coupling	G. W. Dickey	509,208	Nov. 21	2013	489	65	1169
Car-coupling	A. Dingwall	497,121	May 9	1179	{ 301 302 }	63	849
Car-coupling	J. B. Doby	495,152	Apr. 11	1022	255	63	207
Car-coupling	D. Donahue	495,315	Apr. 11	1278	319	63	255
Car-coupling	W. F. Donnell	511,073	Dec. 19	2130	526	65	1833
Car-coupling	H. R. Dore	493,913	Mar. 21	1840	469	62	1747
Car-coupling	R. K. Dorsey	497,537	May 16	1868	471	63	986
Car-coupling	C. A. Dunn	500,098	June 20	2229	543	63	1807
Car-coupling	J. W. Dyer	499,016	June 6	487	113	63	1476
Car-coupling	J. H. and F. A. Earles	497,266	May 9	1398	354	63	888
Car-coupling	A. S. Edey	496,930	May 9	887	232	63	797
Car-coupling	A. J. Edwards	489,376	Jan. 3	600	162	62	129
Car-coupling	G. Eklund	491,474	Feb. 7	680	171	62	878
Car-coupling	V. Erbach	496,251	Apr. 25	2742	686	63	556
Car-coupling	R. N. Ervin	494,630	Apr. 4	165	39	63	33
Car-coupling	W. Faulhaber	507,896	Oct. 31	3572	{ 879 880 }	65	722
Car-coupling	T. E. W. Fay	491,839	Feb. 14	1253	312	62	1015
Car-coupling	H. G. Field	491,999	Feb. 21	1501	{ 374 375 }	62	1078
Car-coupling	J. Fischer	502,711	Aug. 8	811	196	64	729
Car-coupling	O. Flohr	502,412	Aug. 1	273	65	64	616
Car-coupling	O. Flohr	502,413	Aug. 1	275	65	64	616
Car-coupling	J. W. Flynn	501,929	July 25	2237	558	64	471
Car-coupling	C. Frost	510,854	Dec. 12	1768	434	65	1753
Car-coupling	G. S. Gaines	490,958	Jan. 31	3180	813	62	696
Car-coupling	E. C. Garlick	489,943	Jan. 17	1496	{ 390 391 }	62	338
Car-coupling	R. L. Garlick	506,314	Oct. 10	885	218	65	180
Car-coupling	T. Gaskins	507,799	Oct. 31	3417	838	65	693
Car-coupling	F. A. Gaudet	501,416	July 11	1419	355	64	272
Car-coupling	H. Gay and F. Finke	501,710	July 18	1879	467	64	372
Car-coupling	H. Gay and F. Finke	508,695	Nov. 14	1161	286	65	992
Car-coupling	W. C. Gebhardt	496,276	Apr. 25	2747	687	63	557
Car-coupling	W. Gerard	501,460	July 11	1478	371	64	284
Car-coupling	F. Goff and T. H. Joiner	499,827	June 20	1814	441	63	1734
Car-coupling	C. A. Gould	495,032	Apr. 11	790	200	63	166
Car-coupling	J. B. Granger	492,328	Feb. 21	2009	500	62	1183
Car-coupling	D. D. Green	495,630	Apr. 18	1782	448	63	365
Car-coupling	C. M. Graves	501,933	July 25	2245	560	64	452

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Car-coupling	W. H. Grove	495,797	Apr. 18	2049	519	63	411
Car-coupling	O. S. Guernsey	501,832	July 18	2068	510	64	406
Car-coupling	W. M. Hall	502,295	Aug. 1	65	14	64	578
Car-coupling	W. N. Hall	498,789	June 6	59	14	63	1399
Car-coupling	C. Halpin	500,890	July 4	564	146	64	103
Car-coupling	S. Hamer	510,254	Dec. 5	691	166	65	1541
Car-coupling	M. Harmon	495,132	Apr. 11	925	247	63	201
Car-coupling	C. T. Harrison	503,346	Aug. 15	1857	459	64	933
Car-coupling	F. Harvey and J. Kane	493,998	Mar. 21	1995	508	62	1777
Car-coupling	G. A. Haslup	496,516	May 2	198	53	63	655
Car-coupling	D. W. Hausam	503,347	Aug. 15	1859	460	64	934
Car-coupling	T. H. Hawick	495,487	Apr. 18	1557	392	63	326
Car-coupling	T. Heard	489,952	Jan. 17	1510	395	62	341
Car-coupling	J. M. Henderson	503,082	Aug. 8	1402	346	64	838
Car-coupling	J. B. Hinchman and A. W. Hille	493,268	Mar. 14	777	199	62	1528
Car-coupling	J. A. Hinson	503,208	Aug. 15	1626	399	64	893
Car-coupling	J. A. Hinson	509,372	Nov. 28	2308	559	65	1235
Car-coupling	C. W. Hinton	493,402	Mar. 14	988	255	62	1569
Car-coupling	P. E. Holl	496,877	May 9	797	210	63	781
Car-coupling	J. Holm	511,427	Dec. 26	2751	665	65	1960
Car-coupling	A. H. Hopkins	495,889	Apr. 13	2196	553	63	438
Car-coupling	N. J. Hopkins	498,117	May 23	2780	695	63	1165
Car-coupling	J. B. Hughes	496,939	May 9	901	236	63	800
Car-coupling	J. C. Huguley	429,607	Jan. 10	870	252	62	217
Car-coupling	J. C. Hunsinger	497,920	May 23	2478	619	63	1111
Car-coupling	S. Hutton	510,343	Dec. 5	832	199	65	1566
Car-coupling	E. B. Hyre	503,855	Aug. 22	2654	665	64	1098
Car-coupling	F. Jacob	504,085	Aug. 29	3025	755	64	1185
Car-coupling	G. Jenkins	494,424	Mar. 28	2695	676	62	1921
Car-coupling	W. R. Jenkins	498,473	May 30	3368	839	63	1285
Car-coupling	W. S. Jennings	500,501	June 27	2894	712	63	1936
Car-coupling	D. W. and G. Jewell	506,235	Oct. 10	765	188	65	156
Car-coupling	G. Johnston	510,028	Dec. 5	320	71.72	65	1469
Car-coupling	D. R. Jones	491,562	Feb. 14	823	209	62	928
Car-coupling	W. M. Jones	510,390	Dec. 5	909	218	65	1583
Car-coupling	D. R. Joslyn	501,076	July 11	853	221	64	171
Car-coupling	J. Joss	491,357	Feb. 7	498	128	62	843
Car-coupling	A. R. Kanthack	511,623	Dec. 26	3065	749	65	2017
Car-coupling	B. A. Keeler	493,167	Mar. 7	618	155	62	1480
Car-coupling	M. Q. Keith	495,493	Apr. 18	1567	394	63	328
Car-coupling	W. Kelso	492,357	Feb. 21	2058	513	62	1192
Car-coupling	J. H. O. Kemp	509,038	Nov. 21	1724	426	65	1113
Car-coupling	L. B. Kenney	506,118	Oct. 3	492	128	65	97
Car-coupling	G. Ker	504,697	Sept. 5	631	160	64	1389
Car-coupling	W. T. Kinsey	497,184	May 9	1268	322	63	865
Car-coupling	E. Kling	501,428	July 11	1431	359	64	275
Car-coupling	J. W. Klingler	507,015	Oct. 17	2054	507	65	414
Car-coupling	H. K. Knox	493,095	Mar. 7	501	125	62	1458
Car-coupling	H. K. Knox	507,821	Oct. 31	3456	849	65	701
Car-coupling	J. T. Koch	506,598	Oct. 10	1370	343	65	275
Car-coupling	C. Koerner	494,376	Mar. 28	2624	659	62	1909
Car-coupling	J. La Burt	501,005	July 18	1705	424	64	343
Car-coupling	W. P. Lamp	492,029	Feb. 21	1552	387	62	1088
Car-coupling	D. A. Lee and M. F. Snyder	502,304	Aug. 1	79	18.19	64	581
Car-coupling	P. Lee and J. A. O'Farrell	490,147	Jan. 17	1842	451	62	408
Car-coupling	A. B. Lefever	502,305	Aug. 1	81	19	64	521
Car-coupling	F. W. Leipnitz	497,672	May 16	2074	518	63	1023
Car-coupling	C. Leischer	499,235	June 13	813	193	63	1546
Car-coupling	J. N. Leitch	495,981	Apr. 25	2330	589	63	479
Car-coupling	J. Lessard	509,817	Nov. 28	3068	740	65	1320
Car-coupling	A. T. Lewis	501,432	July 11	1435	360	64	276
Car-coupling	D. Lippy	495,158	Apr. 11	1032	257	63	209
Car-coupling	D. Lippy	495,159	Apr. 11	1033	257	63	209
Car-coupling	D. Lippy	495,160	Apr. 11	1033	257	63	209
Car-coupling	J. C. Look	493,933	Mar. 21	1872	477	62	1754
Car-coupling	J. C. Look	494,067	Mar. 21	2104	536	62	1797
Car-coupling	R. F. Ludlow	500,338	June 27	2658	651	63	1895
Car-coupling	W. Mable	495,501	Apr. 18	1577	397	63	330
Car-coupling	J. Machenheimer, Sr	503,052	Aug. 8	1360	336	64	831
Car-coupling	J. Machenheimer, Sr	503,053	Aug. 8	1361	336	64	831
Car-coupling	G. W. Mahan	493,102	Mar. 7	515	129	62	1461
Car-coupling	G. E. Mann	510,278	Dec. 5	731	177	65	1548
Car-coupling	L. S. Manning	499,133	June 6	657	158	63	1505
Car-coupling	H. H. Markley	494,539	Mar. 28	2889	724	62	1957
Car-coupling	J. A. Markley	499,558	June 13	1369	327	63	1644
Car-coupling	A. C. Martin	502,735	Aug. 8	840	204	64	735
Car-coupling	H. H. Martin	502,369	Aug. 1	88	20	64	582
Car-coupling	B. Mayer and W. H. Mitchell	500,342	June 27	2666	654	63	1896
Car-coupling	A. C. McCord	489,492	Jan. 10	795	210	62	182
Car-coupling	A. C. McCord	489,976	Jan. 17	1546	404	62	344
Car-coupling	A. C. McCord	489,977	Jan. 17	1548	403	62	349
Car-coupling	A. C. McCord	494,219	Mar. 28	2371	599	62	1862
Car-coupling	J. McCormick and J. R. Deisher	501,527	July 18	1580	398	64	319
Car-coupling	J. MeDade	489,826	Jan. 10	1286	336	62	282
Car-coupling	T. B. McDermott	501,805	July 18	2037	501	64	399

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Car-coupling	J. McDonogh	506,528	Oct. 10	1271	318	65	255
Car-coupling	P. McEntee	505,803	Sept. 26	2511	633 634	64	1781
Car-coupling	J. C. McEwen	491,185	Feb. 7	204	52	62	787
Car-coupling	R. D. McGee	508,899	Nov. 14	1464	362	65	1048
Car-coupling	T. L. McKeen	492,610	Feb. 23	2476	615	62	1291
Car-coupling	T. L. McKeen	493,833	Mar. 21	1713	436	62	1723
Car-coupling	J. M. McMaster	502,375	Aug. 1	211	50	64	604
Car-coupling	C. W. and H. F. McMillen	502,631	Aug. 1	640	153	64	685
Car-coupling	B. McMonagle	495,508	Apr. 18	1587	399	63	332
Car-coupling	P. McMullen	509,388	Nov. 28	2339	566 567	65	1240
Car-coupling	W. L. McQuarrie	489,195	Jan. 3	329	90	62	74
Car-coupling	E. L. Meigs	507,376	Oct. 24	2701	663	65	545
Car-coupling	C. E. Miller and P. M. Haas	499,639	June 13	1495	358 359	63	1666
Car-coupling	H. O. Miller	490,811	Jan. 31	2937	753 754	62	649
Car-coupling	H. O. Miller	502,260	July 25	2778	701 702	64	553
Car-coupling	W. F. Monroe and T. W. Creek	495,933	Apr. 25	2332	589	63	479
Car-coupling	L. Moore	495,595	Apr. 18	1727	435	63	556
Car-coupling	L. Moore	506,827	Oct. 17	1752	441	65	358
Car-coupling	C. Morfit	493,638	Mar. 21	1397	354	62	1662
Car-coupling	W. O. Morton	508,035	Nov. 7	84	24	65	773
Car-coupling	D. A. Mullane	506,788	Oct. 17	1685	424	65	345
Car-coupling	J. Munton and A. Frazier	500,815	July 4	448	117	64	83
Car-coupling	J. Murphy	497,593	May 16	1955	499	63	1001
Car-coupling	C. O. Myers	498,675	May 30	3720	919	63	1345
Car-coupling	J. L. Myers	494,878	Apr. 4	566	142	63	110
Car-coupling	R. Nash	500,074	June 20	2198	536	63	1802
Car-coupling	M. W. Needham	507,685	Oct. 31	3233	792	65	658
Car-coupling	W. C. Nelson	510,360	Dec. 5	846	204	65	1571
Car-coupling	A. F. Nesbit	490,978	Jan. 31	3214	821	62	703
Car-coupling	G. A. Norcross	501,688	July 18	1840	458	64	366
Car-coupling	T. H. Nunn	503,490	Aug. 15	2074	517	64	973
Car-coupling	T. C. O'Donnell	507,686	Oct. 31	3234	792	65	658
Car-coupling	C. P. Oldham	509,552	Nov. 23	2645	640	65	1299
Car-coupling	C. S. Park	503,615	Aug. 22	2303	574	64	1029
Car-coupling	L. Parnley	489,659	Jan. 10	1031	260	62	230
Car-coupling	W. B. Parrish	506,933	Oct. 17	1931	478	65	391
Car-coupling	J. O. Pattee and H. H. Vaughan	501,575	July 18	1654	414	64	334
Car-coupling	W. B. Patterson	501,576	July 18	1656	414	64	334
Car-coupling	C. W. Patton	502,499	Aug. 1	423	100	64	644
Car-coupling	E. T. Peirce	497,684	May 16	2095	523	63	1027
Car-coupling	W. B. and S. C. Peoples and T. J. Cox	500,420	June 27	2780	685	63	1916
Car-coupling	E. Perroté	501,577	July 18	1658	414	64	334
Car-coupling	E. N. Pitts and H. D. Cowden	508,527	Nov. 14	908	223	65	941
Car-coupling	C. A. Pooley	491,589	Feb. 14	869	220	62	937
Car-coupling	J. T. Pougher	497,208	May 9	1299	331	63	870
Car-coupling	J. C. Powell	489,391	Jan. 3	623	168	62	134
Car-coupling	J. F. Preston, A. F. Ferrell and H. Schiffbauer	496,368	Apr. 25	2949	736 737	63	596
Car-coupling	A. Price	494,691	Apr. 4	260	65	63	52
Car-coupling	W. Price	506,543	Oct. 10	1293	323	65	260
Car-coupling	J. H. Quimby	508,239	Nov. 7	425	103	65	837
Car-coupling	T. W. Ranson	489,661	Jan. 10	1033	270	62	230
Car-coupling	J. Rawles	496,444	May 2	89	25	63	635
Car-coupling	J. Reinicke	508,976	Nov. 21	1833	400 401	65	1095
Car-coupling	A. H. Renshaw	489,233	Jan. 3	389	107 108	62	87
Car-coupling	A. H. Renshaw and H. H. Burden	496,956	May 9	921	242	63	804
Car-coupling	T. Renwick	509,627	Nov. 23	2762	666	65	1322
Car-coupling	H. Resley	510,291	Dec. 5	753	182	65	1552
Car-coupling	W. C. Richard and H. Hanson	491,059	Jan. 31	3318	854	62	731
Car-coupling	W. F. Richards	491,134	Feb. 7	110	30	62	770
Car-coupling	W. F. Richards	495,062	Apr. 11	833	212	63	174
Car-coupling	W. F. Richards	498,029	May 23	2647	662	63	1140
Car-coupling	W. F. Richards	509,100	Nov. 21	1844	451	65	1135
Car-coupling	W. F. Richards	511,457	Dec. 26	2797	677	65	1969
Car-coupling	B. K. Richardson	509,248	Nov. 21	2091	504	65	1183
Car-coupling	E. Richter	495,220	Apr. 11	1142	285	63	230
Car-coupling	E. Richter	510,190	Dec. 5	584	136	65	1520
Car-coupling	J. B. Riddle	497,213	May 9	1309	333	63	873
Car-coupling	J. B. Riddle	506,075	Oct. 3	428	112	65	83
Car-coupling	J. D. Ripson	502,205	July 25	2671	674	64	533
Car-coupling	H. W. Rist	498,190	May 23	2890	720	62	1184
Car-coupling	G. W. Roberson	494,167	Mar. 28	2284	579	62	1844
Car-coupling	R. S. Robertson	489,092	Jan. 3	169	46	62	40
Car-coupling	W. W. Roehm and J. Schweitzer, Jr.	507,932	Oct. 31	3633	898	65	732
Car-coupling	F. L. Rousseau	508,344	Nov. 7	588	144	65	867
Car-coupling	G. Runge	494,030	Mar. 21	2046	522	62	1787
Car-coupling	F. M. Ryan	498,575	May 30	3541	876 877	63	1314
Car-coupling	S. B. and J. R. Sadler	505,608	Sept. 26	2184	552	64	1721
Car-coupling	S. C. Sams	494,941	Apr. 4	648	166	63	125
Car-coupling	F. W. Sargent	502,532	Aug. 1	479	115	64	654
Car-coupling	A. H. Saunders	497,608	May 16	1977	495	63	1005
Car-coupling	H. Schreyer	492,842	Mar. 7	106	26	62	1378
Car-coupling	W. S. Schroeder and A. P. Lindholm	509,104	Nov. 21	1848	452 453	65	1136
Car-coupling	J. H. Scoggin	506,644	Oct. 10	1435	360	65	287

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Car-coupling	J. S. Scott	511,278	Dec. 19	2477	603	65	1897
Car-coupling	J. S. Scott	511,279	Dec. 19	2478	603	65	1897
Car-coupling	M. P. Scott	501,734	July 18	1912	475 476	64	378
Car-coupling	J. M. Scurr and S. R. Cotton	493,792	Mar. 21	1644	419	62	1711
Car-coupling	J. M. Scurr and E. D. Whipple	493,793	Mar. 21	1646	419	62	1711
Car-coupling	E. W. Seitz	504,759	Sept. 12	742	185	64	1424
Car-coupling	J. F. Sharp	506,833	Oct. 17	1760	443	65	359
Car-coupling	S. Shaftuck	489,393	Jan. 3	625	169	62	135
Car-coupling	B. F. Sheldon	500,961	July 4	674	177	64	123
Car-coupling	S. Shepardson	492,242	Feb. 21	18-2	470	62	1157
Car-coupling	Z. A. and W. J. Sheram	511,654	Dec. 26	3107	759	65	2025
Car-coupling	R. A. Shipman	489,765	Jan. 10	1202	315 316	62	264
Car-coupling	F. C. Shoemaker	497,418	May 16	1671	422	63	952
Car-coupling	J. Simpson	489,992	Jan. 17	1578	413	62	354
Car-coupling	L. N. Singin	497,930	May 23	2492	622	63	1114
Car-coupling	E. J. Sitler	489,421	Jan. 3	667	181	62	143
Car-coupling	G. W. Smillie	508,441	Nov. 14	755	186	65	912
Car-coupling	G. W. Smillie	508,442	Nov. 14	756	186	65	913
Car-coupling	G. W. Smillie	511,220	Dec. 19	2375	579	65	1879
Car-coupling	J. H. C. and N. B. Smith	510,097	Dec. 5	430	96	65	1491
Car-coupling	J. L. Smith	490,169	Jan. 17	1872	488	62	414
Car-coupling	R. A. Smith	507,762	Oct. 31	3349	821	65	680
Car-coupling	W. W. Smith	494,391	Mar. 28	2652	665	62	1913
Car-coupling	W. W. Smith	494,512	Mar. 28	2835	710	62	1947
Car-coupling	C. H. Snyder	510,719	Dec. 12	1489	368	65	1704
Car-coupling	J. C. Souleyret	509,144	Nov. 21	1911	467	65	1148
Car-coupling	J. L. Sowell	500,624	July 4	140	37	64	27
Car-coupling	D. Sprecher	503,175	Aug. 15	1574	388	64	884
Car-coupling	C. F. Springer	508,532	Nov. 14	1395	347	65	1036
Car-coupling	S. H. Springer	501,592	July 18	1679	419	64	338
Car-coupling	A. J. Stanley	509,457	Nov. 28	2497	603	65	1271
Car-coupling	F. M. Stanley	490,515	Jan. 24	2447	631	62	539
Car-coupling	J. M. Stark	489,395	Jan. 3	628	169	62	135
Car-coupling	W. H. and J. T. Starkey	491,450	Feb. 7	645	161	62	871
Car-coupling	J. W. Steele	491,862	Feb. 14	1296	320	62	1023
Car-coupling	W. E. Steffey	503,754	Aug. 22	2522	627	64	1071
Car-coupling	A. Stein	503,503	Aug. 15	2093	522 523 524	64	976
Car-coupling	F. Stenger	491,929	Feb. 14	1395	348	62	1043
Car-coupling	J. Sterns	490,128	Jan. 17	1813	474	62	403
Car-coupling	F. A. Stevens	508,779	Nov. 14	1278	318	65	1014
Car-coupling	E. B. Stone	508,062	Nov. 7	125	35	65	782
Car-coupling	T. M. Stuart	505,930	Oct. 3	198	50	65	39
Car-coupling	S. Stump	511,556	Dec. 26	2944	717	65	1997
Car-coupling	W. W. Swank	491,612	Feb. 14	912	229	62	946
Car-coupling	J. L. Swanson	505,861	Oct. 3	94	25	65	20
Car-coupling	E. A. Sweet and L. B. Sessions	507,180	Oct. 24	2363	583	65	482
Car-coupling	T. Sweet	503,999	Aug. 29	2900	726	64	1160
Car-coupling	J. H. Swindell	497,612	May 16	1982	496	63	1006
Car-coupling	J. H. Swindell	497,613	May 16	1983	496	63	1006
Car-coupling	J. H. Swindell	499,947	June 20	1997	485	63	1767
Car-coupling	J. H. Talpey	493,534	Mar. 14	1210	310	62	1608
Car-coupling	H. Tatam	497,837	May 23	2335	585	63	1026
Car-coupling	C. H. Taylor	504,637	Sept. 5	519	134	64	1368
Car-coupling	J. Tebo and A. Paquin	490,838	Jan. 31	2975	763	62	657
Car-coupling	W. R. Teegarden and R. A. Clark	496,493	May 2	156	44, 45	63	647
Car-coupling	W. R. Teegarden, R. A. and J. G. Clark	496,494	May 2	157	45, 46	63	648
Car-coupling	A. Testard	500,224	June 27	2477	604	63	1863
Car-coupling	F. Tiemann	502,505	Aug. 1	431	103	64	645
Car-coupling	J. Timms	496,920	May 9	875	230	63	795
Car-coupling	J. Timms. (Reissue)	11,348	June 27	2973	750	63	1952
Car-coupling	J. E. Tiner	506,955	Oct. 17	1957	485	65	396
Car-coupling	J. B. E. Tittle	498,827	June 6	131	32	63	1415
Car-coupling	H. W. Toier	508,192	Nov. 7	346	85	65	822
Car-coupling	C. A. Tower	507,511	Oct. 24	2919	718	65	586
Car-coupling	E. R. Trammell	490,592	Jan. 24	2556	657	62	590
Car-coupling	A. Trautman	490,604	Jan. 24	2578	664	62	565
Car-coupling	L. Triplett, Jr., and J. Fry	504,408	Sept. 5	156	41	64	1299
Car-coupling	A. G. Tupper	509,779	Nov. 28	3005	726 727	65	1368
Car-coupling	W. T. Van Dorn	503,017	Aug. 8	1310	321	64	821
Car-coupling	A. Vanderbeck	505,562	Sept. 26	2103	533 534	64	1705
Car-coupling	F. Vaughan	500,981	July 4	707	186	64	128
Car-coupling	F. W. Verde	507,861	Oct. 31	3523	867	65	713
Car-coupling	F. J. Vowles	499,267	June 13	858	205	63	1553
Car-coupling	J. Wadleigh	506,247	Oct. 10	852	210	65	174
Car-coupling	W. J. Walker	491,823	Feb. 14	1229	307	62	1010
Car-coupling	W. J. Walker	496,924	May 9	879	231	63	796
Car-coupling	W. J. Walker. (Reissue)	11,353	July 25	2783	703	64	554
Car-coupling	W. J. Walker and A. L. Bedford	500,448	June 27	2822	695	63	1924
Car-coupling	W. J. Walker and L. Hammer-schmidt	489,770	Jan. 10	1211	317	62	266
Car-coupling	M. E. Wallace	491,301	Feb. 7	399	102	62	823
Car-coupling	V. Wallace	493,902	Mar. 21	1815	462	62	1743
Car-coupling	W. H. Wallace	509,588	Nov. 28	2701	653	65	1310
Car-coupling	W. C. Watson	507,296	Oct. 24	2556	630	65	516
Car-coupling	W. C. Watson	509,108	Nov. 21	1857	454	65	1138
Car-coupling	W. C. Watson	510,660	Dec. 12	1399	344	65	1686
Car-coupling	M. I. Welch	496,025	Apr. 25	2393	605	63	491

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Car-coupling	M. I. Welch	496,026	Apr. 25	2394	{ 605 606	63	491
Car-coupling	S. G. Wilber	490,004	Jan. 17	1593	416	62	357
Car-coupling	S. G. Wilber	507,866	Oct. 31	3531	868	65	714
Car-coupling	J. G. Williams	498,343	May 30	3175	790	63	1248
Car-coupling	W. E. Williams	494,663	Apr. 4	215	54	63	44
Car-coupling	R. R. Wilson	485,539	Apr. 18	1639	411	63	340
Car-coupling	C. M. Winn	489,427	Jan. 3	679	183	62	116
Car-coupling	F. B. Woodman	498,870	June 6	210	51	63	1430
Car-coupling	E. W. Woolley	510,949	Dec. 19	1937	{ 472 473	65	1797
Car-coupling	W. B. Yates	499,491	June 13	1256	299	63	1624
Car-coupling	S. A. Yeager, W. I. Luckenbach, and A. P. Balliet.	504,958	Sept. 12	1066	273	64	1486
Car-coupling	J. Zehneck	499,078	June 6	577	138	63	1492
Car-coupling	J. Zilius	504,015	Aug. 29	2923	732	64	1164
Car-coupling	M. Zimmerman	509,993	Dec. 5	255	59	65	1457
Car-coupling. Automatic.	H. White	500,309	June 27	2613	638	63	1887
Car-coupling link	G. Beekman	503,116	Aug. 15	1479	363	64	865
Car-coupling. Safety.	J. M. Roach	490,399	Jan. 24	2262	588	62	503
Car-couplings. Manufacturing.	J. Munton	493,218	Mar. 7	687	176	62	1494
Car-couplings. Unlocking-lever for	J. Timms	491,388	Feb. 7	546	139	62	853
Car-couplings. Wear-plate for head-blocks of	J. B. Safford	501,963	July 25	2284	572	64	459
Car cover. Coal.	T. M. Nalton	509,935	Dec. 5	149	34, 35	65	1437
Car deflector and ventilator. Passenger.	C. E. Berry	500,555	July 4	30	10	64	8
Car-door	J. W. Dellinger	499,909	June 20	1950	473	63	1759
Car-door	A. S. Desha	492,276	Feb. 21	1934	483	62	1168
Car-door	T. Eubank	509,570	Nov. 23	2675	647	65	1305
Car-door	S. A. Jennings	495,250	Apr. 11	1182	296	63	237
Car-door	J. Lafore	505,836	Oct. 3	52	14	65	13
Car-door	N. Roy	497,218	May 9	1316	335	63	874
Car-door and conductor's observatory. Combined	W. Sutton	499,604	June 13	1437	345	63	1656
Car-door. Combination swing and sliding	W. Sutton	507,853	Oct. 31	3512	864	65	710
Car-door fastener	J. B. Nowland	506,064	Oct. 3	409	107	65	80
Car-door. Grain.	W. F. Lyon	492,926	Mar. 7	247	63	62	1407
Car-door. Grain.	A. C. McCord	494,220	Mar. 28	2372	599	62	1862
Car-door. Grain.	P. J. Monaghan and H. Mohaupt	497,193	May 9	1276	324	63	866
Car-door. Grain.	G. W. Perry	509,941	Dec. 5	158	37	65	1439
Car-door lock	J. Pearson	509,939	Dec. 5	155	36	65	1438
Car-doors. Combined lock and cinder-guard for	J. B. Nowland	506,065	Oct. 3	409	107	65	80
Car-doors, &c. Locking device for	W. W. Haley	495,327	Apr. 11	1297	326	63	258
Car draft attachment	R. Clark	497,264	May 9	1395	353	63	887
Car draft device	J. Timms	507,293	Oct. 24	2550	628	65	515
Car draft device	N. Weis	490,935	Jan. 31	3139	805	62	639
Car draft-rigging	G. L. Potter	498,026	May 23	2644	661	63	1140
Car draft-rigging	P. M. Reagan	491,785	Feb. 14	1175	294	62	998
Car draw-bar	G. W. Tompkins	498,329	May 30	3138	782	63	1243
Car draw-bar. Street.	J. A. Trimble	498,334	May 30	3147	785	63	1244
Car draw-gear	F. E. Ellis	497,777	May 23	2251	564	63	1072
Car draw-gear apparatus.	G. Westinghouse, Jr.	499,336	June 13	975	{ 235 236 237	63	1574
Car draw-rigging	J. W. Allison	510,828	Dec. 12	1678	417	65	1738
Car. Dump.	I. Barker	489,211	Jan. 3	351	99	62	80
Car. Dumping.	E. A. Kaufman	492,904	Mar. 7	211	52	62	1400
Car. Dumping.	W. A. Thacher	489,242	Jan. 3	400	{ 111 112	62	90
Car. Dumping.	W. A. Thacher	489,243	Jan. 3	404	{ 112 113	62	90
Car. Dumping.	W. A. Thacher	496,672	May 2	450	121	63	701
Car. Dumping.	W. A. Thacher	508,998	Nov. 21	1662	{ 409 410	65	1101
Car. Dumping.	E. A. Trapp	490,324	Jan. 24	2144	{ 559 560	62	480
Car. Dumping.	E. A. Trapp	493,317	Mar. 14	868	{ 221 222	62	1543
Car. Dumping.	H. C. Womelsdorff	489,111	Jan. 3	200	53, 54	62	46
Car-dumping apparatus	A. E. Williams	508,071	Nov. 7	141	40, 41	65	785
Car dust-guard. Railway.	D. H. Mondy	494,643	Apr. 4	181	46	63	37
Car. Electric.	C. Brown	493,969	Mar. 21	1947	496	62	1767
Car. Elevated-railway	J. L. Pope	508,631	Nov. 14	1068	{ 264 265	65	974
Car. Elevated-railway	H. S. Pruyn	494,081	Mar. 21	2129	{ 514 515	62	1802
Car emergency-brake	J. Goodfellow	493,705	Mar. 21	1466	383	62	1681
Car equalizing device	J. Gosney	501,573	July 4	55	16	64	11
Car-fender	I. Bean	509,646	Nov. 28	2790	671	65	1327
Car-fender	F. W. Brown	509,996	Dec. 5	253	60	65	1458
Car-fender	G. E. Cates and D. Reuschenberg	511,586	Dec. 26	2994	729	65	2006
Car-fender	A. L. Clarke	489,848	Jan. 10	1320	344	62	289
Car-fender	A. L. Clarke	508,565	Nov. 14	963	236	65	953
Car-fender	H. T. Field	494,524	Mar. 28	2856	715	62	1951
Car-fender	M. F. Field	502,959	Aug. 8	1221	{ 300 301	64	805
Car-heater	E. H. Gold	508,514	Nov. 14	886	218	65	938
Car-fender	C. H. and E. M. Green	506,315	Oct. 10	887	219	65	181
Car-fender	C. T. Grilley	502,037	July 25	2401	604	64	481
Car-fender	G. Hipwood, H. C. Barrett, and S. Porter.	507,655	Oct. 31	3196	782	65	651
Car-fender	W. A. Kuhlman	506,785	Oct. 17	1681	423	65	345
Car-fender	G. Lowe	496,424	May 2	49	14	63	627
Car-fender	J. W. McKinnon	511,640	Dec. 26	3088	754	65	2022
Car-fender	J. Nagele	492,423	Feb. 28	2165	540	62	1226
Car-fender	G. F. Topliff and F. B. Comins	489,134	Jan. 3	230	62	62	53

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Car-fender	J. N. Wiczorek	499,812	June 20	1784	433	63	1730
Car fender and brake combined	F. W. Smith	502,780	Aug. 8	916	223	64	749
Car fender and life-guard. Street	S. Du Moulin	504,081	Aug. 29	3015	753 754	64	1182
Car fender. Electric	E. Rochester	494,281	Mar. 28	2471	622 623	62	1879
Car fender. Railway	F. Groshans	499,882	June 20	1910	464	63	1752
Car fender. Railway	E. W. Harding	506,396	Oct. 10	1037	258	65	210
Car-fender. Safety	G. Latz	498,556	May 30	3517	870	63	1310
Car fender. Street	D. Flanders	511,604	Dec. 26	3033	739	65	2012
Car fender. Street	W. Leonhardt	497,583	May 16	1935	486	63	997
Car fender. Street	W. B. Miles	510,922	Dec. 19	1882	461	65	1787
Car fender. Street	L. Pfingst	494,689	Apr. 4	254	64, 65	63	51
Car fender. Street	T. C. Rice	494,165	Mar. 28	2280	578	62	1844
Car fender. Street	H. B. Williams	496,146	Apr. 25	2577	648	63	525
Car fender. Street-railway	L. J. Hirt	495,972	Apr. 25	2313	584	63	476
Car floor-frame	F. E. Ellis	497,776	May 23	2250	564	63	1071
Car-floor. Ventilated	H. M. Minto	499,303	June 13	921	223	63	1565
Car for transporting horses. Railway	W. A. Caswell	491,936	Feb. 14	1408	351 352	62	1045
Car-frame	W. Robinson	493,876	Mar. 21	1775	453	62	1735
Car. Freight	E. E. Pratt	503,874	Aug. 22	2679	671	64	1102
Car-gate	G. W. Naylor and N. W. Foley	492,826	Mar. 7	84	20	62	1374
Car gear. Street	M. G. Hubbard	503,142	Aug. 15	1519	373	64	873
Car-gong	J. H. Sartin	501,030	July 4	778	204	64	142
Car. Grain	A. L. Whitcomb	492,128	Feb. 21	1695	422	62	1117
Car grip. Cable	D. E. Washington	496,499	May 2	166	47	63	649
Car grippers. Apparatus for shipping or unshipping cable	J. H. Pendleton and C. Tiers	492,103	Feb. 21	1658	412 413	62	1110
Car-guard. Rotary	J. C. Loucks and W. W. Huelster	497,381	May 16	1614	408	63	942
Car. Hand	A. Hitt	505,830	Oct. 3	42	11, 12	65	11
Car. Hand	W. Randolph	492,337	Feb. 21	2025	503 504	62	1186
Car. Hand	C. Roberts	511,211	Dec. 19	2361	577	65	1876
Car. Hand	J. M. Taft	495,529	Apr. 18	1621	408	63	337
Car hand-strap	E. E. Rombauer	497,893	May 23	2436	607	63	1104
Car hand-strap. Street	S. A. Flanigan	490,191	Jan. 17	1907	497	62	421
Car hauling and controlling mechanism	P. Hartman	497,661	May 16	2058	514	63	1020
Car-heater	W. C. Baker	498,924	June 6	314	73	63	1448
Car-heater	C. E. Dolan	506,984	Oct. 17	2004	496	65	405
Car-heater	P. J. Fitzgerald and D. F. Barry	499,017	June 6	489	113 114	63	1476
Car-heater	G. D. Hiscox	501,718	July 18	1889	470	64	374
Car-heater	E. A. Quisenberry	501,361	July 11	1332	333	64	256
Car-heater	E. A. Quisenberry	501,489	July 11	1510	380	64	290
Car-heater	G. W. Rodgers	493,388	Mar. 14	973	250	62	1565
Car-heater	G. W. Rodgers	499,594	June 13	1424	341	63	1654
Car-heater	M. A. Wilcox	509,415	Nov. 28	2398	581	65	1250
Car heater. Street	G. Myers	496,091	Apr. 25	2503	631	63	511
Car heating and ventilating apparatus	W. Howard	503,745	Aug. 22	2507	624	64	1068
Car-heating apparatus	G. Collins	489,524	Jan. 10	853	222	62	194
Car-heating apparatus	J. F. McElroy	493,443	Mar. 14	1058	272	62	1581
Car-heating apparatus	T. R. Yates	507,302	Oct. 24	2516	633	65	521
Car heating apparatus. Railway	J. F. McElroy	490,673	Jan. 31	2723	701	62	608
Car-heating apparatus. Street	J. F. McElroy	497,385	May 16	1621	409	63	943
Car-heating device	R. Quayle	497,252	May 9	1372	348	63	884
Car-heating system and apparatus	E. H. Gold	508,513	Nov. 14	883	218	65	937
Car-heating systems. Trap for	E. E. Gold	508,569	Nov. 14	975	240	65	955
Car hook. Stock	B. C. Hicks	491,803	Feb. 14	1204	301	62	1004
Car. Hopper-bottom	R. Blackstone	500,846	July 4	497	129	64	91
Car indicator. Street	J. W. Dear	502,227	July 25	2709	684	64	541
Car jack. Street	G. F. Pearson	502,200	July 25	2665	673	64	532
Car journal-box	J. J. Busenbenz	503,405	Aug. 15	1941	482	64	949
Car life-guard or fender	J. F. Ingraham	511,432	Dec. 26	2757	666	65	1961
Car life-guard. Street	T. Barnes	504,485	Sept. 5	284	73	64	1323
Car life-guard. Street	C. W. Howe	511,428	Dec. 26	2752	665	65	1960
Car life-preserving guard	A. Knoblauch	508,888	Nov. 14	1449	359	65	1045
Car-lighting system. Electric	J. C. Henry	508,616	Nov. 14	1011	257	65	968
Car-lighting system. Electric	F. E. Kinsman	506,237	Oct. 10	768	199 190	65	157
Car-lighting system. Electric	I. N. Lewis	504,681	Sept. 5	604	154 155	64	1384
Car-loading apparatus	D. C. Boyce	503,364	Aug. 15	1889	468 469	64	939
Car loading or unloading apparatus	A. M. Commun	498,155	May 23	2826	707 708	63	1173
Car. Log	L. T. Johnson	500,712	July 4	288	78	64	53
Car. Metallic	G. M. Bird	490,469	Jan. 24	2370	613	62	523
Car. Mining	H. Corrigan and H. E. Fulkerson	500,114	June 27	2261	550	63	1824
Car-motor. Auxiliary	W. H. Schalliol	500,432	June 27	2801	689	63	1920
Car motor. Street	J. A. Currie	492,274	Feb. 21	1930	482	62	1167
Car-mover	W. L. Carr	489,410	Jan. 3	646	175	62	139
Car-mover	S. C. Chase	493,615	Mar. 14	1358	344	62	1638
Car-mover	P. H. Jacobus	504,529	Sept. 5	365	92	64	1338
Car-mover	F. Mertsheimer	498,521	May 30	3450	856	63	1298
Car. Non-telescopic railway	J. E. Page	493,597	Mar. 14	1324	338 339	62	1632
Car. Non-telescopic railway	J. E. Page	510,816	Dec. 12	1650	411 412	65	1733
Car. Oil-tank	J. D. McIlwain	493,940	Mar. 21	1886	40 41	62	1756
Car or other seats. Reversible back for	M. N. Forney	488,992	Jan. 3	24	78	62	7
Car. Passenger	H. W. Libbey	502,908	Aug. 8	1126	277	64	789
Car. Pilot	G. Link	505,406	Sept. 19	1800	465	64	1613

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Car-platform	A. C. McCord	489,978	Jan. 17	1550	405	62	340
Car-platform and gate	E. W. Appelmann	497,744	May 16	2181	545	63	1044
Car-platform balcony	E. W. Appelmann	509,641	Nov. 28	2784	169	65	1326
Car-platform gate	C. H. Cox	508,815	Nov. 14	1334	330	65	1024
Car-platform holder	E. M. Gurnee	499,106	June 6	613	147	63	1497
Car-platform. Railway	H. D. Arkland	495,652	Apr. 18	1824	456	63	372
Car-platforms. Folding gate for	W. S. Adams	507,092	Oct. 24	2185	541	65	449
Car-platforms. Folding gate for	H. Cochran	492,139	Feb. 21	1713	426	62	1122
Car. Poultry	F. X. Mudd	489,657	Jan. 10	1029	268 269	62	229
Car-propeller	J. P. Robertson	509,491	Nov. 28	2548	615	65	1281
Car. Push	C. Roberts	509,182	Nov. 21	1969	479	65	1160
Car. Railway	F. U. Adams	489,912	Jan. 17	1429	375 376	62	325
Car. Railway	C. Brown	494,319	Mar. 28	2520	635	62	1890
Car. Railway	M. W. Edgar	509,300	Nov. 21	2178	523 524	65	1199
Car. Railway	J. D. Morrison	497,677	May 16	2020	519 520	63	1024
Car. Railway	R. L. Piepenbring	508,835	Nov. 14	1366	338	65	1030
Car. Railway	T. E. Pope	504,615	Sept. 5	488	125 126	64	1361
Car. Railway	T. E. Pope	504,616	Sept. 5	490	126	64	1362
Car. Railway freight	X. Caverno and W. E. Fowler	498,234	May 30	2970	740	63	1212
Car register. Street	L. Ehrlich	490,342	Jan. 24	2173	567	62	486
Car register. Street	F. K. Fassett and G. Rein	490,345	Jan. 21	2182	568 569	62	487
Car register. Street	O. E. Michaud	505,167	Sept. 19	1417	364 365	64	1563
Car-replacer	J. H. Blomshield	502,806	Aug. 8	957	233	64	757
Car-replacer	J. Fisher	494,806	Apr. 4	453	112	63	87
Car-replacer	H. G. Hanson	496,935	May 9	895	234 235	63	799
Car-replacer	F. A. Moore	489,187	Jan. 3	315	87	62	72
Car-replacer	H. Saunders	497,927	May 23	2489	621	63	1113
Car-replacer	J. N. Stein	493,308	Mar. 14	855	218	62	1541
Car-replacer	B. E. Tilden	489,109	Jan. 3	198	53	62	46
Car-replacer and derailler	D. D. Green	496,055	Apr. 25	2447	617	63	501
Car-roof	P. H. Murphy	489,322	Jan. 3	517	141	62	112
Car-roof	J. F. Veronee and G. McInerney	491,909	Feb. 14	1363	340	62	1036
Car-roof	J. C. Wands	496,332	Apr. 25	2877	718 719	63	582
Car-roof	J. C. Wands	503,886	Aug. 22	2698	676	64	1106
Car-roof covering attachment	A. N. Monteer	491,120	Feb. 7	88	24, 25	62	766
Car-roof covering attachment	A. N. Monteer	507,627	Oct. 31	3138	768	65	641
Car-roof. Flanged metal plated and sheeted double	P. H. Murphy	499,641	June 13	1496	359	63	1666
Car-roof. Non-conductor compound	P. H. Murphy	500,028	June 20	2126	515	63	1729
Car running-gear. Mining	J. Gowland	492,917	Mar. 7	236	59	62	1405
Car. Safety	B. F. Brown	499,819	June 20	1795	436 437	63	1732
Car. Safety	J. A. Yarger	490,529	Jan. 24	2470	636	62	543
Car safety attachment	I. W. Bisbing and J. E. Gerhart	504,798	Sept. 12	801	205	64	1434
Car safety attachment	R. Bustin and T. I. McMackin	495,928	Apr. 18	2248	567	63	448
Car safety attachment. Street	L. E. Dubois	499,910	June 20	1951	474	63	1759
Car safety device	L. J. Couch	504,078	Aug. 29	3011	752	64	1181
Car safety device. Railway	C. L. Pullman	509,326	Nov. 21	2224	537 538	65	1207
Car safety device. Street	J. M. Kelly	507,138	Oct. 24	2285	561	65	468
Car safety-fender. Tram	H. S. Robins	507,167	Oct. 24	2336	575	65	477
Car safety-guard	N. C. Bassett	492,932	Mar. 7	254	64, 65	62	1409
Car sand-box	J. M. Christopher	507,066	Oct. 17	2137	530	65	428
Car sand-box. Street	E. F. De Witt	491,161	Feb. 7	161	41, 42	62	779
Car sanding attachment. Street	T. B. Clark	498,706	May 30	3773	931	63	1354
Car sanding-box	J. J. Kenelly	501,722	July 18	1895	471	64	375
Car sanding device	J. R. Dougherty	511,199	Dec. 19	2342	573	65	1873
Car sanding device	D. A. Ghent and O. S. Colbran	494,136	Mar. 28	2333	568	62	1836
Car sanding device	H. H. Hennegin	510,258	Dec. 5	702	169	65	1543
Car sanding device	E. H. Pinkham	494,080	Mar. 21	2128	544	62	1801
Car sanding device	N. Seibert	502,053	July 25	2428	611	64	486
Car sanding device. Railway	M. F. Field	505,976	Oct. 3	270	71	65	53
Car sanding device. Street	A. S. Bunker	490,896	Jan. 31	3080	790	62	678
Car sanding device. Street	C. W. West and W. R. Womach	497,902	May 23	2449	612	63	1106
Car sanding device. Street	E. F. de Witt	498,632	May 30	3636	900	63	1331
Car-seat	E. Aze and E. N. Gillilan	491,761	Feb. 14	1133	285	62	991
Car-seat	F. H. Henry	500,204	June 27	2443	596	63	1857
Car-seat	J. S. Johnston	489,562	Jan. 10	905	236	62	204
Car-seat	J. Lemman	504,882	Sept. 12	943	243	64	1462
Car-seat	R. R. Pease	506,373	Oct. 10	996	248	65	201
Car-seat beater. Railway	H. H. Forsyth, Jr	500,059	June 20	2176	530	63	1798
Car seat. Railway	H. S. Hale	505,246	Sept. 19	1535	400	64	1585
Car seat. Railway	H. S. Hale	509,527	Nov. 28	2609	631	65	1292
Car-seat. Reversible	J. E. Anger	497,228	May 9	1331	339	63	877
Car-seat. Reversible	J. E. Anger	510,374	Dec. 5	875	210	65	1576
Car-seats. Device for turning the backs of	J. E. Groves	500,063	June 20	2181	531	63	1799
Car-seats. End panel for	H. Cochran	503,653	Aug. 22	2356	588	64	1039
Car side bearing	W. W. Wooll	495,688	Apr. 18	1876	470	63	380
Car-signal	C. Callahan	494,366	Mar. 28	2606	655	62	1905
Car-signal	J. G. Tomlinson	491,203	Feb. 7	232	59	62	792
Car. Sleeping	G. W. Pearson	497,457	May 16	1734	437 438	63	963
Car. Sleeping	H. Pearson and C. J. Rose	489,089	Jan. 3	159	44	62	38
Car. Sleeping	A. Rapp	509,944	Dec. 5	161	37, 38	65	1439
Car-spring	H. B. Williams	496,144	Apr. 25	2574	617	63	525
Car-spring case	G. F. Godley	506,907	Oct. 17	1882	469	65	381

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Car-spring case	G. F. Godley	508,103	Nov. 7	204	54	65	797
Car-spring seat	G. F. Godley	499,338	June 13	982	238	63	1575
Car-stake	P. Anderson	511,575	Dec. 26	2980	726	65	2003
Car-stake-pocket	J. P. Cagigal	494,409	Mar. 28	2676	671	62	1918
Car-stake-pockets. Die for making.	N. H. Davis	504,520	Sept. 5	349	89	64	1335
Car-starter	H. Boysen and O. N. Sørensen	497,488	May 16	1789	450	63	971
Car-starter	J. Desmedt	495,964	Apr. 25	2301	581	63	474
Car-starter	K. J. Pihl and O. W. Hult	494,026	Mar. 21	2041	520	62	1786
Car-starter	J. Ripberger	493,736	Mar. 21	1559	397	62	1694
Car-starter	W. Weaver	501,595	July 18	1685	420	64	339
Car-starter	L. M. Woodcock	509,419	Nov. 28	2401	582	65	1251
Car starter and brake	W. A. Barker	501,756	July 18	1964	486	64	387
Car starter and brake	H. Duys, Jr.	495,725	Apr. 18	1943	489	63	392
Car starter and brake	C. Sacco	497,551	May 16	1884	475	63	989
Car starter and brake	R. Schrödlein	501,447	July 11	1459	365	64	280
Car-step	W. Kunz	493,932	Mar. 21	1871	477	62	1753
Car-step	J. J. Steur	510,369	Dec. 5	867	209	65	1575
Car-step. Extensible	S. A. Foster	494,949	Apr. 4	657	169	63	127
Car-step. Folding	M. E. Campany	507,415	Oct. 24	2761	677	65	557
Car-step. Railway	H. C. Farquharson	490,344	Jan. 24	2180	568	62	487
Car. Stock	T. Bowles	507,524	Oct. 31	2951	723	65	606
Car. Stock	J. M. Burton	492,344	Feb. 21	2035	506	62	1188
Car. Stock	J. M. Burton	492,345	Feb. 21	2039	507	62	1188
Car. Stock	J. M. Burton	497,945	May 23	2515	628	63	1118
Car. Stock	G. C. Faville	501,413	July 11	1416	355	64	272
Car. Stock	B. C. Hicks	495,586	Apr. 18	1710	430	63	353
Car. Stock	B. C. Hicks	504,692	Sept. 5	624	159	64	1388
Car. Stock	A. P. Powell	495,909	Apr. 18	2323	560	63	444
Car. Stock	C. L. Travis	499,311	June 13	931	226	63	1567
Car stopping and derailing device	O. Bates and B. B. Carter	498,611	May 30	3594	890	63	1324
Car. Street	J. O. Adsit and C. H. Wickham	492,882	Mar. 7	175	42, 43	62	1393
Car. Street	G. B. Bolton	493,242	Mar. 14	736	188	62	1521
Car. Street	L. J. Hirt	491,107	Feb. 7	71	19	62	762
Car. Street	H. W. Hooton	510,138	Dec. 5	498	113	65	1503
Car. Street	J. Marshall	500,924	July 4	608	159	64	111
Car. Street	J. A. Mebling. (Reissue)	11,346	June 20	2251	548	63	1811
Car. Street	G. Moore	498,071	May 23	2708	677	63	1151
Car. Street	J. A. Trimble	498,333	May 30	3146	7-5	63	1244
Car. Street-railway	G. Moore. (Reissue)	11,396	Dec. 26	3261	799	65	2055
Car structure. Railway	F. J. Cole and E. W. Grieves	511,588	Dec. 26	3000	730	65	2007
Car. Summer	J. M. Schatz	496,232	Apr. 25	2709	679	63	550
Car-switch. Automatic	J. A. Hawkins	497,176	May 9	1255	319	63	862
Car switch. Railway	T. A. Rensen	508,837	Nov. 14	1370	339	65	1031
Car to a motor thereon. Means for transmitting the power of a moving	R. D. Gallagher, Jr.	511,520	Dec. 26	2887	702	65	1986
Car. Tram	J. Stephenson	491,608	Feb. 14	904	227	62	944
Car. Transfer	C. Chambers, Jr.	493,976	Mar. 21	1960	500	62	1769
Car-transportation carriage	A. Bowie	498,739	May 30	3845	948	63	1367
Car trolley-bar carrier	J. C. Love	511,346	Dec. 26	2599	632	65	1933
Car trolley. Electric	R. D. Nuttall	498,722	May 30	3816	940	63	1361
Car-unloader	A. Dahl	500,097	July 4	727	191	64	132
Car. Ventilated fruit and refrigerator	H. A. Smith	498,449	May 30	3332	829	63	1278
Car-ventilating apparatus	C. Knapp	502,928	Aug. 8	1169	288	64	736
Car ventilator	G. W. Bancroft and C. R. Hawcroft	491,068	Feb. 7	8	3	62	750
Car ventilator	S. W. Evans	506,987	Oct. 17	2008	496	65	405
Car ventilator	W. A. Gay	490,960	Jan. 31	3182	814	62	697
Car ventilator	J. Hankin	503,047	Aug. 8	1353	334	64	830
Car ventilator	M. B. Stafford	511,369	Dec. 26	2640	642	65	1941
Car ventilator. Automatic	T. L. Merrill	496,270	Apr. 25	2768	693	63	561
Car ventilator. Railway	S. Hughes	490,388	Jan. 21	2348	585	62	501
Car. Vestibule	M. Dickerson	506,421	Oct. 10	1088	270	65	220
Car-vestibule	L. J. Harris	498,432	May 30	3300	823	63	1272
Car-vestibule	E. L. Perry	503,160	Aug. 15	1552	340	64	879
Car-vestibule	A. P. Williams	506,293	Oct. 10	859	212	65	176
Car-vestibule connection	W. N. Thompson	497,145	May 9	1211	309	63	854
Car vestibule. Railway	T. L. McKeen	500,413	June 27	2769	683	63	1914
Car. Vestibule railway	G. Hancock	489,906	Jan. 10	1413	366	62	306
Car-wheel	P. Arbel	506,199	Oct. 10	6-5	173	65	141
Car-wheel	H. E. Butts	499,778	June 20	1728	417	63	1720
Car-wheel	J. W. Cloud	492,529	Feb. 28	2346	582	62	1263
Car-wheel	G. W. Eddy	504,416	Sept. 5	168	44	64	1302
Car-wheel	W. Hailes	506,850	Oct. 17	1786	449	65	364
Car-wheel	D. Hazard	508,824	Nov. 14	1347	333	65	1027
Car-wheel	A. Hymas and J. Brockley	509,084	Nov. 21	1819	445	65	1130
Car-wheel	A. M. Leinwather	490,571	Jan. 21	2526	630	62	554
Car-wheel	H. W. Libbey	492,907	Mar. 7	220	55	62	1401
Car-wheel	H. S. Maxim and L. Silverman	505,572	Sept. 26	2123	538	64	1710
Car-wheel	G. W. Miller	509,579	Nov. 28	2689	650	65	1308

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Car-wheel	W. J. Parmelee	489,496	Jan. 10	810	212	62	185
Car-wheel	J. Rolling	504,790	Sept. 12	794	201	64	1432
Car-wheel	R. C. Totten	509,409	Nov. 28	2388	579	65	1249
Car-wheel	J. A. Webber	498,038	May 23	2661	665	63	1143
Car-wheel	W. J. Willis	491,456	Feb. 7	654	164	62	873
Car wheel and axle	G. W. Fairman	507,265	Oct. 24	2506	618	65	507
Car wheel and axle	L. Harris	505,983	Oct. 3	284	74	65	55
Car wheel and axle	W. R. Kirk	498,171	May 23	2853	713	63	1178
Car-wheel dust and oil guard	C. C. Leivenich	498,176	May 23	2864	715	63	1179
Car wheel-guide. Railway	W. F. Turnbull and J. C. Council	493,666	Mar. 21	1439	366 367	62	1669
Car-wheel mold	J. K. Sax	496,100	Apr. 25	2515	636	63	514
Car-wheel molds. Core for	A. Hymas	500,500	June 27	2892	711	63	1936
Car-wheel. Self-oiling	J. H. Watt	494,661	Apr. 4	211	53	63	44
Car-wheels and dies for same. Making	P. Arbel	501,908	July 25	2204	549 550	64	445
Car-wheels. Interchangeable tire and sleeve-journal for	J. C. Bryan	496,968	May 9	939	246	63	807
Car-window	E. P. Phelps	504,170	Aug. 29	3172	791	64	1212
Car-window	F. Swanson	496,454	May 2	104	29	63	638
Car window-ventilator. Railway	G. L. Thomas	502,919	Aug. 8	1153	282	64	794
Car-windows. Cinder, dust, and smoke excluder for	J. C. Fry	492,671	Feb. 28	2573	637	62	1309
Car windows. Dust and cinder guard for railway	S. B. Allison	496,767	May 2	595	159	63	726
Cars. Adjustable fitting for freight	A. J. Sneed, Jr	509,697	Nov. 28	2867	692	65	1342
Cars. Air-purifying and ventilating apparatus for railway	C. B. Titcomb	506,749	Oct. 17	1619	407	65	333
Cars. Air-supply device for railway	F. U. Adams	489,910	Jan. 17	1422	370 371 372	62	324
Cars. Air-supply device for railway passenger	F. U. Adams	489,909	Jan. 17	1420	369	62	323
Cars. Antifriction side bearing for	J. Jessen	498,795	June 6	73	17, 18	63	1401
Cars. Apparatus for electrically-propelled	C. J. Kintner	492,627	Feb. 28	2505	621	62	1296
Cars. Attachment for unloading box	M. Lester	505,558	Sept. 26	2097	532	64	1704
Cars. Automatic coupling for steam and air pipes for railway	J. E. Marble	491,291	Feb. 7	386	98	62	821
Cars. Automatic life-guard for street	G. A. Parmenter	489,716	Jan. 10	1121	289	62	248
Cars. Automatic safety attachment for street	C. E. Baggesen	507,201	Oct. 24	2401	592	65	488
Cars. Bell-cord hanger for railway	G. F. S. Clamer	503,406	Aug. 15	1942	483	64	949
Cars. Brake apparatus for electrically-propelled	F. O. Blackwell	508,673	Nov. 14	1127	278	65	985
Cars. Buffer and vestibule connection for passenger	H. C. Buhoup	503,647	Aug. 22	2347	586	64	1037
Cars. Chock and guard for railway	W. T. Sears	502,145	July 25	2572	645	64	513
Cars. Combination-coupling for steam-pipes of railway	T. W. Moran	501,465	July 11	1483	373	64	285
Cars. Controller-roller for electric	E. P. Warner	505,686	Sept. 26	2317	588	64	1745
Cars. Controlling device for electric railway	W. P. Coldren	506,001	Oct. 3	312	81, 82	65	61
Cars. Convertible seat and berth for	J. Krehbiel	498,013	May 23	2621	655	63	1136
Cars. Coupling for steam-pipes of railway	J. E. Marble	498,520	May 30	3447	855	63	1298
Cars. Curtain-rod for sleeping	A. Selby	496,621	May 2	359	97, 98	63	685
Cars. Directly-connected motor for	S. H. Short	491,667	Feb. 14	989	249	62	962
Cars. Elastic supporting device for	W. Kuhlmann	507,739	Oct. 31	3309	810	65	673
Cars. Electric motor and controlling apparatus for	J. V. Capek	491,982	Feb. 21	1476	368	62	1073
Cars, &c. Fender for electric	C. N. Homan	508,472	Nov. 14	202	198	65	921
Cars. Fender for electric, cable, or other similar	W. J. Nunn	501,294	July 11	1206	305	64	234
Cars. Fender for electric or other	M. S. Starkweather	489,207	Jan. 3	344	97	62	79
Cars from leaving the rails. Device for preventing railway	C. W. McBryer	506,439	Oct. 10	1122	279 280	65	226
Cars. Gas-engine motor for	D. Best	496,717	May 2	514	137	63	712
Cars. Gearing for electric-railway	J. C. Henry	499,633	June 13	1485	357	63	1664
Cars. Heating and ventilating railway	J. J. Burwell	491,468	Feb. 7	673	169	62	877
Cars in mines. Handling coal	J. A. Anderson	500,547	July 4	10	3	64	4
Cars in trains. Ventilating apparatus for railway	F. U. Adams	489,908	Jan. 17	1417	387 388 369	62	323
Cars. Jack for loading or unloading	Q. W. Morrison	502,049	July 25	2422	610	64	484
Cars, lumber-trucks, &c. Running-gear for mining	J. Gowlan	492,918	Mar. 7	237	59	62	1405
Cars. Means for preventing derailment of	H. W. Kirchner and G. N. Chase	508,480	Nov. 14	823	204	65	925
Cars. Mechanism for transmitting power from car-wheel axles to dynamos within the	M. Moskowitz and S. Young	498,985	June 6	416	97	63	1465
Cars of underground-cable-railway crossings. Bump-er or stop for	H. E. Poehlman	498,215	May 23	2934	730	63	1191
Cars. Removable front for street	P. W. Lupher	508,892	Nov. 14	1454	360	65	1046
Cars. Removable side wall for	L. D. Craig	501,677	July 18	1825	454	64	363
Cars. Rocket-holder for railway	J. Gallagher, Jr	503,234	Aug. 15	1667	410	64	900
Cars. Rotary tippie for dump	I. Barker	502,805	Aug. 8	956	233	64	757
Cars. Safety apparatus for electric or other street-railway	W. Cox	508,089	Nov. 7	186	49, 50	65	792
Cars. Skid-shoe for railway	L. Peetz	508,971	Nov. 21	1625	399	65	1094
Cars. Speed-reducing and power-multiplying hydraulic gear for electric-railway	W. Hochhausen	510,600	Dec. 12	1286	314	65	1665
Cars. Steam heating apparatus for railway	P. Reilly	502,204	July 25	2669	674	64	533
Cars. Steam-heating system for railway	E. E. Gold	508,132	Nov. 7	251	63	65	805
Cars. Storm-front for railway	G. S. Powell, W. B. Williamson, and R. A. Havner	495,369	Apr. 11	1358	340	63	269
Cars. System of distributing steam for heating railway	C. B. Grim	495,612	Apr. 18	1752	441 442	63	360
Cars. System of dumping	D. P. Cameron	510,674	Dec. 12	1420	351	65	1690
Cars. Switch for electrical tram	M. Immisch	491,483	Feb. 7	691	174 175	62	881
Cars. Track-sanding device for street	C. W. Sherburne	494,283	Mar. 28	2473	623	62	1879
Cars. Trussed trolley-board for electric	H. Cochran	499,871	June 20	1889	459	63	1748
Cars. Valve for steam-pipes of railway	E. E. Gold	498,545	May 30	3494	864 865	63	1306
Cars. Ventilation of	S. G. Curry	510,001	Dec. 5	263	61, 62	65	1459

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Caramel from distillery refuse. Making.	J. Mosler	511,353	Dec. 26	2614		65	1936
Caramel-holder.	R. A. Donaldson	489,858	Jan. 10	1338	347	62	291
Caramel-holder.	G. Miller	502,676	Aug. 1	731	175	64	700
Carbon. Arc-light.	J. McLaughlin	491,124	Feb. 7	94	26	62	767
Carbon dioxide. Apparatus for making.	E. Luhmann	507,143	Oct. 24	2293	563	65	469
Carbon dioxide. Making.	E. Luhmann	507,741	Oct. 31	3311	811	65	674
Carbon dioxide. Process of and apparatus for recovering.	W. Walker	496,546	May 2	242	64	63	663
Carbon. Electric-arc-lamp.	G. M. Lane	495,463	Apr. 11	1520	378	63	300
Carbon. Electric-arc-lamp.	R. McManus	504,815	Sept. 12	841	215	64	1441
Carbon. Electric-arc-lamp.	R. McManus	504,845	Sept. 12	891	229	64	1452
Carbon filaments for electric lamps. Manufacture of.	T. A. Edison	490,954	Jan. 31	3175		62	696
Carbon for electric-arc lamps.	R. E. Ball	506,459	Oct. 10	1155	286	65	233
Carbon for voltaic cells.	E. B. Cutten	508,091	Nov. 7	188	50	65	793
Carbon-holder.	C. C. Hill	508,314	Nov. 7	547	134	65	859
Carbon molding and pressing apparatus.	L. B. Marks	505,775	Sept. 26	2466	622	64	1773
Carbon-rod clutch.	C. McNellis	506,716	Oct. 17	1565	391	65	323
Carbon rods for electric-arc lamps. Manufacture of.	E. Corleis and H. Renisch	504,105	Aug. 29	3067		64	1192
Carbon-trimming machine.	C. O. Bartlett	500,553	July 4	25	9, 10	64	7
Carbonaceous and vapor-burning furnace.	W. McClave	499,642	June 13	1498	359	63	1666
Carbonaceous materials. Production of artificial crystalline.	E. G. Acheson	492,767	Feb. 28	2732	360	62	1340
Carbonaceous minerals. Utilizing.	E. B. Cox	510,586	Dec. 12	1266	308	65	1661
Carbonated-liquid fountain.	O. Zwietsch	506,355	Oct. 10	967	240	65	195
Carbonating liquids. Atomizing-head for.	D. Mueller	496,579	May 2	293	78	63	672
Carbonizing apparatus.	I. L. Roberts	511,459	Dec. 26	2800	677	65	1969
Carboy-case.	H. H. Higham	497,878	May 23	2410	601	63	1099
Carbureting apparatus.	S. Marcus	500,772	July 4	383	100	64	71
Carbureting apparatus.	J. Ruthven	494,442	Mar. 28	2719	681	62	1925
Carbureting apparatus. Air.	P. H. Fontaine	493,992	Mar. 21	1985	506	62	1775
Carbureting apparatus. Air.	P. H. Fontaine	501,778	July 18	1993	493	64	392
Carbureting apparatus. Air.	P. H. Irgens	493,165	Mar. 7	615	154	62	1479
Carbureting apparatus. Air.	O. Mulvey	498,673	May 30	3709	916	63	1344
Carbureting apparatus. Gas.	R. S. Lawrence	509,174	Nov. 21	1955	477	65	1158
Carbureting apparatus. Gas or air.	J. Love	490,972	Jan. 31	3200	818	62	700
Carburetor.	C. B. Collins	497,866	May 23	2396	598	63	1097
Carburetor.	H. B. Cornish	505,700	Sept. 26	2346	594	64	1750
Carburetor.	P. Keller	499,635	June 13	1490	357	63	1665
Carburetor.	J. C. McCrory and W. P. Houze	501,154	July 11	999	254	64	196
Carburetor.	R. J. Rolfsen	498,447	May 30	3325	828	63	1277
Carburetor.	R. J. Rolfsen	509,828	Nov. 28	3086	745	65	1383
Carburetor.	E. Salomon	499,597	June 13	1427	341	63	1654
Carburetor.	E. Savill	504,137	Aug. 29	3115	760	64	1201
Carburetor.	E. A. Smith	502,781	Aug. 8	918	224	64	749
Carburetor. Gas-engine.	J. E. Caps	509,462	Nov. 28	2505	605	65	1272
Card-box.	W. E. Richards	501,693	July 18	1647	459	64	367
Card-canceling machine.	A. A. Low	505,627	Sept. 26	2208	559	64	1726
Card-case.	J. F. Smith	504,948	Sept. 12	1052	270	64	1482
Card-clothing.	M. Duesberg-Delrez	495,694	Apr. 18	1885	472	63	381
Card-feeding machines. Speed-regulating mechanism for.	W. White and R. T. Smith	506,960	Oct. 17	1967	487	65	398
Card-flat-clothing fastener.	J. W. Fawcett and E. Jones	504,572	Sept. 5	431	109	64	1350
Card. Flower.	F. Schumm	508,149	Nov. 7	283	71	65	810
Card-holder.	R. D. Knight	501,279	July 11	1185	300	64	231
Card mounting machine. Fillet.	J. S. Dronsfield	492,716	Feb. 28	2637	653	62	1323
Card or letter case.	J. Lambert	501,431	July 11	1435	360	64	276
Card. Playing.	F. Ames	491,302	Feb. 7	400	103	62	823
Card. Playing.	W. O. Bird	502,089	July 25	2484	624	64	497
Card. Playing.	W. Doerflinger	509,881	Dec. 5	61	15	65	1421
Card. Playing.	G. W. McGeorge and W. C. Banks	506,648	Oct. 10	1443	362	65	289
Card. Playing.	S. T. Varian	499,406	June 13	1116	268	63	1600
Card-setting-machine stop mechanism.	H. Bischo	494,774	Apr. 4	395	98	63	78
Card-setting machines. Feed mechanism for.	W. Walton	493,136	Mar. 7	567	141	62	1470
Card shuffling and dealing mechanism.	W. H. Ranney	507,930	Oct. 31	3628	897	65	731
Card, sign, or label rack.	W. G. Duckett	496,152	Apr. 25	2584	650	63	527
Card-stacking machine.	C. A. Wright	492,130	Feb. 21	1199	423	62	1118
Card-table. Folding.	A. A. Griffin	493,925	Mar. 21	1859	474	62	1751
Card-waste transmitter.	R. B. Robinson and E. P. Conley	508,487	Nov. 14	834	207	65	928
Card-waste transmitter.	R. B. Robinson and E. P. Conley	508,488	Nov. 14	836	207	65	928
Cards, &c. Packing-case for.	S. J. Murray	494,218	Mar. 28	2370	598	62	1862
Carding-cylinders. Device for holding and stretching card-clothing while being attached to.	H. C. Kitching	492,404	Feb. 28	2137	534	62	1221
Carding-engine.	L. Clarenbach, Jr., and E. Zoll	493,752	Mar. 21	1588	404	62	1699
Carding-engine.	E. and W. H. Crowther	504,968	Sept. 12	1090	278	64	1400
Carding-engine coiler.	F. A. Flather	491,209	Feb. 7	239	60, 61	62	793
Carding-engine feeders. Low-stock alarm for.	J. Kearney	506,046	Oct. 3	379	100	65	74
Carding-engine flats. Method of and machine for securing card-clothing to.	A. Hitchon	511,146	Dec. 19	2258	554	65	1857
Carding-engine fleece-dividing attachment.	J. P. Schmitz	508,148	Nov. 7	282	70	65	810
Carding-engine. Revolving-flat.	O. L. Owen	493,408	Mar. 14	996	257	62	1570
Carding-engine stop mechanism.	J. Vaughan	501,387	July 11	1378	345	64	264

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Carding-engines. Actuating mechanism for doffer-combs of	W. P. Canning	492,537	Feb. 28	2360	586	62	1267
Carding-engines. Actuating mechanism for doffer-combs of	C. L. Hildreth	492,533	Feb. 28	2350	583	62	1264
Carding-engines. Apparatus for driving the flats of traveling-flat	A. Hitchon	501,836	July 18	2072	511	64	406
Carding-engines. Apparatus for grinding flats of	J. Jones	491,356	Feb. 7	497	128	62	842
Carding-engines. Apparatus for grinding revolving flats of	J. Edge	501,995	July 25	2328	581 582 583	64	468
Carding-engines. Apparatus for grinding the revolving flats of	J. E. Platt and J. Fidler	510,611	Dec. 12	1310	319 320	65	1669
Carding-engines. Device for adjusting the bends of traveling-flat	A. Hitchon	494,422	Mar. 28	2692	675	62	1921
Carding-engines. Feed-roll-weighting device for	W. P. Canning	504,707	Sept. 12	650	165	64	1405
Carding-engines. Feeding mechanism for wool	D. C. Fisher	506,487	Oct. 10	1211	302	65	243
Carding-engines. Rubbing belt or apron for	J. Barker	489,281	Jan. 3	462	128	62	101
Carding-machine condenser or finisher	W. T. Sykes	508,064	Nov. 7	127	37	65	783
Carding-machine condensing-roll. Wool	J. E. McWilliam	511,641	Dec. 26	3090	754	65	2022
Carding-machine feeding device	C. F. Morrison	507,664	Oct. 31	3209	785	65	653
Carding-machine lap-roll	W. E. Sharples	494,600	Apr. 4	119	28	63	25
Carding-machine ring-doffer	W. T. Sykes	508,065	Nov. 7	131	37, 38	65	783
Carding-machine spring-presser	J. D. Stanwood	491,143	Feb. 7	123	34	62	773
Carding-machine stop-motion	H. McDermott	501,573	July 18	1652	413	64	333
Carding-machine stopping mechanism	I. F. Lawry	493,870	Mar. 21	1768	451	62	1734
Carding-machines. Burr and shive extractor for	A. and F. A. Howarth	495,413	Apr. 11	1427	359	63	281
Carousel	J. Mott and J. J. Fearon	496,889	May 9	818	216 217	63	785
Carousel	M. T. Weston	510,746	Dec. 12	1535	381	65	1712
Carousel	M. T. Weston	510,747	Dec. 12	1537	381	65	1713
Carpet-beater	F. L. Goodenough	499,967	June 20	2059	499	63	1778
Carpet-beater	F. L. Goodenough	499,968	June 20	2059	499	63	1778
Carpet beating and cleaning machine	C. W. Raymond	505,481	Sept. 26	1920	495	64	1671
Carpet-cleaner	F. H. Good	499,986	June 20	2057	498	63	1777
Carpet fabric. Ingrain	S. J. Acheson	497,294	May 16	1477	373	63	917
Carpet fabric. Ingrain	J. S. Cooke and J. W. Brook	497,708	May 16	2134	533	63	1034
Carpet fabric. Ingrain	H. Hardwick	505,788	Sept. 26	2483	626 627	64	1776
Carpet fabric. Ingrain	H. Hardwick	505,789	Sept. 26	2485	627	64	1777
Carpet fabric. Ingrain	W. G. Harre and M. M. Hutt	508,106	Nov. 7	207	55	65	797
Carpet-fastener	J. R. Gallinger and T. C. De Lisle	493,699	Mar. 21	1489	381	62	1680
Carpet-fastener	N. M. Harrison	493,401	Mar. 14	988	255	62	1569
Carpet-fastener	G. Klenk	489,016	Jan. 3	58	17	62	15
Carpet-fastener	C. E. Piper	510,089	Dec. 5	418	93	65	1489
Carpet-fastener	H. Solt	495,844	Apr. 18	2124	534	63	425
Carpet-fastener. Stair	A. C. Küster	507,517	Oct. 24	2034	720	65	589
Carpet-lining, packing, &c.	T. D. Holcomb	493,929	Mar. 21	1863	475	62	1752
Carpet-stretcher	M. T. Bigelow	494,773	Apr. 4	393	97	63	77
Carpet-stretcher	G. W. Blanchard	501,132	July 11	960	245	64	189
Carpet-stretcher	L. E. Ebrgott	496,777	May 2	613	164	63	729
Carpet-stretcher	A. Hankey	501,617	July 18	1725	430	64	346
Carpet-stretcher	W. Harvey	498,977	June 6	406	95	63	1463
Carpet-stretcher	W. A. Phillips	510,361	Dec. 5	848	204	65	1571
Carpet-stretcher	S. Tabor and J. Murphy	489,769	Jan. 10	1210	317	62	265
Carpet-stretcher	J. W. Tatem and D. C. Mangum	507,049	Oct. 17	2113	524	65	424
Carpet-stretcher	E. Wilcox	492,857	Mar. 7	127	32	62	1382
Carpet stretcher and tacker	G. W. Ansley	505,546	Sept. 26	2057	525	64	1696
Carpet stretcher and tacker	J. O. Clark	499,372	June 13	1051	255	63	1589
Carpet stretcher and tacker	J. A. Stephens	492,771	Feb. 28	2723	679	62	1341
Carpet stretcher and tacker. Combined	E. L. McDivitt	492,045	Feb. 21	1574	391	62	1093
Carpet-sweeper	C. O. Allen	503,107	Aug. 8	1451	357	64	847
Carpet-sweeper	C. A. Hammett	498,431	May 30	3299	823	63	1272
Carpet-sweeper	W. Newbigging and G. A. Worz	504,846	Sept. 12	892	229	64	1452
Carpet-sweeper	S. H. Raymond	491,954	Feb. 14	1432	357	62	1050
Carpet-sweeper	S. H. Raymond	503,678	Aug. 22	2390	596	64	1045
Carpet-sweeper	S. H. Raymond	503,679	Aug. 22	2392	596	64	1046
Carpet-sweeper	C. Tangenberg	500,976	July 4	689	183	64	127
Carpet-sweeper. Corner and base	J. W. Roop	490,589	Jan. 24	2550	657	62	559
Carriage	J. Currier	499,452	June 13	1200	285	63	1615
Carriage	J. Currier and F. Ellis	492,461	Feb. 28	2228	557	62	1240
Carriage	J. Currier and F. Ellis	508,919	Nov. 21	1545	378	65	1077
Carriage	W. H. Emond	505,197	Sept. 19	1463	377	64	1572
Carriage	C. Mullen	506,687	July 18	1839	458	64	365
Carriage	A. Schröder	505,234	Sept. 19	1516	396	64	1582
Carriage	J. Spofford, Jr	492,477	Feb. 28	2250	562	62	1244
Carriage	H. P. Wells	499,768	June 20	1711	410	63	1717
Carriage	F. W. Zimmer	505,015	Sept. 12	1163	298 299	64	1504
Carriage. Baby	J. Dietrich and L. Habicht	495,476	Apr. 18	1541	387	63	323
Carriage. Baby	H. Lange	508,726	Nov. 14	1204	299	65	1000
Carriage. Baby	F. P. Mann	510,355	Dec. 5	841	203	65	1570
Carriage. Baby	W. A. Marqua	498,440	May 30	3315	825	63	1275
Carriage basket. Baby	G. Marqua	511,537	Dec. 26	2919	710	65	1992
Carriage-body	L. Doyle	500,740	July 4	334	89	64	62
Carriage brake. Baby	M. W. Bohn and J. H. Machen	506,970	Oct. 17	1980	491	65	400
Carriage brake. Baby	E. J. Wells	494,910	Apr. 4	609	154	63	118
Carriage brake. Baby	E. Rowland	496,903	May 9	840	223	63	789
Carriage brake. Child's	F. O. Boës	509,288	Nov. 21	2160	519	65	1195
Carriage. Child's	G. B. Best	492,656	Feb. 28	2554	632	62	1306
Carriage. Child's	E. L. Campbell	495,301	Apr. 11	1261	314	63	251
Carriage. Child's	A. A. Hanson	490,114	Jan. 17	1783	464	62	397
Carriage. Child's	A. Woodward	510,461	Dec. 12	1029	246	65	1619
Carriage. Convertible	F. Meyer	509,385	Nov. 28	2333	565	65	1239

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Carriage-coupling	S. R. Bailey	501,202	July 11	1067	{ 270 271 }	{ 64 65 }	210 94
Carriage-curtain fastener	A. Hampel	506,110	Oct. 3	482	125	65	94
Carriage. Folding baby	F. F. Plouf	504,817	Sept. 12	842	216	64	1441
Carriage folding seat	H. A. Moyer	490,080	Jan. 17	1727	450	62	385
Carriage gear. Child's	C. W. Jeffries	490,289	Jan. 24	2089	545	62	468
Carriage-gear coupling	N. A. Newton	511,541	Dec. 26	2923	712	65	1993
Carriage-indicator	A. M. Blake	498,101	May 23	2753	688	63	1160
Carriage jump-seat	W. H. Sparks	500,354	June 27	2686	659	63	1899
Carriage-screen	J. H. Caffrey	510,773	Dec. 12	1585	{ 394 395 }	{ 65 66 }	1721 1224
Carriage-seat	O. Morrill and H. P. Wells	492,414	Feb. 28	2152	538	62	1224
Carriage. Shifting-seat	J. T. Clarkson	497,765	May 23	2234	559	63	1069
Carriage shifting seat	A. N. Parry	494,794	Apr. 4	431	106	63	83
Carriage-spring	P. Woods	490,594	Jan. 24	2558	658	62	561
Carriage-step	J. A. Mattson	499,327	June 13	959	231	63	1571
Carriage storm-apron	A. F. Brandenburg	506,152	Oct. 3	558	145	65	108
Carriage. Three-wheeled	G. Rouy	490,400	Jan. 24	2264	588	62	504
Carriage-top	A. J. Hubner and R. R. S. von Seeberg	509,472	Nov. 28	2523	609	65	1275
Carriage-top	R. F. Krause	497,099	May 9	1139	{ 291 292 }	{ 63 64 }	842 112
Carriage-top	M. D. Martin	500,925	July 4	609	159	64	112
Carriage-top crate	B. B. Breed	491,669	Feb. 14	1304	332	62	1024
Carriage-top-folding device	L. L. Short	506,558	Oct. 10	1314	328	65	263
Carriage-top joint	J. T. Groves	503,135	Aug. 15	1508	371	64	871
Carriage-top prop	H. L. Philips	502,138	July 25	2557	641	64	511
Carriage-top valance	C. Bauer	498,152	May 23	2823	706	63	1173
Carriage wheel-lock. Baby	G. A. Watkins	495,211	Apr. 11	1109	277	63	224
Carriage-wrench	J. K. Byler and H. S. Zook	496,595	May 2	317	86	63	677
Carriages. Sleigh-runner attachment for baby	W. P. Tarrant	493,416	Mar. 14	1006	259	62	1572
Carriages. Nursery-case for children's	J. R. Lyle	501,520	July 18	1573	395	64	317
Carrier							
See Baggage-carrier. Elevator-carrier.							
Bicycle basket-carrier. Freight-carrier.							
Cash-carrier. Lumber-carrier.							
Egg or fruit carrier. Package-carrier.							
Elevated carrier. Trace-carrier.							
Water-carrier.							
Carrier-attachment	E. W. Ross	492,751	Feb. 28	2687	{ 667 668 }	{ 62 63 }	1332 1254
Carrying-strap	G. W. Roberts	504,307	Aug. 29	3396	850	64	1254
Cart	A. C. Butts and J. O'Marra	495,722	Apr. 18	1939	488	63	391
Cart	J. Jones and A. Gillies	499,740	June 20	1660	399	63	1708
Cart. Dump	Z. E. Coffin	494,670	Apr. 4	224	56	63	45
Cart. Dumping	A. Voelkle	497,934	May 23	2500	624	63	1115
Cart for transporting telegraph-poles, &c.	J. and W. Titus	504,377	Sept. 5	105	26, 27	64	1290
Cart. Garbage	T. Dark, Sr.	502,350	Aug. 1	169	39, 40	64	597
Cart. Road	J. B. Armstrong	504,771	Sept. 12	769	194	64	1428
Cart. Road	C. C. Bradley	502,028	July 25	2387	600	64	478
Cart. Road	J. J. Cretsinger	502,281	Aug. 1	28	7	64	571
Cart. Road	C. Fahrney	490,278	Jan. 24	2070	541	62	464
Cart. Road	A. P. Ferguson	501,776	July 18	1990	492	64	392
Cart. Road	G. J. Overshiner	498,687	May 30	3739	923	63	1348
Cart. Road	J. C. Shepherd	496,912	May 9	802	227	63	793
Cart. Road	J. S. Shoemaker	505,333	Sept. 19	1678	433	64	1612
Cart. Speeding	F. E. Brown	498,154	May 23	2825	707	63	1173
Cart. Sugar-cane	C. L. Comeaux	509,425	Nov. 23	2414	584	65	1254
Cart-top	H. Bunker	499,963	June 20	2022	490	63	1771
Cart. Wood	E. L. G. W., and E. E. Higgins	498,056	May 23	2687	673	63	1147
Cartridge	W. C. Bush	505,089	Sept. 19	1299	334	64	1542
Cartridge	F. Mohr	503,096	Aug. 8	1430	353	64	844
Cartridge	C. E. Overbaugh	498,857	June 6	189	46	63	1426
Cartridge	W. H. Saenger	505,297	Sept. 19	1630	421	64	1604
Cartridge-belt	G. W. Barton	501,642	July 18	1764	439	64	353
Cartridge-belt. Woven	T. C. Orndorff	507,836	Oct. 31	3485	857	65	705
Cartridge-case extractor	R. B. Dashiell	494,917	Apr. 4	618	158	63	120
Cartridge-cases. Manufacture of	F. Mohr	497,192	May 9	1276	324	63	866
Cartridge-filler	L. R. Smith	492,171	Feb. 21	1769	442	62	1134
Cartridge-holder	O. H. J. Krag and E. Jørgensen	505,363	Sept. 19	1733	{ 448 449 }	{ 64 65 }	1622 1432
Cartridge implement	T. M. Pierce	504,789	Sept. 12	793	200	64	1432
Cartridge-loading machine	M. Bielefeldt	504,699	Sept. 12	640	163	64	1403
Cartridge-loading machine	C. S. Hisey	505,423	Sept. 19	1834	472	64	1642
Cartridge-loading machine	A. Tenner	494,905	Apr. 4	601	{ 152 153 }	{ 63 64 }	116 472
Cartridge-machine	P. Butler	495,959	Apr. 25	2293	{ 578 579 }	{ 63 64 }	472 1182
Cartridge-reloader	G. W. Chambers and B. F. Gruver	492,324	Feb. 21	2002	498	62	1182
Cartridge-shell	T. G. Bennett	503,117	Aug. 15	1480	364	64	866
Cartridge-shell	C. E. Overbaugh	498,856	June 6	189	46	63	1426
Cartridge-shell crimper	G. D. Hunter	505,046	Sept. 12	1215	313	64	1513
Cartridge-shell crimper	W. H. Nichol	510,187	Dec. 5	580	135	65	1519
Cartridge-shell extractor	R. Prieto y Cubillos	506,937	Oct. 17	1935	479	65	392
Cartridge-shells. Device for capping and recapping	A. Velten and C. J. Rose	496,143	Apr. 25	2572	647	63	524
Cartridge-shells. Machine for trimming	C. R. Richards	500,511	June 27	2912	{ 716 717 718 }	{ 63 64 65 }	1940 1416 843
Cartridge with amorphous explosive shell and charge	H. Maxim	504,736	Sept. 12	703	176	64	1416
Cartridges. Wad-setter for paper-shell	H. A. Sanford	497,103	May 9	1144	293	63	843
Carving-fork guard	E. E. Wood, Jr.	503,303	Aug. 15	1782	440	64	920
Carving-machine	O. Lademann	508,951	Nov. 21	1597	391	65	1087
Carving-machine	F. Snow	495,233	Apr. 11	1146	287	63	921

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Case:							
See Banker's case.	Jewelry-case.						
Bookcase.	Label-case.						
Book and package case.	Map-case.						
Bottle-case.	Match and ticket case.						
Burial-case.	Packing-case.						
Carboy-case.	Packing and shipping case.						
Card-case.	Prescription-case.						
Card or letter case.	Razor-strop case.						
Cheese-case.	Sample-case.						
Cigar-case.	Shipping-case.						
Confectionery-case.	Show-case.						
Display-case.	Smoker's combination-case.						
Display glove-case.	Spectacle-case.						
Drum-case.	Syringe-case.						
Egg-case.	Thread-case.						
Egg-shipping case.	Ticket-case.						
Eraser-case.	Tobacco-case.						
File-case.	Toilet-powder case.						
Fruit-case.	Type-case.						
Gear-case.	Umbrella-case.						
Gun-case.	Watchcase						
Honey-shipping case.							
Case.....	C. C. Wientge.....	489,426	Jan. 3	678	183	62	146
Case hook and handle.....	D. V. Butler.....	510,526	Dec. 12	1127	273	65	1637
Caseholder.....	O. Eisele.....	509,853	Nov. 28	3132	756	65	1392
Cash and package carrier.....	E. C. Gipe.....	510,505	Dec. 12	1094	264	65	1632
Cash and package carrier apparatus.....	S. W. Barr.....	490,533	Jan. 24	2477	638 639	62	545
Cash and parcel carrier apparatus.....	W. H. Albach.....	490,093	Jan. 17	1749	456	62	390
Cash and parcel carrier apparatus.....	E. A. Owen.....	491,130	Feb. 7	99	27, 28	62	768
Cash-box.....	J. Goodenberger and L. Akins.....	506,997	Oct. 17	2022	499	65	408
Cash-carrier.....	E. C. Gipe.....	508,303	Nov. 7	531	130 131	65	856
Cash-carrier.....	G. P. Kenney.....	494,783	Apr. 4	415	103	63	81
Cash-carrier.....	T. F. Mark.....	497,885	May 23	2423	604	63	1102
Cash-carrier.....	H. M. Weaver.....	500,307	June 27	2610	637	63	1886
Cash-carrier apparatus.....	S. W. Barr.....	500,552	July 4	23	9	64	7
Cash-carrier apparatus.....	H. M. Weaver.....	490,695	Jan. 31	2754	709	62	613
Cash-carrier apparatus.....	H. M. Weaver.....	500,642	July 4	168	43, 44	64	33
Cash-controlling machine.....	T. F. Russel and J. Brady.....	501,962	July 25	2281	570 571	64	459
Cash-drawer and manual recorder.....	C. E. Putnam.....	507,592	Oct. 31	3083	753	65	629
Cash-drawer and manual sales-recorder.....	G. D. Strayer.....	497,141	May 9	1205	307	63	853
Cash-drawer and record-sheet holder.....	C. F. Goller.....	495,671	Apr. 18	1849	463	63	376
Cash-indicator.....	J. P. Smith.....	493,306	Mar. 14	852	217	62	1541
Cash indicator and recorder.....	H. C. Pritchard.....	496,795	May 2	643	171 172	63	734
Cash indicator and register.....	A. C. Hansen.....	503,598	Aug. 22	2263	567	64	1022
Cash indicator and register.....	T. J. Hume.....	506,176	Oct. 3	611	156 157	65	119
Cash indicator and register.....	E. H. Murdock.....	489,085	Jan. 3	153	42	62	37
Cash indicator and register.....	E. H. Murdock.....	501,153	July 11	996	254	64	196
Cash-recorder.....	A. J. Walters.....	491,150	Feb. 7	136	36, 37	62	775
Cash-recorder and check-printer.....	D. Curell.....	499,660	June 13	1524	367	63	1670
Cash-recorder and check-printer.....	T. Pink.....	499,309	June 13	927	224 225	63	1566
Cash recorder and indicator.....	W. H. Cleasby.....	498,532	May 30	3471	860	63	1302
Cash-register.....	H. A. Bierley. (Reissue).....	11,319	Apr. 4	745	189	63	142
Cash-register.....	H. A. Bierley.....	507,256	Oct. 24	2468	613	65	504
Cash-register.....	T. Carney.....	496,855	May 9	741	197 198	63	771
Cash-register.....	T. Carney.....	497,861	May 23	2379	595 596 597	63	1094
Cash-register.....	T. Carroll.....	499,192	June 6	752	178 179 180	63	1521
Cash-register.....	T. Carroll.....	509,071	Nov. 21	1778	438 439	65	1123
Cash-register.....	W. H. Clark.....	496,338	Apr. 25	2885	721	63	583
Cash-register.....	W. H. Clark.....	496,341	Apr. 25	2891	722 723	63	585
Cash-register.....	W. H. Clark.....	506,471	Oct. 10	1177	292 293 294 294	65	237
Cash-register.....	W. H. Clark.....	506,472	Oct. 10	1187	295 296 296	65	239
Cash-register.....	J. T. Cowley.....	505,194	Sept. 19	1456	375 376 377	64	1570
Cash-register.....	J. M. Cripe.....	490,640	Jan. 31	2663	686 687	62	597
Cash-register.....	L. Ehrlich.....	502,353	Aug. 1	174	40, 41	64	598
Cash-register.....	L. Ehrlich.....	506,167	Oct. 3	582	151 152 153	65	112
Cash-register.....	L. Ehrlich.....	509,656	Nov. 28	2804	675 676	65	1330
Cash-register.....	L. S. Field.....	490,647	Jan. 31	2673	688	62	598
Cash-register.....	E. D. Gibbs.....	509,658	Nov. 28	2813	679	65	1331

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Cash-register	C. F. Hamilton	507,120	Oct. 24	2236	{ 552 553	{ 65	460
Cash-register	E. K. Heller	499,885	June 20	1915	{ 465	{ 63	1752
Cash-register	E. B. Hess	498,716	May 30	3796	{ 936 937	{ 63	1358
Cash-register	H. W. Hoffheimer	500,898	July 4	572	{ 149	{ 64	104
Cash-register	E. P. Holly	498,793	June 6	63	{ 16, 17	{ 63	1400
Cash-register	R. T. Houk	492,982	Mar. 7	331	{ 81	{ 62	1425
Cash-register	R. T. Houk	492,983	Mar. 7	334	{ 84	{ 62	1425
Cash-register	W. P. Huffman	489,228	Jan. 3	384	{ 106	{ 62	86
Cash-register	W. Koch	505,553	Sept. 26	2067	{ 527 528 529	{ 64	1698
Cash-register	W. Koch	505,554	Sept. 26	2082	{ 530	{ 64	1701
Cash-register	W. Koch	506,123	Oct. 3	503	{ 130 131	{ 65	98
Cash-register	T. Long	492,035	Feb. 21	1559	{ 388 389	{ 62	1089
Cash-register	M. U. Loree	499,171	June 6	721	{ 171 172	{ 63	1515
Cash-register	H. M. Neer	490,304	Jan. 24	2110	{ 550 551	{ 62	472
Cash-register	W. K. Nichols	493,557	Mar. 14	1257	{ 322	{ 62	1618
Cash-register	F. C. Osborn	491,022	Jan. 31	3287	{ 839 840	{ 62	718
Cash-register	C. J. Passick	502,580	Aug. 1	555	{ 132 133	{ 64	668
Cash-register	J. Pfeifer	491,587	Feb. 14	860	{ 218 219	{ 62	936
Cash-register	F. H. Seymour	507,936	Oct. 31	3641	{ 900	{ 65	734
Cash-register	F. A. L. Sneckner	492,974	Mar. 7	320	{ 81	{ 62	1423
Cash-register	W. H. Thompson	511,663	Dec. 26	3121	{ 762 763	{ 65	2028
Cash register and drawer	W. H. Thompson	496,585	May 2	301	{ 81	{ 63	674
Cash register and indicator	J. B. Aufuldish	492,454	Feb. 28	2213	{ 55 554	{ 62	1236
Cash register and indicator	F. L. Bailey	493,571	Mar. 14	1280	{ 327 328	{ 62	1623
Cash register and indicator	F. L. Bailey	504,293	Aug. 29	3374	{ 844	{ 64	1250
Cash register and indicator	J. A. Barnes	507,097	Oct. 24	2194	{ 543	{ 65	451
Cash register and indicator	A. I. Blanchard	489,177	Jan. 3	294	{ 81, 82	{ 62	67
Cash register and indicator	T. Carney	490,898	Jan. 31	3082	{ 791 792	{ 62	679
Cash register and indicator	T. Carney	497,860	May 23	2372	{ 594 595	{ 63	1093
Cash register and indicator	T. Carney	507,351	Oct. 24	2656	{ 653	{ 65	536
Cash register and indicator	H. Cook	503,946	Aug. 29	2793	{ 701 702	{ 64	1142
Cash register and indicator	H. Cook	511,070	Dec. 19	2120	{ 524	{ 65	1831
Cash register and indicator	W. F. Z. Desant	492,761	Feb. 28	2709	{ 673 674	{ 62	1337
Cash register and indicator	W. F. Z. Desant	505,444	Sept. 26	1868	{ 481	{ 64	1661
Cash register and indicator	L. Ehrlich	507,313	Oct. 24	2592	{ 637 638 639	{ 65	524
Cash register and indicator	W. R. Fowler	494,374	Mar. 28	2617	{ 657 658	{ 62	1907
Cash register and indicator	H. J. Gilbert	491,546	Feb. 14	790	{ 201 202	{ 62	921
Cash register and indicator	J. T. Greene	502,885	Aug. 8	1081	{ 267 338	{ 64	780
Cash register and indicator	J. H. Greenleaf	505,101	Sept. 19	1313	{ 339 340	{ 64	1545
Cash register and indicator	J. S. Hilliard	506,233	Oct. 10	761	{ 188	{ 65	155
Cash register and indicator	C. A. Juengst	499,294	June 13	903	{ 219 220	{ 63	1562
Cash register and indicator	M. N. Lovell	489,382	Jan. 3	608	{ 163 164	{ 62	131
Cash register and indicator	M. N. Lovell	489,383	Jan. 3	612	{ 164 165 166	{ 62	132
Cash register and indicator	G. McCabe	506,715	Oct. 17	1559	{ 390 391	{ 65	322
Cash register and indicator	H. M. Neer	491,020	Jan. 31	3276	{ 837 838 839	{ 62	715
Cash register and indicator	U. B. Newman	489,086	Jan. 3	155	{ 43	{ 62	37
Cash register and indicator	H. G. O'Neill	498,079	May 23	2718	{ 679 680	{ 63	1153
Cash register and indicator	H. C. Pritchard	491,593	Feb. 14	880	{ 222	{ 62	939
Cash register and indicator	H. C. Pritchard	496,169	Apr. 25	2611	{ 657	{ 63	532
Cash register and indicator	A. H. Scranton	502,387	Aug. 1	233	{ 55	{ 64	608
Cash register and indicator	E. F. Spaulding	500,164	June 27	2378	{ 577 578	{ 63	1845
Cash register and indicator	G. W. Spurr	508,353	Nov. 7	607	{ 149	{ 65	871
Cash register and indicator	E. T. Taylor	494,534	Mar. 28	2876	{ 720	{ 62	1954
Cash register and indicator	E. T. Taylor	510,622	Dec. 12	1338	{ 324 325	{ 65	1673
Cash register and indicator	J. A. Treat	510,211	Dec. 5	620	{ 145 146	{ 65	1527
Cash register and indicator	A. D. Tyrrel and J. B. Aufuldish	511,257	Dec. 19	2435	{ 593 594	{ 65	1890

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Cash register and indicator	A. H. Ullrich	508,194	Nov. 7	348	86, 87	65	822
Cash register and indicator	F. W. Vaughan	506,891	Oct. 17	1858	493	65	377
Cash register and indicator	H. G. and C. F. Walter	492,897	Mar. 7	197	49	62	1397
Cash register and indicator	C. W. Weiss	496,240	Apr. 25	2724	682	63	553
Cash register and indicator	W. W. and W. H. Wythe	507,301	Oct. 24	2561	632	65	517
Cash register and indicator	P. Yoe	490,466	Jan. 24	2363	612	62	522
Cash register and indicator blind	L. Ehrlich	504,470	Sept. 5	258	67	64	1318
Cash register and recorder	H. Cook	503,947	Aug. 29	2808	702	64	1144
Cash register and recorder	W. Koch	505,555	Sept. 26	2088	703	64	1702
Cash register and recorder	C. W. Weiss	495,764	Apr. 18	1996	531	63	402
Cash register and till	A. L. Crawford	491,876	Feb. 14	1318	505	62	1027
Cash register and till	A. L. Crawford	503,579	Aug. 22	2225	506	64	1016
Cash-register. Barber's	M. J. Sarsfield	494,087	Mar. 21	2137	558	62	1803
Cash-register. Check	T. H. Bergh	496,632	May 2	379	547	63	688
Cash register, indicator, and check-printer	L. Ehrlich	509,657	Nov. 28	2807	102	65	1330
Cash register, indicator, and check-printer	L. Ehrlich and J. B. Benton	511,743	Dec. 26	3249	677	65	2051
Cash register, indicator, and check-printer	W. Koch	506,121	Oct. 3	495	797	65	97
Cash register, indicator, and recorder	W. T. McGraw	510,033	Dec. 5	411	129	65	1487
Cash register, indicator, recorder, and check-printer	G. Boemermann	498,615	May 30	3599	130	63	1325
Cash register, indicator, recorder, and check-printer	J. Pfeifer	502,317	Aug. 1	103	891	64	585
Cash-register mechanism	W. H. Clark	496,339	Apr. 25	2888	892	63	584
Cash-register money-drawer	E. N. Foote	495,934	Apr. 18	2258	93	63	450
Cash register, recorder, and indicator. Electrical	L. Ehrlich	502,287	Aug. 1	35	24	64	573
Cash registers and indicators. Pawl-locking device for	W. Koch	509,666	Nov. 28	2829	25	65	1335
Cash-registers. Check-ejector for check-printing	G. W. Grove	509,660	Nov. 28	2818	26	65	1332
Cash-registers. Key-locking and key-coupling mechanism for	W. H. Clark	496,340	Apr. 25	2890	683	63	585
Cash-registers. Tablet and key locking device for	M. N. Lovell	489,384	Jan. 3	616	684	62	133
Cash-registering and account-checking. Method of and means for	J. T. Hicks	500,071	June 20	2194	680	63	1802
Cash-registering machine	F. L. Bailey	504,409	Sept. 5	157	681	64	1299
Cash-registering machine	J. J. Range and E. N. Foote	495,948	Apr. 18	2277	574	63	454
Cash-registering machine	J. J. Range and E. N. Foote	498,728	May 30	3825	943	63	1363
Cash-registering machine	J. J. Webster	502,645	Aug. 1	662	944	64	688
Cash-registering-machine defective device	F. L. Bailey	506,618	Oct. 10	1396	161	65	280
Casing-spear	P. H. Mack	492,371	Feb. 21	2075	350	62	1196
Cask. Cylindrical	C. E. Bratt	503,575	Aug. 22	2219	519	64	1015
Cask. Petroleum	J. D. Sprunt	500,245	June 27	2506	555	63	1868
Cask-steaming apparatus	J. M. Chambers	492,346	Feb. 21	2040	612	62	1189
Casket carrier	J. McLaughlin	508,179	Nov. 7	323	508	65	818
Casket-handle	L. H. Bannister	498,610	May 30	3593	80	63	1324
Casket-handle	J. McCarthy	491,122	Feb. 7	91	890	62	766
Casket-handle	J. McCarthy	494,822	Apr. 4	479	121	63	92
Casket-handle	J. McCarthy	495,226	Apr. 11	1133	282	63	228
Casket. Metallic	E. N. Lupfer and C. H. Hiser	508,432	Nov. 14	739	182	65	909
Casket-top fastener	S. N. Hiser	495,412	Apr. 11	1426	359	63	281
Casket-top fastener	S. N. Hiser	500,577	July 4	62	18	64	13
Caster	S. Chambers	490,424	Jan. 24	2298	597	62	509
Caster	F. W. Frank	499,783	June 20	1736	420	63	1721
Caster	S. Hoobler	498,271	May 30	3037	756	63	1225
Caster	H. A. Housel	494,677	Apr. 4	234	59	63	48
Caster	P. J. Lennard	491,710	Feb. 14	1056	267	62	976
Caster	C. F. Mankey	498,130	May 23	2797	699	63	1168
Caster	T. Polster	503,438	Aug. 15	1929	493	64	957
Caster	J. H. Russell	495,519	Apr. 18	1604	404	63	335
Caster axle and wheel	A. C. Sanford	496,620	May 2	358	97	63	684
Caster. Ball	A. M. Leinwather	494,009	Mar. 21	2016	514	62	1781
Caster. Furniture	A. B. Diss	506,813	Oct. 17	1739	435	65	353
Caster. Furniture	J. Elwood	490,016	Jan. 17	1629	424	62	364
Caster. Furniture	C. A. Fellows	492,624	Feb. 28	2501	620	62	1295
Caster. Furniture	A. M. Leinwather	494,925	Apr. 4	629	160	63	121
Caster. Furniture	O. Pederson	498,297	May 30	3091	770	63	1234
Caster-socket	H. H. McIlhiney	498,444	May 30	3320	826	63	1276
Caster-wheel	E. G. Hoffmann	501,719	July 18	1891	470	64	375
Casting	M. Lachman	492,924	Mar. 7	245	62	62	1407
Casting apparatus	J. C. Hill	507,365	Oct. 24	2681	659	65	541
Casting apparatus. Ingot	J. H. Cornelson	511,265	Dec. 19	2452	598	65	1893
Casting apparatus. Metal	L. W. Mallasee	504,131	Aug. 29	3105	777	64	1200
Casting apparatus. Stereotype	W. S. Simpson	493,047	Mar. 7	430	108	62	1443
Casting battery-plates. Apparatus for	F. J. Wendell	492,448	Feb. 28	2201	550	62	1234
Casting beads on spigot ends of iron pipes. Method of and apparatus for	E. W. Timmis	506,281	Oct. 10	845	208	65	172
Casting hard-metal or chilled rolls	P. McArthur	511,247	Dec. 19	2420	589	65	1887
Casting ingots	H. Reusch and B. Preu	492,874	Mar. 7	164	39	62	1391
Casting ingots. Apparatus for	H. A. Brustlein	504,322	Sept. 5	17	5	64	1274
Casting ingots	T. Kaye	491,213	Feb. 7	250	62	62	795

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Casting lock-nuts. Mold for.....	A. M. Rouse.....	505,778	Sept. 26	2472	623	64	1774
Casting machine. Line.....	W. S. Scudder.....	506,198	Oct. 3	659	167 168 169 170 171	65	127
Casting machine. Type.....	J. G. Pavver.....	495,704	Apr. 18	1906	480	63	385
Casting machine. Type.....	H. S. Popp.....	510,288	Dec. 5	748	181 182	65	1551
Casting metals. Centrifugal apparatus for.....	J. L. Sebenius.....	510,995	Dec. 19	2020	498	65	1811
Casting-plant.....	H. B. A. Keiser.....	497,984	May 23	2577	645	63	1129
Casting rollers.....	F. B. Torrey.....	508,785	Nov. 14	1287	320	65	1016
Casting sash-weights. Apparatus for.....	A. C. Bruce and J. W. Warnock.....	490,184	Jan. 17	1898	494	62	419
Castings-separator.....	W. W. Doolittle.....	490,274	Jan. 24	2064	539 540	62	463
Casting solid ingots of steel.....	W. P. B. Urlick.....	509,973	Dec. 5	211	49	65	1450
Casting steel or other ingots. Apparatus for.....	O. F. Leibet.....	506,518	Oct. 10	1257	314 315	65	252
Casting teeth on gear-wheels. Chill-mold for.....	S. E. Maxwell.....	500,591	July 4	82	23	64	16
Castings. Apparatus for making.....	W. W. Doolittle.....	501,331	July 11	1269	318 319 320	64	243
Cat-barrier.....	G. S. Niles.....	504,936	Sept. 12	1033	265	64	1479
Catalogue and index. Card.....	A. J. Rudolph.....	499,441	June 13	1179	282	63	1610
Caramenial sack.....	G. W. Gaines.....	501,563	July 18	1638	410	64	329
Catapult for propelling boomerangs.....	C. W. Renear.....	510,936	Dec. 19	1910	467	65	1792
Caterpillar-trap.....	T. D. Noone.....	505,226	Sept. 19	1506	393	64	1580
Catheter.....	O. de Pezzer.....	504,744	Sept. 12	719	179	64	1419
Catheter-holder.....	W. W. Lovejoy.....	503,973	Aug. 29	2853	716	64	1153
Cattle-dehorner.....	V. B. Brown, J. Imel, and D. J. Whitaker.....	507,967	Oct. 31	3690	917	65	743
Cattle-dehorner.....	J. Miller.....	508,178	Nov. 7	331	80	65	818
Cattle-guard.....	J. J. Callaghan and A. R. Horn.....	489,601	Jan. 10	963	250	62	215
Cattle-guard.....	L. Hills.....	501,785	July 18	2006	495	64	395
Cattle-guard.....	M. L. Lynch.....	506,242	Oct. 10	777	192	65	159
Cattle-guard.....	B. Wolhaupter.....	500,730	July 4	320	85, 66	64	60
Cattle-guard.....	B. Wolhaupter.....	505,866	Oct. 3	100	26	65	21
Cattle-guard.....	B. Wolhaupter.....	505,867	Oct. 3	101	26	65	21
Cattle loading and unloading device.....	P. Friederich.....	492,002	Feb. 21	1506	376	62	1080
Cantery apparatus. Electric.....	J. A. Wotton and E. A. Bostrom.....	511,742	Dec. 26	3248	796	65	2051
Ceiling. Metallic.....	L. J. Cherest.....	490,186	Jan. 17	1901	495	62	420
Ceiling. Metallic.....	A. Friedley.....	495,935	Apr. 18	2259	569	63	450
Ceiling. Metallic.....	C. C. Moore.....	500,595	July 4	87	25	64	17
Ceiling or wall.....	H. Lehmann.....	503,721	Aug. 22	2466	613	64	1060
Ceiling or wall.....	E. Reiss.....	492,108	Feb. 21	1666	414	62	1112
Ceiling-plate. Metallic.....	L. L. Sagendorph.....	489,236	Jan. 3	393	108	62	88
Ceiling-plate. Metallic.....	L. L. Sagendorph.....	505,852	Oct. 3	74	18	65	16
Ceiling. Sheet-metal.....	C. V. Gross.....	497,718	May 16	2149	537	63	1037
Cell-cases. Process of and machine for making.....	H. F. Smith.....	507,761	Oct. 31	3346	819 820	65	679
Celluloid boxes. Manufacture of.....	A. C. Hafely and J. Redlefsen.....	505,462	Sept. 26	1894	488	64	1666
Cellulose and fiber from coconut-husks. Apparatus for removing amorphous.....	J. B. Torrilhon.....	496,075	Apr. 25	2474	625	63	506
Cellulose. Machine for cutting wood for the manufacture of.....	L. A. J. Niethammer and A. Pfarr.....	508,147	Nov. 7	280	69, 70	65	810
Cement.....	B. Dreyfuss.....	491,280	Feb. 7	348	.....	62	815
Cement.....	E. E. Hawes.....	501,937	July 25	2249	.....	64	453
Cement.....	C. F. Le Fevre.....	504,477	Sept. 5	270	.....	64	1320
Cement.....	V. F. L. Smidth.....	494,763	Apr. 4	371	.....	63	74
Cement. Apparatus for mixing asphalt.....	J. Schubert.....	501,215	July 11	1085	275 276	64	214
Cement. Apparatus for turning over.....	J. F. de Navarro.....	499,391	June 13	1081	262	63	1593
Cement. Compound for retarding the setting of.....	E. A. Brouson.....	493,613	Mar. 14	1356	.....	62	1638
Cement in barrels. Machine for packing.....	L. Faith.....	505,758	Sept. 26	2438	615	64	1767
Cement-kilns. Arrangement for drying slurry by waste heat from.....	G. Batchelor.....	507,058	Oct. 17	2126	528	65	426
Cement. Manufacture of Portland.....	M. L. Griffin.....	497,785	May 23	2260	.....	63	1073
Cementmaterials. Apparatus for mixing wet and dry.....	H. Froehling.....	495,323	Apr. 11	1283	324	63	257
Cement. Non-conducting and waterproof.....	N. D. Ménégal.....	507,662	Oct. 31	3206	.....	65	653
Cement. Non-inflammable.....	R. J. Doyle.....	490,548	Jan. 24	2498	.....	62	549
Cement pipes. Apparatus for the manufacture of repressed.....	C. Schnell.....	500,675	July 4	233	62	64	44
Cement pipes. Tamping-machine for making.....	E. Oehrle.....	497,597	May 16	1959	490 491	63	1002
Centerboard.....	J. Couch.....	492,785	Mar. 7	19	5	62	1363
Centerboard.....	R. Pigott.....	498,082	May 23	2734	681	63	1154
Centering, preparing, and countersinking bars, studs, &c. Machine for.....	W. Webster.....	505,013	Sept. 12	1161	298	64	1503
Centering-tool.....	S. A. Piper.....	506,722	Oct. 17	1576	395	65	325
Centrifugal drier.....	H. M. Saint-Denis.....	510,298	Dec. 5	764	185	65	1554
Centrifugal machine.....	L. F. Haubtman.....	506,230	Oct. 10	756	187	65	154
Centrifugal machine.....	R. A. Lister and M. Pedersen.....	502,859	Aug. 8	1042	255	64	770
Centrifugal machine.....	G. Proeber.....	489,166	Jan. 3	276	77	62	64
Centrifugal machine.....	J. Schmerber.....	493,900	Mar. 21	1812	461	62	1742
Centrifugal machine.....	C. Steffen.....	498,643	Jan. 10	1013	263	62	226
Centrifugal machine.....	I. v. Szczeniewski and G. v. Piontkowski.....	500,782	July 4	397	105	64	74
Centrifugal runner-mill.....	G. A. M. Arnaud.....	499,083	June 6	585	140	63	1493
Centrifugal screen.....	S. M. Hoyt.....	507,815	Oct. 31	3447	846 847	65	699
Centrifugal separator.....	P. M. and D. T. Sharples. (Reissue).....	11,311	Feb. 28	2731	680	62	1342
Centrifugal separator and regulating the supply thereto.....	F. Ludloff.....	504,422	Sept. 5	182	47, 48	64	1305
Centrifugal separators. Crank connection for.....	J. Bernström.....	489,140	Jan. 3	239	66	62	55

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Centrifugal ventilator	C. G. Herscher	511,140	Dec. 19	2249	552	65	1856
Ceramic boiler	A. P. Creque	491,083	Feb. 7	33	9	62	754
Cesspool	M. Moriarty	498,287	May 30	3056	761	63	1228
Chain	L. Herman	490,409	Jan. 24	2275	590	62	506
Chain	G. G. Howe	494,423	Mar. 28	2693	676	62	1921
Chain adjustment	F. D. Cable	494,804	Apr. 4	447	111	63	87
Chain and the manufacture thereof	A. Shedlock	492,439	Feb. 28	2189	547	62	1231
Chain. Boom	A. Mutehenbacker	506,790	Oct. 17	1688	425	65	346
Chain. Drive	J. Baker	495,006	Apr. 11	751	191	63	159
Chain. Drive	J. O. Brown	499,961	June 20	2017	490	63	1770
Chain. Drive	F. Gleason	501,587	July 18	1672	417	64	337
Chain. Drive	W. H. Hart	504,494	Sept. 5	306	77	64	1327
Chain. Drive	W. H. Hart	507,362	Oct. 24	2678	658	65	540
Chain. Drive	C. W. Hunt	500,332	June 27	2650	648	63	1893
Chain. Drive	F. Lev	494,962	Apr. 4	679	175	63	130
Chain. Drive	J. L. Taplin	508,258	Nov. 7	466	113	65	844
Chain. Driving and cutting	J. V. Muehlig and F. N. Slade	496,529	May 2	213	56	63	657
Chain elevator. Endless	J. P. Manton	504,044	Aug. 29	2968	742	64	1173
Chain gear. Drive	H. Guthrie	495,584	Apr. 18	1708	430	63	353
Chain-link	R. A. Breul	510,238	Dec. 5	669	159	65	1537
Chain-link	C. R. Harris	510,134	Dec. 5	493	112	65	1503
Chain-link. Drive	J. S. Carter	498,233	May 30	2969	740	63	1212
Chain-link. Drive	C. A. Taplin	500,223	June 27	2476	604	63	1863
Chain-link manufacture	W. H. Hart	489,252	Jan. 3	424	118	62	94
Chain-links. Machine for making	J. W. Bowen	496,773	May 2	603	162	63	727
Chain-links. Machine for separating	F. L. White	499,901	June 20	1936	470	63	1756
Chain-linking machine	M. Heim	494,780	Apr. 4	405	100	63	79
Chain. Making	I. L. Atwood	507,346	Oct. 24	2649	651	65	535
Chain. Making	I. L. Atwood	507,347	Oct. 24	2650	651	65	535
Chain-making machine	F. Egge	507,263	Oct. 24	2502	616	65	506
Chain or cable grip	G. Gagnon	499,981	June 20	2052	497	63	1776
Chain. Sprocket	S. H. Percy	503,871	Aug. 22	2677	671	64	1102
Chains. Means for manufacturing	C. White	510,748	Dec. 12	1539	382	65	1713
Chains. Means for propelling	C. W. Hunt	500,807	July 4	437	115	64	81
Chains. Shield or covering for drive	S. Elliott	491,750	Feb. 14	1113	281	62	987
Chair:					282		
See Bed-chair. Rail-chair.							
Camp-chair. Railway-rail chair.							
Convertible chair. Reclining-chair.							
Dental chair. Rocking-chair.							
Folding chair. Suspended chair.							
Knockdown chair. Window-chair.							
Opera-chair. Window-washing chair.							
Photographic posing-chair.							
Chair	C. F. J. Behr	490,334	Jan. 24	2164	564	62	484
Chair	T. J. Collins	511,195	Dec. 19	2337	571	65	1872
Chair	W. H. Fauber	508,690	Nov. 14	1148	572	65	990
Chair	C. B. Halsey	491,724	Feb. 14	1077	283	62	980
Chair	T. S. King	505,832	Oct. 3	46	13	65	12
Chair	W. S. O'Brien	507,821	Oct. 31	3617	893	65	739
Chair	W. Seng	490,366	Jan. 24	2216	578	62	495
Chair	A. Vose	491,300	Feb. 7	397	102	62	823
Chair and brace. Combined	C. H. Read	493,326	Mar. 14	971	250	62	1565
Chair and sofa-bed	L. Hirschfeld	507,270	Oct. 24	2517	621	65	509
Chair and step-ladder. Convertible	O. S. Jennings	505,795	Sept. 26	2494	629	64	1778
Chair and table. Combined	B. Poulson	491,590	Feb. 14	873	220	62	938
Chair-base	E. E. Koken	492,554	Feb. 28	2390	593	62	1274
Chair-bottom. Spring	R. S. Judson and F. Edmond	509,225	Nov. 21	2057	496	65	1176
Chair fan attachment	A. Flierboom	495,319	Apr. 11	1281	320	63	255
Chair fan attachment	P. A. Tornwall	490,234	Jan. 17	1980	519	62	435
Chair fan attachment. Rocking	J. H. Macartney	509,926	Dec. 5	130	30	65	1434
Chair fan attachment. Rocking	M. M. Ruth	498,365	May 30	3207	797	63	1254
Chair foot-rest. Rocking	W. McQuillen	503,246	Aug. 15	1685	414	64	903
Chair-frame	A. H. Ordway	498,140	May 23	2309	703	63	1170
Chair head-rest	J. L. Baker	494,617	Apr. 4	147	34	63	30
Chair-pad	J. J. Totman and E. G. Wheeler	491,325	Feb. 7	441	114	62	832
Chair seat and back	B. H. Dodd	504,446	Sept. 5	215	56	64	1310
Chair-seats. Machine for weaving cane for	C. W. Greenwood	494,139	Mar. 28	2238	570	62	1837
Chair stirrup attachment	F. E. Case	490,540	Jan. 24	2487	641	62	546
Chair table attachment	C. C. Whelan	506,985	Oct. 3	442	116	65	86
Chairs. Electrical attachment for rocking	C. E. Hartelius	493,997	Mar. 21	1994	508	62	1777
Chairs. Fan attachment for rocking	J. Martin	494,213	Mar. 28	2360	597	62	1860
Chaise	J. C. Huggins	499,738	June 20	1657	398	63	1707
Chalking device. Line	E. Walker	497,362	May 16	1588	401	63	937
Chamber-vessel	G. C. Fitts	501,601	July 18	1697	423	64	241
Change-delivering device	A. L. Levin	506,195	Oct. 3	649	165	65	125
Change making and delivering device	C. L. Travis	502,242	July 25	2737	690	64	545
Change-receiver	O. Lelm	499,556	June 13	1363	324	63	1643
Channel-molding machine	J. N. Moulton	498,017	May 23	2627	657	63	1137
Channeling and edge-trimming machine	E. F. White	500,174	June 27	2396	581	63	1849
Channeling-machine	Z. T. French and W. C. Meyer	500,060	June 20	2177	530	63	1798
Channeling-machine bit	J. S. Budro	505,972	Oct. 3	265	70	65	52
Charm or other article of jewelry. Watch-chain	S. A. Stahl and B. Klipper	491,382	Feb. 7	536	136	62	850

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Charm. Watch.....	B. G. Stanffer.....	497,611	May 16	1981	496	63	1006
Chart-board.....	J. S. Shepherd.....	511,552	Dec. 26	2936	716	65	1995
Chart-displayer.....	W. S. Temple.....	499,764	June 20	1707	409	63	1716
Chart. Dress.....	H. Poulin.....	510,364	Dec. 5	855	206	65	1572
Chart. Time.....	A. Gleason.....	497,917	May 23	2474	618	63	1110
Charts. Convertible case and display-stand for.....	N. W. Mackey.....	511,089	Dec. 19	2160	532	65	1839
Chase-frame and table. Combined.....	G. A. Davis.....	506,873	Oct. 17	1822	456	65	370
Chasing-mill.....	B. C. White.....	511,380	Dec. 26	2666	{ 646 647 648 }	65	1946
Chasing-mill.....	B. C. White.....	511,382	Dec. 26	2672	{ 647 648 }	65	1947
Chatelaine.....	J. C. Hayden.....	504,580	Sept. 5	442	113	64	1352
Chatelaine.....	A. B. Knight.....	504,839	Sept. 12	882	227	64	1450
Chatelaine. Umbrella.....	J. C. Hayden.....	504,579	Sept. 5	440	112	64	1352
Check. Baggage.....	A. J. Gulick.....	490,806	Jan. 31	2929	752	62	647
Check-bit.....	M. W. Case.....	510,158	Dec. 5	535	123	65	1511
Check-delivery apparatus. Coin-actuated automatic.....	H. A. Herr.....	506,400	Oct. 10	1049	{ 261 262 }	65	212
Check, draft, money-order, or similar instrument. Blank.....	W. T. Doremus.....	490,951	Jan. 31	3169	812	62	694
Check, draft, or similar instrument. Bank.....	L. C. Newton.....	505,884	Oct. 3	131	33.34	65	26
Check, draft, or the like.....	J. F. Schafer.....	493,223	Mar. 7	701	179	62	1496
Check-hook.....	W. Eckert.....	495,627	Apr. 18	1778	447	63	364
Check-hook.....	R. N. Martz.....	498,281	May 30	3050	759	63	1227
Check-hook.....	G. H. Van Wagner.....	505,147	Sept. 19	1386	355	64	1557
Check-holding apparatus.....	A. N. Southwick.....	492,441	Feb. 28	2192	548	62	1232
Check or token and missive. Combined.....	J. P. Stout.....	490,448	Jan. 17	1678	436	62	374
Check-perforator.....	W. H. Connell and J. A. Patterson.....	507,674	Oct. 31	3220	788	65	656
Check-register.....	C. T. Daniels.....	493,985	Mar. 21	1977	504	62	1773
Checkrein.....	A. W. Cox.....	493,353	Mar. 14	916	235	62	1553
Checkrein attachment.....	G. W. Hizer.....	511,697	Dec. 26	3175	777	65	2038
Checkrein attachment.....	J. Perkins.....	493,515	Mar. 14	1171	299	62	1601
Checkrein detaching or attaching device.....	H. P. Kyes.....	498,353	May 30	3185	793	63	1250
Checkrein-guide.....	J. R. Sturgeon.....	494,308	Mar. 28	2504	632	62	1887
Checkrein-loop.....	F. H. Towne.....	498,964	June 6	380	91	63	1459
Check-row and drill. Combined.....	C. H. and H. L. Dooley.....	509,797	Nov. 28	3039	734	65	1374
Check-row attachment.....	M. C. McMillan.....	495,429	Apr. 11	1455	{ 367 368 }	63	287
Check-row attachment.....	M. C. McMillan.....	498,292	May 30	3079	766	63	1232
Check-row-wire anchor.....	J. B. Lasure.....	509,913	Dec. 5	115	26	65	1431
Check-tower.....	R. Chadwick.....	490,268	Jan. 24	2054	537	62	461
Checks. Manifold device for baggage.....	C. H. Brown.....	509,669	Dec. 5	28	7	65	1416
Checks or the like. Form for bank.....	W. E. Selleck.....	507,850	Oct. 31	3508	863	65	710
Checking device.....	J. H. McGrady.....	497,594	May 16	1956	490	63	1001
Cheese case and cutter.....	P. W. Brundin.....	502,170	July 25	2616	659	64	523
Cheese compounds. Preparing.....	O. N. Ferry.....	507,897	Oct. 31	3574	880	65	722
Cheese hoop and cutter.....	J. Black.....	499,626	June 13	1477	355	63	1663
Cheese-making.....	J. Boyd.....	494,777	Apr. 4	398	.....	63	78
Cheese-making apparatus.....	W. T. Armstrong.....	494,973	Apr. 4	697	178	63	133
Cheese-press.....	J. L. Helmer.....	490,284	Jan. 24	2081	543	62	466
Cheese-press.....	J. L. Helmer.....	496,413	May 2	35	10	63	625
Cheese-press.....	C. J. Lundstrom.....	505,571	Sept. 26	2122	537	64	1709
Cheese-vat heater.....	R. Olp.....	505,413	Sept. 19	1813	468	64	1637
Chenille-cutting machine.....	O. Lever and W. S. Grundy.....	491,218	Feb. 7	257	64	62	797
Chenille twisting and winding machine.....	J. H. Clasen.....	489,370	Jan. 3	592	{ 159 160 }	62	127
Chess and checker board.....	C. C. Moore.....	511,306	Dec. 19	2521	{ 613 614 }	65	1905
Chest:							
See Flour-chest.							
Chicken-house.....	W. H. Putnam.....	508,529	Nov. 14	911	224	65	942
Chill. Oscillatory.....	R. A. Poole.....	502,994	Aug. 8	1280	313	64	815
Chill. Sectional.....	T. A. Griffin.....	489,474	Jan. 10	765	202	62	176
Chimney.....	L. E. Clawson.....	502,901	Aug. 8	1117	275	64	787
Chimney attachment.....	S. R. Heberling.....	495,887	Apr. 18	2193	552	63	438
Chimney attachment.....	R. B. Holmes.....	498,393	May 30	3239	806	63	1261
Chimney-cleaner.....	P. Teeple.....	490,374	Jan. 24	2231	580	62	497
Chimney-cowl.....	W. H. Ashton.....	494,454	Mar. 28	2740	687	62	1929
Chimney-cowl or ventilator.....	J. H. Chappel.....	506,812	Oct. 17	1728	434	65	353
Chimney-cowl. Rotary.....	H. and L. Iwan. (Reissue).....	11,375	Oct. 17	2179	539	65	436
Chimney-door.....	J. Hohenreiner.....	491,735	Feb. 14	1092	276	62	983
Chimney or flue cowl.....	J. L. Charvat.....	489,459	Jan. 10	744	198	62	172
Chimney or smoke-stack.....	R. Savage.....	500,779	July 4	394	104	64	73
Chimney-protector.....	O. W. Boston.....	490,536	Jan. 24	2481	639	62	545
Chimney-rack.....	F. W. Keller.....	504,729	Sept. 12	680	173	64	1411
Chimney-top.....	E. Finch.....	491,678	Feb. 14	1004	253	62	965
Chimney-top. Revolving.....	L. Iwan and W. Reiferscheid.....	493,430	Mar. 14	1032	267	62	1577
Chimneys, flues, &c. Cap for.....	H. Moeller.....	491,848	Feb. 14	1272	315	62	1018
Chin-rest.....	J. F. Bogan.....	508,081	Nov. 7	166	46	65	789
Chin-rest for the dead.....	J. W. Sexton.....	506,886	Oct. 17	1853	462	65	375
Chloride-of-lime dissolver.....	G. M. Newhall and C. L. Hamilton.....	489,261	Jan. 3	435	{ 120 121 }	62	66
Chlorine and caustic soda. Apparatus for the production of.....	J. Greenwood.....	489,677	Jan. 10	1058	{ 275 276 }	62	236
Chlorine and purifying lead. Producing.....	F. M. and C. H. M. Lyte.....	503,429	Aug. 15	1975	490	64	955
Chlorine. Making.....	J. A. Just.....	495,462	Apr. 11	1518	378	63	300
Chlorine or caustic alkali by electrolysis. Manufacturing.....	C. N. Waite.....	501,121	July 11	949	.....	64	187
Chlorine package. Liquid.....	R. Knietisch.....	506,640	Oct. 10	1428	358	65	286
Chlorine. Preparing liquid.....	E. B. Cutten.....	491,699	Feb. 14	1039	263	62	973
Chlorine. Process of and apparatus for making liquid.....	R. Knietisch.....	506,639	Oct. 10	1426	358	65	286
Chloroform. Purifying.....	R. P. Pictet.....	489,592	Jan. 10	947	247	62	212

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Chopper:							
<i>See</i> Cotton-chopper.	Potato-chopper.						
Culinary chopper.	Stalk-chopper.						
Meat-chopper.	Vegetable-chopper.						
Chopping-knife	J. W. Allen	496,809	May 2	671	177	63	738
Chopping-machine	L. Genevois	499,535	June 13	1333	{ 315 316 }	{ 63	1638
Chopping or mincing machine	A. Wood and T. Davies	511,485	Dec. 26	2838	686	65	1976
Christmas-tree candle-holder	W. Grau	493,161	Mar. 7	607	152	62	1478
Christmas-tree candle-holder	H. Schlueter	495,641	Apr. 18	1806	453	63	369
Christmas-tree holder	W. Windus	497,999	May 23	2601	651	63	1133
Chronograph. Personal-equation.	L. D. Wells	493,346	Mar. 14	907	{ 232 233 }	{ 62	1551
Chronometer-escapement	J. G. McAlpine	504,046	Aug. 29	2971	743	64	1173
Chuck	F. Blessing	459,862	Jan. 10	1333	348	62	292
Chuck	C. M. Conradson	489,934	Jan. 17	1482	387	62	335
Chuck	J. Emig	499,377	June 13	1057	256	63	1590
Chuck	J. Hartness	507,904	Oct. 31	3586	885	65	724
Chuck	W. J. Hoggson and E. P. Bement	493,502	Mar. 14	1156	295	62	1598
Chuck	J. G. McAlpine	504,047	Aug. 29	2972	743	64	1174
Chuck	A. Muir	493,231	Mar. 7	712	182	62	1498
Chuck	W. G. Nelson	497,986	May 23	2580	645	63	1129
Chuck	W. G. Nelson	500,292	June 27	2574	629	63	1879
Chuck	P. W. Reck	504,939	Sept. 12	1039	267	64	1480
Chuck	G. H. Sellers	507,598	Oct. 31	3093	755	65	631
Chuck and drill	H. Meister	492,733	Feb. 28	2660	659	62	1328
Chuck and rod-feeder. Automatic	C. M. Conradson	490,863	Jan. 31	3006	{ 771 772 }	{ 62	664
Chuck. Automatic	C. M. Conradson	497,632	May 16	2013	502	63	1012
Chuck. Drill	C. E. Billings	493,857	Mar. 21	1749	445	62	1731
Chuck. Drill	G. W. Kinser	498,797	June 6	75	18	63	1402
Chuck. Drill	S. C. Thompson	489,732	Jan. 10	1132	293	62	250
Chuck. Drill	W. Whitlock	506,024	Oct. 3	344	91	65	67
Chuck. Drill	A. Woerber	508,667	Nov. 14	1121	276	65	984
Chuck. Lathe	J. R. Howgate	503,374	Aug. 15	1903	471	64	942
Chuck. Lathe	R. L. Stanley	504,285	Aug. 29	3358	839	64	1247
Chuck. Lathe	A. Weatherby	498,998	June 6	448	105	63	1470
Chuck. Nipple	L. M. Saunders	500,820	July 4	455	120	64	84
Chuck or holder for tools, &c	A. Fleurant	494,631	Apr. 4	166	40	63	34
Chuck. Screw-machine	C. M. Conradson	489,933	Jan. 17	1480	347	62	335
Chuck. Screw-machine	A. C. Fitz	507,315	Oct. 24	2601	640	65	526
Chuck. Screw-machine	E. E. Saum and F. E. Blackman	510,191	Dec. 5	585	137	65	1520
Chuck. Spindle	J. R. Hopkins	489,006	Jan. 3	45	13	62	12
Chucking-machine and gage-lathe.	P. Dosch	490,406	Jan. 24	2270	590	62	505
Churn	H. C. Alexander	491,917	Feb. 14	1376	433	62	1039
Churn	J. F. Allison	498,499	May 30	3417	848	63	1293
Churn	E. Alpangh	493,006	Mar. 7	372	93	62	1432
Churn	H. C. Atkinson	492,654	Feb. 28	2551	632	62	1305
Churn	J. W. Bailey and J. T. McNorton	506,300	Oct. 10	868	214	65	177
Churn	J. C. Budd	505,026	Sept. 12	1180	{ 302 303 }	{ 64	1507
Churn	I. S. and W. O. Bunker	500,990	July 4	717	188	64	130
Churn	F. Cameron and E. Potter	507,414	Oct. 24	2760	677	65	557
Churn	W. N. Cason	493,681	Mar. 21	1465	373	62	1675
Churn	W. H. Curtice	511,404	Dec. 26	2710	657	65	1953
Churn	J. L. Cutler	500,850	July 4	516	134	64	94
Churn	E. Danner	507,788	Oct. 31	3400	834	65	690
Churn	W. Dobson	509,880	Dec. 5	60	14, 15	65	1421
Churn	H. Drymon	495,478	Apr. 18	1542	387	63	323
Churn	J. H. H. Duncan	503,654	Aug. 22	2357	588	64	1039
Churn	W. Edmister	502,179	July 25	2629	663	64	526
Churn	M. Elliott and A. J. Crigler	502,286	Aug. 1	34	8	64	572
Churn	M. V. Elsbree	507,677	Oct. 31	3225	789	65	657
Churn	A. C. Fell	491,677	Feb. 14	1003	253	62	965
Churn	D. A. Fiske	497,643	May 16	2030	505	63	1015
Churn	G. C. Forbes and B. Prickett	506,107	Oct. 3	479	124	65	94
Churn	W. Gibson	493,825	Mar. 21	1703	434	62	1721
Churn	F. D. Goodwin	508,219	Nov. 7	396	96	65	832
Churn	T. W. Hambric	491,644	Feb. 14	957	240	62	956
Churn	J. R. Havslit	494,202	Mar. 28	2343	593	62	1857
Churn	W. W. Hinman	504,385	Sept. 5	114	29	64	1292
Churn	T. F. Hood and W. G. Smith	501,423	July 11	1426	{ 357 358 }	{ 64	274
Churn	J. A. Kernodle	491,737	Feb. 14	1096	277	62	984
Churn	I. Key	491,055	Jan. 31	3345	853	62	730
Churn	D. H. King	501,839	July 18	2075	512	64	407
Churn	J. P. Kyte	506,404	Oct. 10	1057	263	65	214
Churn	A. M. Lance	499,234	June 13	813	193	63	1546
Churn	H. W. Lanphere	495,202	Apr. 11	1098	273	63	222
Churn	R. A. Ludlow	502,628	Aug. 1	637	152	64	684
Churn	W. F. Martin	494,430	Mar. 28	2703	678	62	1923
Churn	T. J. Missildine	500,021	June 20	2120	513	63	1788
Churn	N. Monday	489,872	Jan. 10	1347	351	62	295
Churn	R. D. Moon	504,737	Sept. 12	704	176	64	1416
Churn	A. W. Nanny	511,056	Dec. 19	2100	519	65	1827
Churn	H. G. Olds	501,806	July 18	2037	501	64	399
Churn	C. Owens	511,275	Dec. 19	2467	601	65	1896
Churn	J. Phegley	492,945	Mar. 7	274	70	62	1413
Churn	H. F. Quigley	504,174	Aug. 29	3182	795	64	1214
Churn	C. M. Robert	495,103	Apr. 11	917	231	63	191
Churn	S. J. Saxon	489,833	Jan. 10	1295	338	62	285
Churn	E. W. Settle	504,893	Sept. 12	958	247	64	1465
Churn	J. M. Tedlock	493,535	Mar. 14	1212	310	62	1609

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Churn.....	J. S. Thomson.....	501,384	July 11	1375	{ 343 344	{ 64	263
Churn.....	J. T. Urbach.....	496,674	May 2	453	{ 122	{ 63	701
Churn.....	F. Wiley.....	490,730	Jan. 31	2809	{ 720	{ 62	624
Churn.....	J. Wylie.....	501,984	July 25	2314	{ 578	{ 64	465
Churn and butter-worker. Combined.....	R. B. Disbrow.....	490,105	Jan. 17	1768	{ 460 461	{ 62	393
Churn and butter-worker. Combined.....	J. Overhalser.....	494,222	Mar. 28	2377	{ 600	{ 62	1863
Churn and butter-worker. Combined.....	E. Silen.....	509,772	Nov. 28	2988	{ 723	{ 65	1364
Churn-dasher.....	B. Cannon.....	497,304	May 16	1497	{ 377	{ 63	920
Churn-dasher.....	J. M. Chadwick.....	507,065	Oct. 17	2135	{ 530	{ 65	428
Churn-dasher.....	W. H. Evans.....	502,180	July 25	2631	{ 663	{ 64	526
Churn-dasher.....	J. E. Gibbs.....	507,612	Oct. 31	3115	{ 761	{ 65	636
Churn-dasher.....	F. M. Lucas.....	493,828	Mar. 21	1707	{ 435	{ 62	1722
Churn-dasher.....	A. Schuyler.....	508,768	Nov. 14	1267	{ 315	{ 65	1012
Churn-dasher.....	J. B. Siewers.....	489,336	Jan. 3	545	{ 147	{ 62	117
Churn mechanism.....	J. T. Walston.....	509,780	Nov. 28	3007	{ 727	{ 65	1368
Churn-motor.....	J. H. Dameron.....	493,822	Mar. 21	1700	{ 433	{ 62	1720
Churn-operating mechanism.....	D. F. Casey.....	489,155	Jan. 3	262	{ 73	{ 62	61
Churn-power.....	C. W. Patton.....	493,288	Mar. 14	817	{ 209	{ 62	1535
Churn-power.....	T. J. Price.....	492,429	Feb. 28	2171	{ 543	{ 62	1328
Chute.....	J. A. Haagen.....	508,307	Nov. 7	537	{ 132	{ 65	857
Chute.....	R. H. Lloyd and R. Reirsen.....	509,041	Nov. 21	1729	{ 427 428	{ 65	1114
Chute. Ash.....	T. Connor.....	491,960	Feb. 14	1443	{ 359	{ 62	1053
Chute. Ash.....	F. W. Stelling and H. F. Reetz.....	508,583	Nov. 14	997	{ 244	{ 65	960
Chute. Ash.....	R. C. Whayne.....	500,173	June 27	2395	{ 581	{ 63	1849
Chute. Coal.....	H. A. Ainsworth.....	498,419	May 30	3276	{ 816 817	{ 63	1268
Chute. Coal.....	I. Burnett.....	489,926	Jan. 17	1459	{ 381	{ 62	332
Chute. Coal.....	J. Forman.....	492,281	Feb. 21	1939	{ 494	{ 62	1169
Chute. Coal.....	J. F. Schmadeke.....	503,439	Aug. 15	1991	{ 494	{ 64	957
Chute. Coal.....	G. L. Stuebner and P. W. Nies.....	511,557	Dec. 26	2946	{ 718	{ 65	1997
Chute. Coal.....	F. G. Susemihl.....	493,949	Mar. 21	1904	{ 485	{ 62	1760
Chute. Flour.....	J. K. Johnston.....	502,194	July 25	2654	{ 670 671	{ 64	530
Chute for transferring material.....	C. L. Harris.....	511,332	Dec. 26	2574	{ 626	{ 65	1928
Cider-mill.....	J. Bowen.....	494,544	Apr. 4	8	{ 23	{ 63	4
Cider-mill.....	C. W. and E. G. Gest.....	502,558	Aug. 1	520	{ 124	{ 64	662
Cider-mill.....	L. Middleton.....	508,958	Nov. 21	1606	{ 394	{ 65	1089
Cider mill and press.....	D. F. Brunney.....	490,335	Jan. 24	2165	{ 565	{ 62	484
Cigar.....	L. M. Harris.....	492,676	Feb. 28	2580	{ 638	{ 62	1310
Cigar.....	A. B. Swope.....	489,397	Jan. 3	631	{ 170	{ 62	136
Cigar attachment.....	T. Guilfoyle.....	505,401	Sept. 19	1794	{ 464	{ 64	1634
Cigar-box.....	O. Kunzell.....	499,124	June 6	644	{ 155	{ 63	1503
Cigar-box.....	W. Pincus.....	499,645	June 13	1504	{ 361	{ 63	1667
Cigar-box moistener.....	C. H. Bayley.....	505,261	Sept. 19	1556	{ 406	{ 64	1589
Cigar-bunch-wrapping machine.....	C. Hvass.....	501,073	July 11	846	{ 219 220	{ 64	170
Cigar-bunching machine.....	J. H. Abraham.....	506,615	Oct. 10	1391	{ 349 350	{ 65	279
Cigar-bunching machine.....	C. Browning.....	494,521	Mar. 28	2849	{ 713 714	{ 62	1949
Cigar-bunching machine.....	L. T. Cornell.....	507,487	Oct. 24	2864	{ 703 704	{ 65	577
Cigar-bunching machine.....	J. Dela Mar.....	498,844	June 6	166	{ 41 42	{ 63	1421
Cigar-bunching machine.....	F. C. Miller.....	494,928	Apr. 4	632	{ 161	{ 63	122
Cigar-bunching machine.....	F. C. Miller.....	494,929	Apr. 4	633	{ 161	{ 63	122
Cigar-bunching machine.....	F. C. Miller.....	494,930	Apr. 4	634	{ 162	{ 63	122
Cigar-bunching machine.....	F. C. Miller.....	494,931	Apr. 4	635	{ 162	{ 63	122
Cigar-bunching machine.....	F. C. Miller.....	494,932	Apr. 4	636	{ 163	{ 63	123
Cigar-bunching machine.....	F. C. Miller.....	500,020	June 20	2115	{ 512 513	{ 63	1787
Cigar-bunching machine.....	E. Pisko.....	503,293	Aug. 15	1763	{ 436 437	{ 64	917
Cigar-bunching machine.....	H. Schmidt, A. Merunka, and C. J. Werner.....	492,438	Feb. 28	2184	{ 546 547	{ 62	1231
Cigar-bunching machine.....	A. C. Schutz.....	497,415	May 16	1666	{ 490 491	{ 63	951
Cigar-bunching machine.....	F. C. Smalstig.....	500,083	June 20	2207	{ 539 580	{ 63	1804
Cigar-bunching machine.....	S. I. Smith and H. W. Pease.....	507,177	Oct. 24	2352	{ 581 582	{ 65	480
Cigar-bunching-machine binder-clamp.....	P. Whitlock.....	499,488	June 13	1251	{ 298	{ 63	1623
Cigar-case.....	G. Westacott.....	492,127	Feb. 21	1694	{ 422	{ 62	1117
Cigar-cutter and electric lighter. Combined.....	A. Hnot.....	493,030	Mar. 7	407	{ 102	{ 62	1439
Cigar cutting and lighting device.....	P. Klemann.....	489,818	Jan. 10	1275	{ 334	{ 62	280
Cigar-fillers. Apparatus for making.....	N. H. Borgfeldt.....	494,362	Mar. 28	2601	{ 653	{ 62	1904
Cigar-fillers. Apparatus for making.....	N. H. Borgfeldt.....	494,363	Mar. 28	2602	{ 653	{ 62	1904
Cigar-fillers. Machine for forming.....	L. F. Winter.....	504,100	Aug. 29	3057	{ 764 765	{ 64	1190
Cigar-glossing device.....	O. Stroberger.....	500,823	July 4	462	{ 122	{ 64	85
Cigar-head-forming device.....	C. W. Boman.....	498,738	May 30	3843	{ 948	{ 63	1367
Cigar-holder.....	J. Anderssen.....	500,791	July 4	413	{ 108	{ 64	76
Cigar-holder.....	E. L. Gaylord.....	508,933	Nov. 21	1566	{ 383	{ 65	1081
Cigar-lighter. Electric.....	W. P. Carstarphen, Jr.....	497,263	May 9	1393	{ 352	{ 63	887
Cigar-lighter. Electric.....	W. P. Carstarphen, Jr.....	497,404	May 16	1650	{ 417	{ 63	948
Cigar-lighter. Electric.....	W. Carter and C. E. Willey.....	495,929	Apr. 18	2250	{ 567	{ 63	449
Cigar-lighter. Electric.....	C. J. Jenne and C. E. Willey.....	509,085	Nov. 21	1820	{ 446	{ 65	1131

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Cigar-lighter. Electric	L. T. Smith	496,103	Apr. 25	2517	637	63	514
Cigar-lighter. Electric	C. B. Struble	506,347	Oct. 10	952	237	65	193
Cigar-lighter. Electric	W. M. Thomas	494,091	Mar. 21	2146	548	62	1805
Cigar-machine	J. J. Becker	494,619	Apr. 4	150	35, 36	63	31
Cigar-machine	J. Bunn	494,548	Apr. 4	18	4, 5	63	6
Cigar-maker's gage	C. S. B. Moffat and J. A. Messina	489,025	Jan. 3	70	20	62	18
Cigar-moistener	A. Alford	493,347	Mar. 14	909	233	62	1551
Cigar-mold	J. Prentice	493,292	Mar. 14	822	210	62	1536
Cigar or cigarette holder	J. J. Baumgartner and H. Dreifuss	491,631	Feb. 14	937	235	62	951
Cigar or cigarette holder	M. C. Roebel	491,744	Feb. 14	1105	279	62	986
Cigar or cigarette machine	C. Schweizer and J. Nüesch	501,629	July 18	1743	434, 435	64	349
Cigar or cigarette mouthpiece	W. C. Baker	499,695	June 13	1575	379	63	1679
Cigar-pipe	E. J. Phillips and J. A. Linhard	502,992	Aug. 8	1278	312	64	815
Cigar-press	E. T. Zellner	507,607	Oct. 31	3107	759	65	635
Cigar-rolling apron	F. C. Miller	498,134	May 23	2800	700, 701	63	1168
Cigar-tip cutter	I. C. C. Rinehart	503,496	Aug. 15	2082	520	64	974
Cigar-tip cutter and match-safe. Combined	W. J. Briggs	494,700	Apr. 4	270	69	63	54
Cigar-tip cutter. Power-actuated	G. W. Beers	495,216	Apr. 11	1116	279	63	225
Cigar-vending machine	A. Berg	497,623	May 16	1997	499	63	1009
Cigar-vending machine	A. J. Kletzker and J. Ranz	508,725	Nov. 14	1202	298	65	999
Cigar-wrapper cutter	C. Hesse and J. C. M. Sternberg	503,701	Aug. 22	2433	605, 606	64	1053
Cigar-wrapper-cutting machine	H. Storm and F. Warnken	511,001	Dec. 19	2026	500, 501	65	1812
Cigar-wrapping machine	G. Hesse	492,203	Feb. 21	1815	454, 455	62	1143
Cigar-wrapping machine	F. Stiles	496,453	May 2	101	28	63	637
Cigars and tobacco. Box for storing and preserving	T. V. Smith	496,234	Apr. 25	2713	679	63	551
Cigarette	W. H. Butler	498,927	June 6	319	75	63	1448
Cigarette-box	T. E. West	503,512	Aug. 15	2107	528	64	979
Cigarette-forming device	F. Evers	496,475	May 2	133	37	63	643
Cigarette-machine	H. Bilgram	506,412	Oct. 10	1070	266, 267	65	216
Cigarette-machine	W. H. Butler	498,762	June 6	14	4	63	1391
Cigarette-machine	A. E. Decouffé	493,688	Mar. 21	1473	375, 376, 377, 378	62	1677
Cigarette-machine	J. B. Duke	503,582	Aug. 22	2230	559, 560, 385	64	1017
Cigarette-machine	V. S. Fombuena	501,498	July 18	1532	386, 387	64	310
Cigarette-machine	R. Hardie	495,613	Apr. 18	1756	443, 444, 561	63	361
Cigarette-machine	A. L. Munson	505,630	Sept. 26	2213	562, 563, 769	64	1726
Cigarette-machine	A. L. Munson	507,631	Oct. 31	3147	770, 771, 772	65	643
Cigarette machine. Continuous	J. H. Venners	503,507	Aug. 15	2101	525, 526	64	978
Cigarette-machine. Pocket	G. H. Zink	489,357	Jan. 3	572	155, 169	62	127
Cigarette-making machine	J. R. Williams	504,768	Sept. 12	755	190, 191, 192	64	1426
Cigarette-mouthpieces. Machine for making	P. Blache	493,472	Mar. 14	1103	283, 284	62	1589
Cigarette-packing device	C. W. Van Vleet	507,696	Oct. 31	3250	796	65	662
Cigarette-paper. Machine for manufacturing tubes of	P. V. M. Blache	492,264	Feb. 21	1915	477, 478	62	1164
Cigarette-papers. Package or wrapper for	F. Brousse	509,790	Nov. 28	3023	730	65	1371
Cigarette-rolling case	E. Schmidt	494,445	Mar. 28	2725	663	62	1926
Cigarettes. Device for making	H. C. Kerman	504,040	Aug. 29	2962	741	64	1172
Cinder and smoke consuming apparatus	F. Little	491,738	Feb. 14	1097	277, 278	62	984
Cinder-shovel	S. J. Besthoff	510,765	Dec. 12	1570	391	65	1719
Cinders. Device for burning and ejecting	R. H. McFerson	509,624	Nov. 28	2758	665	65	1321
Cipher device	W. R. Rothwell	506,731	Oct. 17	1595	402	65	328
Circuit and appliance. Test and signal	T. Spencer	507,565	Oct. 31	3021	742	65	619
Circuit-breaker and retardation-coil for test systems. Vibrating	C. E. Scribner	504,251	Aug. 29	3308	826	64	1237
Circuit-breaker. Automatic	D. Irish and J. G. Williams	492,807	Mar. 7	56	13	62	1369
Circuit-breaker. Automatic	A. Wurts	500,456	June 27	2834	697	63	1926
Circuit-breaker for motors. Automatic	R. T. Lozier	492,036	Feb. 21	1561	389	62	1090
Circuit-breaking apparatus	J. Barry	510,156	Dec. 5	531	122	65	1510
Circuit-closer	A. J. Oehring	502,749	Aug. 8	862	210	64	739
Circuit-closer and indicator. Thermal	J. L. Bradley	498,153	May 23	2824	707	63	1173
Circuit-closer. Thermal	E. Thomson	490,839	Jan. 31	2976	764	62	658
Circuit-closer. Time	R. H. Twigg	491,692	Feb. 14	1022	260	62	971
Circuit-connector. Track	E. H. Goodman	502,229	July 25	2711	684	64	541
Circuit-controller. Automatic	C. L. Mahew	510,646	Dec. 12	1375	336	65	1682
Circuit-controlling device	J. P. Buchanan	497,489	May 16	1791	450	63	972
Circuit for constant-current machines. Automatic short	A. Wurts	500,455	June 27	2833	697	63	1926
Circuit-interrupter. Automatic	A. Wurts	501,201	July 11	1066	270	64	209
Circuit. Means for switching generators or motors in or out of	N. Van Denburgh and F. H. Lovelidge	494,608	Apr. 4	135	31	63	28
Circuit-protector	H. W. Leland	497,430	May 16	1694	427	63	956

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Circuit-switch	C. E. Dey	504,123	Aug. 29	3090	774	64	1197
Circuit-switch	E. Woltmann and H. A. Triggs	497,756	May 16	2212	554	63	1049
Circuit-testing apparatus	F. S. Palmer	502,889	Aug. 8	1089	263	64	781
Circulating-boiler. Horizontal	H. R. Sheppard	501,739	July 18	1931	478	64	381
Cistern-cover	C. M. Monéfee and G. Ertel	503,055	Sept. 12	1227	316	64	1515
Cisterns. Device for removing débris from	G. D. Wilson	493,139	Mar. 7	571	143	62	1471
Clamp:							
See Axle-clamp. Nut-clamp.							
Basin-clamp. Paper-clamp.							
Bedclothes-clamp. Picture-frame clamp.							
Belt-clamp. Pipe-hanger beam-clamp.							
Bench-clamp. Plant-clamp.							
Cabinet-clamp. Rail-clamp.							
Colter-clamp. Railway-frog clamp.							
Electric - conductor Rock-drill clamp.							
clamp. Rope-clamp.							
Elevator-rope clamp. Rubber-dam clamp.							
Floor-clamp. Saw-clamp.							
Furniture-clamp. Saw-brazing clamp.							
Girder-clamp. Screw-clamp.							
Handle-clamp. Sucker-rod clamp.							
Hose-clamp. Tire-clamp.							
Kettle-lid clamp. Track-clamp.							
Loom warp-clamp. Work-holding clamp.							
Meat-clamp.							
Clamp	J. Bahret	489,782	Jan. 10	1228	322	62	269
Clamp	P. E. Bourassa	491,633	Feb. 14	939	236	62	952
Clamp	W. H. Dana	503,125	Aug. 15	1491	366	64	868
Clamp	C. A. Forsberg	498,778	June 6	44	9	63	1396
Clamp	J. F. Harvey	501,936	July 25	2248	561	64	453
Clamp	D. H. Isenminger	506,114	Oct. 3	487	126	65	95
Clamp	W. H. Robinson	493,118	Mar. 7	539	135	62	1465
Clamp-joint	F. Hurbie	509,222	Nov. 21	2053	495	65	1176
Clamps. Die for forming metallic	O. C. Rumsey	500,618	July 4	133	35	64	26
Clamping device. Ball-and-socket-joint	E. M. Low	490,150	Jan. 17	1846	482	62	402
Clamping devices. Work-holder for	F. Petsch	494,722	Apr. 4	305	77	63	62
Clamping-machine	W. Horrocks	507,131	Oct. 24	2264	557	65	465
Clamping mechanism	F. Johnson	509,129	Nov. 21	1892	462	65	1145
Clamping mechanism. Turret	F. H. Richards	496,064	Apr. 25	2460	621	63	503
Clarinet	J. Clinton	510,119	Dec. 5	466	105	65	1497
Clasp:							
See Belt-clasp. Garment-clasp.							
Book-clasp. Garment-supporter clasp.							
Broom-clasp. Necktie-clasp.							
Corset-clasp. Veil-clasp.							
Clasp	G. E. Adams	489,891	Jan. 10	1376	358	62	300
Clasp	G. E. Adams	496,629	May 2	374	102	63	687
Clasp	W. W. Anderson	489,781	Jan. 10	1227	321	62	269
Clasp	J. F. Chatellier	496,721	May 2	521	138	63	714
Clasp	I. Coe	491,079	Feb. 7	29	8	62	754
Clasp	W. B. Draper	497,710	May 16	2135	533	63	1034
Clasp	W. B. Draper	510,333	Dec. 5	809	196	65	1564
Clasp	J. M. Kaiser	510,918	Dec. 19	1877	460	65	1786
Clasp for holding envelopes, paper, &c	M. E. Goodwin and S. H. Lewis	504,213	Aug. 29	3248	810	64	1226
Clasp for pencils, pens, &c	H. C. Evans	508,096	Nov. 7	195	52	65	795
Clay-crushing machine	W. S. Urquhart and H. P. Mallory	511,566	Dec. 26	2961	722	65	2000
Clay-mill	C. W. Vaughn	494,515	Mar. 28	2840	710 711	62	1948
Clay-mill. Combination	C. W. Vaughn	495,235	Apr. 11	1150	288	63	231
Clay-screen	J. C. Schroeder	503,619	Aug. 22	2309	576	64	1030
Clay to make ballast, &c. Burning	W. and H. G. Butler	491,764	Feb. 14	1138	286	62	992
Cleaner:							
See Boiler-cleaner. Hoof-cleaner.							
Boiler-tube cleaner. Oat-cleaner.							
Broom-corn cleaner. Pipe-trap cleaner.							
Carpet-cleaner. Plow-cleaner.							
Chimney-cleaner. Railway-track cleaner.							
Cotton-cleaner. Sewer cleaner.							
Dish-cleaner. Slate-cleaner.							
Floor-cleaner. Track-cleaner.							
Flue-cleaner. Trolley-wire cleaner.							
Grain-cleaner. Tube-cleaner.							
Gun-cleaner. Well and cistern cleaner.							
Harrow-cleaner. Window-cleaner.							
Cleaning compound	J. A. Bazille and G. W. Partridge	507,473	Oct. 24	2849	.....	65	574
Cleaning compound	C. E. Moor	496,374	Apr. 25	2773	.....	63	563
Cleat	D. B. Bronson	503,193	Aug. 15	1602	394	64	889
Cleat for electric wiring	F. A. Duggan	508,687	Nov. 14	1146	282	65	990
Clevis, &c	A. I. Anderson	506,897	Oct. 17	1868	465	65	379
Clevis	W. E. Pennington	508,117	Nov. 7	228	59	65	800
Clevis	M. T. and E. M. Ridout	496,957	May 9	923	242	63	804
Clevis. Doubletree	A. M. Cole	506,769	Oct. 17	1656	415	65	340
Clevis-hook	J. K. Poole	508,338	Nov. 7	580	143	65	866
Clevis for plows. Shifting	H. A. Bates	494,729	Apr. 4	321	81	63	63
Clevis. Spring	E. Salisbury	497,553	May 16	1892	477	63	990
Clip:							
See Bicycle gun-clip. Singletree or whiffletree							
Hame-clip. clip.							
Hauling-clip. Spring-clip.							
Hedge-clip. Tug-clip.							
Insulator-clip. Vehicle-clip.							
Newspaper-clip. Whiffletree-clip.							
Paper-clip.							
Clip or fastening	E. Evans and J. Davies	498,509	May 30	3430	851	63	1295

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Clippers. Shearing.....	E. A. Cochran.....	508,163	Nov. 7	303	75	65	814
Clippers. Shearing.....	E. A. Cochran.....	508,164	Nov. 7	304	75	65	814
Clippers. Shearing.....	E. A. Cochran.....	508,165	Nov. 7	306	76	65	815
Clippers. Shearing.....	E. A. Cochran.....	511,125	Dec. 19	2321	544	65	1851
Cloak and skirt-protector. Combined	L. Sittig.....	489,103	Jan. 3	191	51	62	45
Cloak-rack.....	G. Rentsch.....	496,230	Apr. 25	2704	678	63	549
Clock.....	A. M. Lane.....	492,813	Mar. 7	66	15, 16	62	1371
Clock. Alarm.....	N. Case.....	506,625	Oct. 10	1406	353	65	282
Clock. Alarm.....	W. E. Porter.....	496,667	May 2	441	118	63	699
Clock. Alarm.....	E. R. Mason and A. O. Snow.....	505,115	Sept. 19	1337	345	64	1550
Clock. Alarm.....	E. B. Winger.....	491,328	Feb. 7	445	115	62	892
Clock. Calendar.....	H. Grünberg.....	504,432	Sept. 5	198	51	64	1307
Clock-case sash.....	A. M. Lane.....	492,031	Feb. 21	1553	387	62	1088
Clock-cases. Coating.....	F. Kroeber.....	506,050	Oct. 3	356	102	65	75
Clock. Chiming.....	J. J. Elliott.....	496,870	May 9	778	206	63	778
Clock. Circuit-closing.....	H. S. Page.....	494,966	Apr. 4	688	176	63	131
Clock. Electric.....	J. H. Dyson.....	491,339	Feb. 7	462	120	62	836
Clock. Electric.....	E. Schweizer.....	504,095	Aug. 29	3047	762	64	1189
Clock. Electric.....	H. Wubbelier.....	494,832	Apr. 4	494	{ 124 125 }	63	95
Clock. Electric alarm.....	T. P. Adams.....	495,287	Apr. 11	1241	310	63	247
Clock. Electric alarm.....	W. H. Deane.....	502,811	Aug. 8	962	234	64	758
Clock. Electric alarm.....	W. M. Fowler.....	498,468	May 30	3361	{ 837 838 }	63	1283
Clock. Electric alarm.....	C. F. Wyman.....	507,959	Oct. 31	3679	914	65	742
Clock. Electric program.....	H. C. Hain.....	496,258	Apr. 25	2752	688	63	557
Clock. Electric program.....	A. J. Reams.....	492,971	Mar. 7	314	80	62	1421
Clock-escapement.....	H. Rempe.....	499,176	June 6	730	173	63	1517
Clock-escapement. Torsional.....	E. Klahn.....	509,315	Nov. 21	2205	532	65	1204
Clock. Geographical.....	A. G. Jourdan.....	500,659	July 4	205	53, 54	64	40
Clock. Illuminated.....	W. H. Alderson.....	502,161	July 25	2604	655	64	520
Clock-key.....	F. Baum.....	497,422	May 16	1676	423	63	953
Clock moon-dial.....	E. A. Clark.....	508,467	Nov. 14	795	196	65	920
Clock-motor.....	S. B. Wortmann.....	510,754	Dec. 12	1547	384	65	1715
Clock-movement.....	A. Kehl.....	494,145	Mar. 28	2350	573	62	1839
Clock musical attachment.....	E. L. Cuendet.....	506,101	Oct. 3	467	122	65	91
Clock. Program alarm.....	A. Evans and B. Hollenback.....	497,019	May 9	1017	261	63	820
Clock. Secondary electric.....	R. S. Howland.....	499,787	June 20	1656	398	63	1707
Clock. Self-winding and synchronizing.....	A. G. Wiseman.....	502,156	July 25	2593	{ 652 653 }	64	518
Clock. Self-winding electric.....	E. Klahn.....	491,945	Feb. 14	1421	355	62	1048
Clock. Self-winding electric.....	F. M. Schmidt.....	502,935	Aug. 8	1180	291	64	798
Clock. Ship's bell.....	J. S. Negus.....	500,717	July 4	296	80	64	55
Clock striking mechanism.....	E. O. Caccialupi.....	500,704	July 4	273	73, 74	64	51
Clock striking mechanism.....	L. E. Courtin.....	503,310	Aug. 15	1800	447	64	922
Clock striking mechanism. Electric.....	W. Kailing.....	493,777	Mar. 21	1622	413	62	1706
Clock-synchronizer. Electric.....	H. S. Prentiss.....	496,134	Apr. 25	2560	644	63	522
Clock-synchronizer. Electric.....	H. S. Prentiss.....	496,135	Apr. 25	2562	645	63	522
Clock-synchronizer. Electric.....	H. S. Prentiss.....	502,381	Aug. 1	219	62	64	606
Clock-synchronizer. Electric.....	H. S. Prentiss.....	506,936	Oct. 17	1933	{ 478 479 }	65	391
Clock-synchronizer. Electric.....	A. G. Wiseman.....	502,157	July 25	2598	{ 553 554 }	64	519
Clock winding mechanism.....	M. Everhart.....	505,704	Sept. 26	2350	595	64	1751
Clock winding mechanism.....	A. J. Hopewell.....	509,375	Nov. 28	2312	560	65	1235
Clock winding mechanism.....	D. Vauthier.....	500,683	July 4	241	64	64	46
Clock winding mechanism. Tower.....	R. B. Carr.....	511,408	Dec. 26	2715	658	65	1953
Clocks. Electric winding attachment for.....	A. G. Wiseman.....	502,215	July 25	2687	678	64	537
Clockwork mechanism. Apparatus for controlling the speed of	J. E. Greenhill.....	494,633	Apr. 4	169	40, 41	63	34
Closet: See Dry closet. Siphon-closet. Earth-closet. Water-closet.							
Closet.....	C. G. Baumgaertel.....	508,079	Nov. 7	162	45	65	788
Cloth-cutting machine.....	H. A. Caldwell.....	502,031	July 25	2390	{ 601 602 }	64	479
Cloth-cutting machine.....	O. Froemert.....	499,917	June 30	1962	476	63	1761
Cloth-cutting machine.....	W. S. Salisbury.....	502,052	July 25	2425	611	64	485
Cloth-cutting machine.....	L. Smith.....	510,717	Dec. 12	1487	368	65	1703
Cloth-cutting machine.....	A. K. Thyll.....	511,562	Dec. 26	2955	720	65	1999
Cloth-cutting machine.....	A. K. Thyll.....	511,563	Dec. 26	2956	720	65	1999
Cloth-cutting machine.....	P. D. Van Vradenburg.....	495,174	Apr. 11	1057	263	63	214
Cloth-cutting machine.....	J. Wolf, Jr.....	505,690	Sept. 26	2328	{ 590 591 }	64	1747
Cloth-cutting machine.....	J. Wolf, Jr., and J. Bloch.....	505,689	Sept. 26	2323	590	64	1746
Cloth-cutting machine take-up device.....	J. Wolf, Jr.....	505,741	Sept. 26	2408	609	64	1761
Cloth-cutting machines. Overhead support for conducting-wires of	A. K. Thyll.....	508,534	Nov. 14	918	225	65	944
Cloth dressing or finishing mechanism.....	A. Brown.....	496,720	May 2	520	138	63	713
Cloth drying, tentering, and trimming machine.....	E. H. Schofield.....	494,492	Mar. 28	2797	701	62	1940
Cloth-finishing machine.....	A. Brown.....	509,296	Nov. 21	2173	522	65	1198
Cloth-finishing machine.....	H. G. Johnson.....	504,219	Aug. 29	3255	812	64	1227
Cloth-finishing machines. Chain-clip for.....	R. Walker.....	501,855	July, 18	2103	519	64	411
Cloth-folding machine.....	R. T. Smith.....	492,116	Feb. 21	1678	{ 418 419 }	62	1114
Cloth inspecting and trimming machine.....	P. A. Mathewson.....	506,706	Oct. 17	1542	385	65	319
Cloth-napping machine.....	G. and H. Bauche.....	494,052	Mar. 21	2077	531	62	1792
Cloth-napping machine.....	J. D. Cloudman.....	505,264	Sept. 19	1561	408	64	1591
Cloth-napping machine.....	E. Gessner.....	511,609	Dec. 26	3040	741	65	2013
Cloth-napping machine.....	W. T. Leech and G. Himelspark.....	493,215	Mar. 7	683	{ 174 175 }	62	1492
Cloth-napping machine.....	F. Martinot.....	494,152	Mar. 28	2261	575	62	1840
Cloth-napping machine.....	C. F. X. Ott.....	500,347	June 27	2673	{ 655 656 }	63	1897

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Cloth-napping machine.	M. M. Wilson	504,010	Aug. 29	2916	731	64	1164
Cloth-notcher	F. J. Stolle	491,253	Feb. 7	306	78	62	807
Cloth-piling machine.	J. B. O'Bryan	506,535	Oct. 10	1281	320	65	257
Cloth-piling machine.	J. B. O'Bryan	506,536	Oct. 10	1282	321	65	257
Cloth-pressing machine.	M. Campbell	506,469	Oct. 10	1176	292	65	237
Cloth-pressing machine.	J. Kirk and B. Lee	501,349	July 11	1311	327	64	252
Cloth-pressing machine.	J. Kirk and B. Lee	507,229	Oct. 24	2445	603	65	496
Cloth. Pulley for feeding.	J. Edmunds	494,131	Mar. 28	2226	567	62	1835
Cloth-scouring machine.	M. H. Kohlrausch	493,627	Mar. 21	1381	351	62	1659
Cloth-scouring machine.	J. W. Steelbrooke	500,626	July 4	143	38	64	28
Cloth-shearing machine.	F. Ott	506,067	Oct. 3	412	108	65	80
Cloth-singeing device.	W. S. Granger	506,395	Oct. 10	1035	258	65	209
Cloth-singeing device.	R. M. Hunter	508,944	Nov. 21	1584	388	65	1084
Cloth-softening machine.	J. W. Fries	502,903	Aug. 8	1119	275	64	788
Cloth sponging and shrinking machine.	G. Rothholz	511,216	Dec. 19	2367	578	65	1878
Cloth stretching and calendering machine.	W. P. Mather	504,927	Sept. 12	1020	263	64	1477
Cloth stretching and drying machine.	M. P. Meissner	505,117	Sept. 19	1339	345	64	1550
Cloth stretching and drying machines. Chain-guiding box for	D. R. Kinyon	499,839	June 20	1834	446	63	1738
Cloth-stretching machines. Chain-clip for.	A. A. Whitley	503,301	Aug. 15	1779	439	64	920
Cloth-stretching machines. Chain-clip for.	A. A. Whitley	503,301	Aug. 15	1779	440	64	920
Cloth-tentering machines. Selvage-guide for.	J. C. Whittles	499,072	June 6	569	136	63	1490
Clothes-drier.	J. C. Beckley	503,573	Aug. 22	2217	554	64	1015
Clothes-drier.	J. J. Bisel	509,349	Nov. 21	2260	546	65	1214
Clothes-drier.	M. A. Bowling	496,185	Apr. 25	2629	682	63	535
Clothes-drier.	C. C. F. Brandt	490,943	Jan. 31	3154	808	62	692
Clothes-drier.	C. Brodowska	490,843	Jan. 31	2981	764	62	658
Clothes-drier.	M. C. Burr	494,247	Mar. 28	2412	608	63	1869
Clothes-drier.	R. Z. Curtis	491,987	Feb. 21	1484	370	62	1075
Clothes-drier.	H. A. Eversdyk	499,663	June 13	1530	368	63	1671
Clothes-drier.	T. Fry	495,409	Apr. 11	1422	358	63	281
Clothes-drier.	J. F. Hanson	489,305	Jan. 3	495	137	62	108
Clothes-drier.	W. E. B. Harris	494,141	Mar. 28	2246	572	62	1838
Clothes-drier.	E. F. Hines and H. V. Gibson	492,015	Feb. 21	1532	382	62	1084
Clothes-drier.	J. G. Kurtz	505,108	Sept. 19	1324	342	64	1547
Clothes-drier.	G. A. Leighton	490,570	Jan. 24	2525	650	62	554
Clothes-drier.	J. McKinnon. (Reissue)	11,310	Feb. 28	2730	679	62	1341
Clothes-drier.	M. M. McLeran	493,596	Mar. 14	1322	338	62	1632
Clothes-drier.	W. F. Redding	490,361	Jan. 24	2211	576	62	494
Clothes-drier.	J. F. Schmidt	502,913	Aug. 8	1134	279	64	790
Clothes-drier.	J. Schmitz	508,989	Nov. 21	1649	406	65	1099
Clothes-drier.	H. R. Sheets	508,772	Nov. 14	1271	316	65	1013
Clothes-drier.	E. H. Thomas	498,091	May 23	2738	684	63	1157
Clothes-drier.	F. E. Trude	496,961	May 9	928	243	63	805
Clothes-drier.	G. Tyler	493,880	Mar. 21	1780	454	62	1737
Clothes-drier.	T. Ward	490,380	Jan. 24	2237	582	62	499
Clothes-hanger.	T. M. Garrison	490,145	Jan. 17	1840	480	62	408
Clothes-line.	C. B. Albert	505,016	Sept. 12	1165	299	64	1504
Clothes-line.	F. G. Lane	497,248	May 9	1366	347	63	883
Clothes-line.	G. A. Whitton	491,032	Jan. 31	3309	844	62	723
Clothes-line attachment.	L. Oppenheimer	507,835	Oct. 31	3485	857	65	705
Clothes-line. Chain.	H. E. Percival	507,161	Oct. 24	2326	572	65	475
Clothes-line clutch.	R. Ancock	511,492	Dec. 26	2849	689	65	1979
Clothes-line fastener.	G. J. Reed	507,593	Oct. 31	3088	754	65	630
Clothes-line hanger.	J. R. Hoyt	499,323	June 13	954	230	63	1570
Clothes-line holder.	H. Pittman	510,991	Dec. 19	2013	497	65	1810
Clothes-line holding and operating device.	J. J. Kinman	492,628	Feb. 28	2507	621	62	1297
Clothes-line. Pinless.	F. G. Lane and J. W. Kelly	497,247	May 9	1366	347	63	883
Clothes-line pulley.	E. Fauteux	491,998	Feb. 21	1501	374	62	1078
Clothes-line support. Safety.	T. Rasmus	494,162	Mar. 28	2275	577	62	1843
Clothes-line swinging support.	C. and C. C. J. Gedde	490,385	Jan. 24	2244	584	62	500
Clothes-line. Wire.	F. S. Dowell	499,528	June 13	1321	311	63	1636
Clothes-lines. Clothes-fastener for wire.	K. F. Rice and J. P. Doss	492,835	Mar. 7	95	23	62	1376
Clothes-pin.	N. Baughman	496,768	May 2	596	159	63	726
Clothes-pin.	J. W. Cook	506,980	Oct. 17	1998	494	65	404
Clothes-pin.	W. E. Crump	494,414	Mar. 28	2682	673	62	1919
Clothes-pin.	H. C. Griffin	500,574	July 4	58	17	64	12
Clothes-pin.	G. W. Jones	507,818	Oct. 31	3452	848	65	700
Clothes-pin.	J. B. Lockwood	490,971	Jan. 31	3199	817	62	700
Clothes-pin.	G. W. McCoole. (Reissue)	11,358	Aug. 15	2200	549	64	996
Clothes-pin.	H. Merrill	505,407	Sept. 19	1801	465	64	1635
Clothes-pin.	J. H. Russell	495,518	Apr. 18	1603	404	63	334
Clothes-pin.	E. B. Webber	498,892	June 6	254	60	63	1437
Clothes-pin. Movable.	W. C. Popplewell	493,516	Mar. 14	1172	299	62	1601
Clothes-pounder.	G. W. Ainsworth	500,461	June 27	2839	699	63	1927
Clothes-pounder.	G. E. Allgaier	496,506	May 2	176	49	63	651
Clothes-pounder.	W. G. Beaver	492,774	Mar. 7	4	1	62	1359
Clothes-pounder.	S. and F. G. Davis	503,832	Aug. 22	2622	656	64	1091
Clothes-pounder.	L. Hopkins	498,118	May 23	2781	696	63	1165
Clothes-pounder.	G. W. Lawbaugh	501,606	July 18	1706	425	64	343
Clothes-pounder.	A. C. McKinney	491,685	Feb. 14	1016	257	62	969
Clothes-pounder.	G. Seger	491,448	Feb. 7	643	160	62	870
Clothes-pounder.	H. O. Soper and W. M. Brown	489,506	Jan. 10	827	216	62	189
Clothes-pounder.	W. P. Ware	501,634	July 18	1754	437	64	351
Clothes-press.	H. A. Shepard	511,097	Dec. 19	2174	535	65	1842
Clothes-wringer.	J. E. Craig	497,635	May 16	2017	503	63	1013
Clothes-wringer.	W. I. Gong	510,171	Dec. 5	551	128	65	1514
Clothes-wringer.	J. F. Judy	506,821	Oct. 17	1745	439	65	356
Clothes-wringer.	W. Thornton	504,483	Sept. 5	277	72	64	1322
Clothes-wringer.	C. Wheeler, Jr.	500,984	July 4	709	187	64	129

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Clothes-wringer.....	C. Wheeler, Jr.....	502,646	Aug. 1	663	161	64	689
Clothes-wringer.....	C. Wheeler, Jr.....	502,647	Aug. 1	664	162	64	689
Clothes-wringer roll.....	E. Kohl.....	494,814	Apr. 4	469	118	63	90
Cloud-creator or nebulator.....	S. Mackaye.....	490,481	Jan. 24	2388	618	62	527
Clover-huller casing.....	J. N. Kailor.....	497,027	May 9	1030	263	63	832
Clover-huller screen-shoe.....	J. N. Kailor.....	500,136	June 27	2333	564	63	1838
Clover-hulling machine.....	A. Miller.....	491,740	Feb. 14	1100	278	62	984
Clover-hulling machines. Concave for.....	M. T. Reeves.....	499,591	June 13	1420	340	63	1653
Clutch.....	W. G. Austin.....	503,824	Aug. 22	2613	653	64	1089
Clutch.....	H. Broome.....	510,886	Dec. 19	1823	451	65	1775
Clutch.....	M. H. C. W. Farjasse.....	510,532	Dec. 12	1172	282	65	1644
Clutch.....	J. Fraser.....	492,625	Feb. 28	2502	620	62	1296
Clutch.....	F. S. Gable and J. S. Detrick.....	507,117	Oct. 24	2231	551	65	459
Clutch.....	J. Gawron.....	503,659	Aug. 22	2365	590	64	1041
Clutch.....	J. Gawron.....	511,047	Dec. 19	2085	516	65	1824
Clutch.....	J. C. Gibson.....	505,219	Sept. 19	1495	390	64	1578
Clutch.....	O. F. Leibert.....	506,517	Oct. 10	1256	313	65	252
Clutch.....	W. H. Lindsay.....	502,732	Aug. 8	836	203	64	734
Clutch.....	R. T. G. Lüders.....	498,884	June 6	240	56	63	1435
Clutch.....	J. W. Meserve and W. Morse.....	495,425	Apr. 11	1447	364	63	285
Clutch.....	J. H. Moss.....	496,693	May 2	480	128	63	706
Clutch.....	A. P. Palmer and H. L. Phelps.....	503,984	Aug. 29	2868	719	64	1155
Clutch.....	C. K. Pickles.....	491,444	Feb. 7	628	157	62	868
Clutch.....	S. H. Randall.....	502,758	Aug. 8	876	214	64	741
Clutch.....	E. D. Schmitt and G. N. Hinchman.....	508,052	Nov. 7	105	30, 31	65	778
Clutch.....	E. Shaw.....	495,602	Apr. 18	1736	437	63	357
Clutch.....	S. Trethewey.....	495,686	Apr. 18	1872	470	63	379
Clutch.....	S. Trethewey.....	495,687	Apr. 18	1874	470	63	380
Clutch.....	S. A. Trowbridge and C. E. Twitt.....	505,545	Sept. 26	2057	525	64	1696
Clutch.....	J. Walker.....	496,460	May 2	115	31	63	640
Clutch.....	A. M. White.....	499,280	Jan. 3	461	128	62	101
Clutch.....	F. R. White.....	499,279	Jan. 3	459	127	62	101
Clutch.....	J. Wolf, Jr.....	503,923	Aug. 22	2755	691	64	1117
Clutch.....	W. Womersley.....	511,390	Dec. 26	2686	651	65	1949
Clutch.....	W. Womersley.....	511,391	Dec. 26	2689	652	65	1949
Clutch.....	H. Wyman.....	495,540	Apr. 18	1641	412	63	341
Clutch. Cushioned.....	H. P. Eilers.....	505,037	Sept. 12	1202	309	64	1511
Clutch device. Friction.....	H. R. Tillison.....	495,440	Apr. 11	1474	371	63	290
Clutch device. Friction.....	J. E. Windle.....	497,506	May 16	1825	460	63	978
Clutch. Electric motor.....	W. A. Johnston and A. W. Browne.....	503,420	Aug. 15	1964	488	64	953
Clutch for electric motors. Friction.....	O. Dahl.....	499,183	June 6	739	176	63	1519
Clutch. Friction.....	J. F. Byers.....	499,208	June 13	780	185	63	1540
Clutch. Friction.....	M. E. Company.....	506,767	Oct. 17	1652	414	65	339
Clutch. Friction.....	H. C. Crowell.....	501,925	July 25	2232	557	64	450
Clutch. Friction.....	C. S. Fifield.....	496,603	May 2	329	90	63	679
Clutch. Friction.....	W. H. McConnell.....	504,110	Aug. 29	3076	770	64	1194
Clutch. Friction.....	H. E. Nottingham and A. Tucker.....	502,446	Aug. 1	333	80	64	627
Clutch. Friction.....	G. Philon.....	498,300	May 30	3095	771	63	1235
Clutch. Friction.....	C. E. Twitt.....	505,617	Sept. 26	2193	555	64	1723
Clutch. Friction.....	J. Walrath.....	490,002	Jan. 17	1590	416	62	357
Clutch. Friction.....	W. O. Wakefield and S. H. Libby.....	508,663	Nov. 14	1117	275	65	983
Clutch. Friction.....	F. L. Waterous.....	501,976	July 25	2300	575	64	462
Clutch. Friction.....	P. Weber.....	505,970	Oct. 3	260	69, 70	65	51
Clutch. Friction.....	W. W. Wells and H. E. Tidmarsh.....	493,608	Mar. 14	1348	343	62	1637
Clutch. Friction.....	E. G. P. Wern.....	505,338	Sept. 19	1684	434	64	1613
Clutch. Friction ratchet.....	R. F. Hargraves.....	495,328	Apr. 11	1298	326	63	259
Clutch. Hub friction.....	H. L. Moulton.....	495,748	Apr. 18	1974	498	63	398
Clutch-lubricating device.....	P. Diehl.....	511,412	Dec. 26	2732	659	65	1955
Clutch mechanism.....	T. Griswold, Jr.....	491,169	Feb. 7	180	46	62	782
Clutch mechanism.....	I. F. Thompson.....	505,257	Sept. 19	1550	404	64	1588
Clutch mechanism for power-presses.....	F. M. Leavitt.....	490,715	Jan. 31	2784	715	62	620
Clutch mechanism. Friction.....	E. L. Babcock and E. D. Schmitt.....	511,320	Dec. 26	2548	621	65	1923
Clutch-operating mechanism.....	H. W. Hill.....	503,853	Aug. 22	2653	664	64	1097
Clutch or coupling. Magnetic.....	G. A. Brown.....	505,025	Sept. 12	1179	302	64	1507
Clutch. Outside friction-band.....	J. B. Taplin.....	489,045	Jan. 3	101	28	62	26
Clutch. Self-adjusting friction.....	F. M. Shaw, J. R. Methven, and G. M. Sharp.....	494,173	Mar. 28	2291	580	62	1846
Clutch. Self-lubricating.....	P. Diehl.....	511,413	Dec. 26	2724	659	65	1935
Clutch-shifter.....	W. B. Hosford.....	506,113	Oct. 3	485	126	65	95
Clutch. Valve-controlling.....	J. P. Tirrell.....	489,424	Jan. 3	673	182	62	145
Clutching mechanism.....	G. E. Witherell.....	504,770	Sept. 12	767	193	64	1427
Coagulant-feeder.....	J. H. Blessing.....	510,112	Dec. 5	456	102	65	1496
Coal. Apparatus for handling.....	W. D. Ewart.....	502,250	July 25	2756	697	61	549
Coal-briquets. Composition of matter for.....	J. N. Moerath.....	495,679	Apr. 18	1802	63	378	
Coal-cutters. Forming.....	F. Bain.....	501,755	July 18	1963	486	64	387
Coal-cutting machine.....	I. Warthing and J. T. Johnson.....	510,455	Dec. 12	1017	243	65	1617
Coal-drill.....	C. Grotz.....	500,124	June 27	2310	559	63	1834
Coal elevating and conveying apparatus.....	S. Winslow.....	489,886	Jan. 10	1369	356	62	298
Coal feeder and stoker. Automatic.....	W. Oehlstrom.....	489,542	Jan. 10	875	229	62	198
Coal for transportation. Apparatus for preparing.....	W. C. Andrews.....	502,062	July 25	2442	614	64	488
Coal, grain, &c. Pocket or bin for the storage of.....	T. E. Murray.....	503,097	Aug. 8	1431	353	64	844
Coal-handling appliance.....	H. K. Morrison.....	502,445	Aug. 1	332	80	64	627
Coal-hod and ash-sifter.....	H. Roth.....	501,299	July 11	1213	370	64	235
Coal-moving apparatus.....	E. D. Johnston.....	493,272	Mar. 14	785	203	62	1529
Coal or ore bins. Discharge apparatus for.....	R. W. Ericson.....	504,673	Sept. 5	589	150	64	1381
Coal or ore docks. Discharge apparatus for.....	R. W. Ericson.....	504,674	Sept. 5	591	150	64	1381
Coal or ore docks. Discharge apparatus for.....	R. W. Ericson.....	504,675	Sept. 5	593	151	64	1382

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Coal or ore jigger	V. H. Rood	490,793	Jan. 31	2912	748 749	62	644
Coal, ore, &c. Machine for handling	G. H. Hulett	495,040	Apr. 11	802	202 203	63	168
Coal-piling apparatus	J. M. Dodge	502,555	Aug. 1	516	123 124	64	661
Coal-piling apparatus	J. M. Dodge	503,409	Aug. 15	1944	483	64	950
Coal-screen	F. L. Sackett	508,345	Nov. 7	589	145	65	868
Coal, &c. Separating and cleaning	C. Lührig. (Reissue)	11,334	May 9	1474	370 371	63	900
Coal, &c. Separator for	H. Bradford	501,673	July 18	1818	453	64	362
Coal. Settling or storage pond or basin for pulverized	W. C. Andrews	502,063	July 25	2444	614	64	489
Coat	L. Scheimberg	497,928	May 23	2490	621	63	1113
Coat	B. Thompson	510,452	Dec. 12	1009	211	65	1615
Coat	A. C. Watson	511,667	Dec. 26	3127	764	65	2030
Coat and hat hook	F. Taylor	499,609	June 13	1447	347	63	1658
Coat and hat hook	F. Taylor	505,336	Sept. 19	1683	434	64	1613
Coat and hat hook	F. Taylor	505,337	Sept. 19	1683	434	64	1613
Coat and hat hook	A. White	496,375	Apr. 25	2964	740	63	599
Coat and hat hook	A. White	505,209	Sept. 19	1484	387	64	1576
Coat-bust. Adjustable	A. B. Buehl	497,423	May 16	1677	423 424	63	953
Coat-collar supporter	W. P. Culver	491,337	Feb. 7	460	119	62	835
Coat-form	S. Friedlander	497,236	May 9	1342	342	63	879
Coat-hook	A. White	501,452	July 11	1467	368	64	282
Coat-holder	J. Banks	496,289	Apr. 25	2797	700	63	567
Coat-sleeve protector	R. A. P. Meade	498,567	Jan. 10	911	238	62	205
Coating iron or steel plates with metal or alloy. Apparatus for	R. Lewis and G. Morgan	509,746	Nov. 28	2949	714	65	1356
Coating iron with magnetic oxide	P. H. Bertrand	510,318	Dec. 5	792		65	1560
Coating non-metallic articles with metal	T. M. Ash and H. W. Gill	509,280	Nov. 21	2142		65	1191
Coating with aluminum or alloys thereof	E. C. Broadwell	503,070	Aug. 8	1385		64	836
Coating with silver. Composition of matter for	T. Z. H. St. Cyr	503,358	Aug. 15	1879		64	938
Cock. Ball	W. F. Lill	500,265	June 27	2535	620	63	1873
Cock. Ball	J. M. Young and J. B. Geyser	506,145	Oct. 3	546	141	65	106
Cock. Basin	J. M. Peck	505,634	Sept. 26	2228	565	64	1729
Cock. Compression stop and waste	T. C. Dalton	504,865	Sept. 12	918	237	64	1457
Cock for tanks for water-closets, &c. Ball	J. R. Allan	503,339	Aug. 15	1846	457	64	931
Cock for water-coolers	J. H. Savill	498,366	May 30	3208	798	63	1254
Cock. Gage	T. A. Delaney	509,879	Dec. 5	57	14	65	1421
Cock. Gage	J. D. Mitchell	490,157	Jan. 17	1855	484	62	411
Cock. Gage	R. P. Ross	503,386	Aug. 15	1918	476	61	945
Cock. Gas	E. J. Stoltz	509,777	Nov. 28	3003	726	65	1368
Cock. Lock stop	J. M. Adkins and R. C. Berry	506,087	Oct. 3	446	117	65	87
Cock or faucet	J. Conity	496,998	May 9	985	255	63	814
Cock or faucet	J. Conity	496,999	May 9	987	255	63	815
Cock or faucet	J. Conity	497,000	May 9	989	255	63	815
Cock or faucet	G. T. Eyanson	508,211	Nov. 7	383	94	65	829
Cock or faucet	J. H. Savill	507,456	Oct. 24	2823	691	65	569
Cock or tap. Stop	J. T. Hailwood	502,094	July 25	2491	626	64	498
Cock or turning plug. Stop	E. W. Howell	494,569	Apr. 4	64	15	63	13
Cock. Regulating plug	H. See	505,489	Sept. 26	1931	498	64	1674
Cock. Stop	J. G. Smith	509,628	Nov. 28	2763	666	65	1322
Cocoanut-husks. Treating	J. T. Davis	497,911	May 23	2466		63	1109
Coffee. Aging	C. Mingo	505,883	Oct. 3	130		65	26
Coffee-grinding mill	E. Schmidlin	493,655	Mar. 21	1423	362	62	1666
Coffee. Machine for eliminating stones, &c., from	W. Schwab	505,487	Sept. 26	1929	497	64	1674
Coffee-making pot or utensil	C. Ackerman	498,098	May 23	2748	687	63	1159
Coffee-mill	C. Morgan and M. Redlinger, Jr.	495,099	Apr. 11	909	229	63	189
Coffee-mill	J. B. Quiggle	490,163	Jan. 17	1865	486	62	413
Coffee-mill	W. B. Thompson	507,051	Oct. 17	2117	525	65	425
Coffee mill and box	V. Merkel	506,369	Oct. 10	991	246	65	200
Coffee or tea pot	G. W. Goodwyn	491,478	Feb. 7	685	172	62	880
Coffee or tea pot	S. A. Van Buskirk and W. P. Wilson	494,607	Apr. 4	133	30	63	28
Coffee-pot	F. P. Boland	501,672	July 18	1818	453	64	362
Coffee-pot	W. P. Carlin	503,342	Aug. 15	1850	458	64	932
Coffee-pot	E. J. Colby	503,563	Aug. 15	2194	548	64	995
Coffee-pot	J. K. Cummings	495,693	Apr. 18	1884	472	63	381
Coffee-pot	S. Geldbrant	505,042	Sept. 12	1208	311	64	1512
Coffee-pot	J. Green	495,937	Apr. 18	2261	569	63	451
Coffee-pot	W. C. Jones	494,206	Mar. 28	2351	594	62	1858
Coffee-pot	F. J. Rabbeth	506,338	Oct. 10	934	232	65	190
Coffee-pot handle. Detachable	M. C. Woodward	491,001	Jan. 31	3245	829	62	709
Coffee-roaster	T. W. Petway and W. L. Mullins	498,299	May 30	3094	771	63	1235
Coffee-roaster. Gas	K. F. Henneman	510,068	Dec. 5	384	85	65	1482
Coffee-roasting apparatus	H. Trillich	493,606	Mar. 14	1344	342	62	1636
Coffin	W. J. Leonhardt	494,297	Mar. 28	2491	628	62	1884
Coffin	J. Loersch, Jr.	501,190	July 11	1050	265	64	206
Coffin-bracket	A. E. Whitney	504,009	Aug. 29	2916	731	64	1104
Coffin-fastener	L. G. Kregel	493,096	Mar. 7	502	125	62	1458
Coffin-fastener	C. O. Phillips	498,301	May 30	3096	772	63	1235
Coffin-fastener	F. C. Riddle	498,525	May 30	3457	857	63	1300
Coffin-handle	E. P. Lacroix	505,663	Sept. 26	2277	578	64	1739
Coffin-protector	D. D. Smucker	507,763	Oct. 31	3351	821	65	680
Coffin-signal	A. Kwiatkowski	500,013	June 20	2100	508	63	1785
Coffins, &c. Trimming-table for	S. S. Hotchkiss	499,997	June 20	2076	503	63	1781
Coil. Reactive	E. Thomson	508,657	Nov. 14	1108	273	65	982
Coiled bars or rods. Machine for separating	C. A. Sterling and J. E. Wilson	505,071	Sept. 12	1263	324 325	64	1522
Coin-actuated boxes. Detecting apparatus for	G. A. Tauberschmidt	492,592	Feb. 28	2445	608	62	1285
Coin-actuated machine	W. A. Smith	491,196	Feb. 7	223	56, 57	62	790
Coin and slot machine	C. P. Young	492,178	Feb. 21	1781	445	62	1136
Coin-assorting apparatus	A. R. Günther	502,715	Aug. 8	816	197	64	730

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Coin-carrier	T. F. Gaynor	509,888	Dec. 5	70	17	65	1423
Coin-controlled apparatus	H. H. Buxbaum	504,555	Sept. 5	406	{ 103 104	64	1345
Coin-controlled apparatus	C. W. Delaney	511,594	Dec. 26	3010	733	65	2009
Coin-controlled apparatus	J. R. Farmer	509,845	Nov. 23	3112	{ 751 752	65	1388
Coin-controlled apparatus	G. F. W. Schultze	502,891	Aug. 8	1094	269	64	782
Coin-controlled apparatus	R. M. Shafer	508,848	Nov. 14	1385	{ 343 314	65	1034
Coin-controlled apparatus	M. Slough	492,535	Feb. 28	2355	585	62	1265
Coin-controlled apparatus	J. P. Taylor	501,853	July 18	2099	418	64	411
Coin-controlled apparatus for playing tunes, &c	E. and C. Stransky	507,046	Oct. 17	2109	{ 522 523	65	423
Coin-controlled apparatus. Fraud-preventive device for	O. Anschütz	489,667	Jan. 10	1044	272	62	232
Coin-controlled device	P. C. Oscanyan	510,086	Dec. 5	414	92	65	1488
Coin-controlled lock	W. Eglin	493,209	Mar. 7	675	{ 172 173	62	1491
Coin-controlled lock	W. S. Rogers	499,803	June 20	1770	429	63	1727
Coin-controlled machine	W. M. Ducker	499,453	June 13	1201	{ 285 286	63	1615
Coin-controlled machine	W. T. Lewis	495,498	Apr. 18	1574	396	63	329
Coin-controlled machine	J. A. Lighthipe	500,015	June 20	2102	509	63	1785
Coin-delivering device	H. Broome	489,863	Jan. 10	1335	348	62	292
Coin-detector	E. H. Cook	498,767	June 6	23	6	63	1393
Coin-freed machine	J. G. Cumming	493,821	Mar. 21	1698	432	62	1720
Coin freed machine	W. L. Madgen	490,450	Jan. 24	2333	605	62	516
Coin-freed machine for the automatic sale of news-papers	G. Salter and J. Hughes	494,444	Mar. 28	2721	{ 682 683	62	1926
Coin holder and counter	F. W. Smith	504,504	Sept. 5	324	83	64	1330
Coin holder and ejector. Portable	C. Forbes	508,101	Nov. 7	200	53, 54	65	796
Coin holding and delivering device	E. Berini	507,876	Oct. 31	3545	872	65	717
Coin-operated mechanism	J. Schade	496,749	May 2	571	153	63	722
Coin receiver or tray	W. A. Ruak	500,955	July 4	656	174	64	120
Coin-receiving apparatus	C. C. Clawson	493,544	Mar. 14	1226	314	62	1612
Coin-receptacle	R. H. Bishop and W. Down	494,731	Apr. 4	324	82	63	64
Coin-registering receptacle	E. A. Jahncke	500,769	July 4	378	98	64	70
Coin-shooting machine	G. Haydon and W. Vail	495,734	Apr. 18	1955	493	63	394
Coin sorter and ejector	E. E. Mattson	510,982	Dec. 19	1998	494	65	1807
Coin-tray	W. H. Staats	504,684	Sept. 5	608	{ 155 156	64	1385
Coins, medals, &c. Keeper for	O. J. Handfield	495,248	Apr. 11	1180	296	63	237
Coke and carbonizing oven	T. Bauer and G. Mendheim	504,548	Sept. 5	395	{ 100 101	64	1343
Coke. Making	G. C. Hewett	511,334	Dec. 26	2575	627	65	1929
Coke-oven	G. Hoffmann	492,400	Feb. 28	2125	{ 531 532	62	1219
Coke-oven	G. W. Nixon	499,565	June 13	1381	{ 329 330	63	1646
Coke. Oven for the manufacture of	M. V. Smith	510,448	Dec. 12	1003	{ 239 240	65	1614
Coke-oven. Regenerative	F. Westermann	500,684	July 4	243	65	64	46
Cold and ice. Apparatus for producing	E. D. Kendall	502,438	Aug. 1	317	75	64	623
Collapsible and folding boat	W. H. Gamble and D. H. Allen	495,549	Apr. 18	1651	416	63	343
Collar	J. Stern	507,045	Oct. 17	2108	522	65	423
Collar and hames. Combined	C. A. Pettie	497,386	May 16	1622	410	63	943
Collar and hames. Combined horse	J. Morrison	508,483	Nov. 14	830	206	65	927
Collar and hames. Combined horse	G. D. Ohl	501,097	July 11	904	231	64	180
Collar and necktie. Combined shirt	B. Lowenberg	500,921	July 4	606	158	64	111
Collar and necktie fastener	C. P. Ware	498,592	May 30	3564	883	63	1319
Collar and process of manufacture. Wood horse	B. A. J. Block	511,193	Dec. 19	2333	571	65	1871
Collar coupling. Breast	R. C. Tams	493,311	Mar. 14	860	219	62	1542
Collar-fastener	C. Everitt	489,796	Jan. 10	1245	326	62	273
Collar-fastener	G. W. Harrop	498,168	May 23	2846	711	63	1177
Collar-fastener	G. Marshall	507,021	Oct. 17	2063	510	65	416
Collar-fastener	O. Watson	503,510	Aug. 15	2106	527	64	979
Collar-fastener. Adjustable	J. V. Washburne	500,640	July 4	164	43	64	33
Collar fastener. Horse	H. Hart	490,282	Jan. 24	2078	542	62	465
Collar fastener. Horse	W. A. Holland	499,736	June 20	1655	398	63	1707
Collar fastener. Horse	T. Karges	492,023	Feb. 21	1544	385	62	1086
Collar fastener. Horse	A. T. Osbron	493,513	Mar. 14	1168	290	62	1600
Collar fastener. Horse	J. Sneeberg	508,251	Nov. 7	449	110	65	841
Collar fastener. Horse	R. J. Vanderbeck	502,213	July 25	2685	678	64	536
Collar. Horse	W. C. Agnew	491,065	Feb. 7	1	1	62	749
Collar. Horse	R. Brownson	507,209	Oct. 24	2425	598	65	492
Collar. Horse	L. Ingels	511,699	Dec. 26	3177	777	65	2038
Collar. Horse	J. S. Maring	501,684	July 18	1835	457	64	335
Collar. Horse	H. W. Ross	493,299	Mar. 14	841	214	62	1536
Collar. Horse	W. Sellers	497,502	May 16	1820	458	63	977
Collar. Horse	H. H. Shurtle	496,541	May 2	237	63	63	662
Collar. Horse	E. R. Williamson	502,543	Aug. 1	503	120	64	659
Collar. Horse	J. J. Wright	496,503	May 2	171	48	63	650
Collar or coupling. Set	F. Freeman	506,039	Oct. 3	367	97	65	72
Collar or cuff blank folding machine	G. E. Harris	502,678	Aug. 1	734	{ 176 177	64	700
Collar or cuff drying machine	J. G. Dixon	495,244	Apr. 11	1172	{ 293 294	63	235
Collar-stuffing machine	H. Hildenbrand	503,479	Aug. 15	2062	514	64	970
Collars, cuffs, &c. Composition for glazing	A. Viner	499,685	June 13	1561	63	63	1677
Collars. Machine for forming turn-down linen	A. W. Cummings	509,514	Nov. 29	2587	626	65	1288
Color-disk rotating machine	M. Bradley	492,604	Feb. 28	2468	613	62	1290
Colors upon cottons, &c. Fixing	J. Bracewell	505,088	Sept. 19	1297	64	64	1542
Coloring and burnishing composition	W. R. Albertson and N. B. Briggs	501,311	July 11	1230	64	64	238
Coloring and burnishing composition	W. R. Albertson and N. B. Briggs	501,312	July 11	1231	64	64	238

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Coloring-matter and making same. Blue.....	M. Ulrich and J. Bammann.....	506,284	Oct. 10	848		65	173
Coloring-matter. Blue.....	R. Kothe, F. Reingruber, and H. Hassencamp.	506,918	Oct. 17	1898		65	385
Coloring-matter from dye-wood extracts. Obtaining friable.....	P. T. Austen.....	508,592	Nov. 14	1009		65	961
Coloring-matter from fustic and preparing same. Solid.....	P. T. Austen.....	492,368	Feb. 21	2073		62	1195
Coloring-matter from logwood and preparing same.....	P. T. Austen.....	491,972	Feb. 14	1463		62	1057
Coloring metal leaves.....	J. Rosenthal.....	509,687	Nov. 28	2856		65	1340
Coloring or burnishing composition.....	J. F. Thompson.....	494,514	Mar. 28	2539		62	1948
Colter.....	L. S. Bailey.....	505,018	Sept. 12	1167	299	64	1505
Colter and scraper. Combined.....	F. Sherrod.....	504,252	Aug. 29	3311	827	64	1237
Colter-clamp.....	J. Clayton.....	511,123	Dec. 19	2219	543	65	1850
Colter-clamp. Plow.....	G. A. Lambert.....	491,895	Feb. 14	1346	334	62	1033
Colter. Plow.....	G. A. Lambert.....	509,383	Nov. 28	2331	564	65	1239
Colters. Machine for making plow.....	J. T. Duff.....	499,454	June 13	1203	286	63	1615
Colters. Press for straightening plow.....	J. T. Duff.....	499,418	June 13	1144	274	63	1604
Column.....	N. Poulson.....	498,860	June 6	193	47	63	1427
Column. Metallic.....	W. C. Gholson.....	492,518	Feb. 28	2329	578	62	1259
Column. Wrought iron or steel.....	N. Poulson and B. E. J. Eils.....	498,859	June 6	192	47	63	1427
Comb.....							
See Carrycomb.							
Comb.....	H. G. Guild.....	504,979	Sept. 12	1107	284	64	1493
Comb.....	E. S. Smith.....	497,353	May 16	1577	397	63	934
Comb-making machine.....	J. H. Wells.....	498,831	June 6	139	34	63	1416
Combing fibrous materials. Machine for.....	G. E. Donisthorpe and T. Burrows.....	511,128	Dec. 19	2325	{ 545 546 547 548	65	1852
Combing-machine.....	J. Longmore and W. L. Watson.....	497,380	May 16	1613	{ 407 408 409 410	63	942
Combing-machine stop-motion.....	J. Thorp.....	506,803	Oct. 17	1708	{ 429 430 431	65	350
Combing machine. Wool.....	J. and T. Sharpe.....	492,169	Feb. 21	1767	441	62	1133
Combing machine. Wool.....	J. and T. Sharpe.....	492,170	Feb. 21	1768	441	62	1133
Combing or spinning. Machine for preparing fibers for.....	G. E. Donisthorpe and T. Burrows.....	511,129	Dec. 19	2320	{ 546 547 548	65	1853
Combination-gage.....	C. W. Preston.....	504,278	Aug. 29	3350	837	64	1245
Combination-gage.....	O. W. Schaum.....	494,169	Mar. 28	2287	579	62	1845
Combination-heater.....	C. D. Howard.....	498,057	May 23	2690	673	63	1148
Combination-lock.....	J. A. Bexell and V. O. Peterson.....	510,234	Dec. 5	664	158	65	1536
Combination-lock.....	J. D. Craig.....	491,158	Feb. 7	153	40	62	778
Combination-lock.....	J. D. Craig.....	491,159	Feb. 7	158	40	62	779
Combination-lock.....	H. H. Daniels.....	505,157	Sept. 19	1401	359	64	1560
Combination-lock.....	J. W. Estes.....	493,259	Mar. 14	761	{ 194 195	62	1526
Combination-lock.....	T. W. McGrath.....	505,120	Sept. 19	1346	347	64	1551
Combination-lock.....	W. W. Powell.....	489,091	Jan. 3	164	45	62	39
Combination-lock.....	J. Ringen.....	495,911	Apr. 18	2228	561	63	444
Combination-lock.....	W. A. Schenck.....	491,598	Feb. 14	892	224	62	941
Combination-lock.....	E. M. Skinner and O. M. Farrand.....	495,276	Apr. 11	1221	306	63	244
Combination-lock.....	O. Smith.....	494,605	Apr. 4	124	30	63	26
Combination-wrench.....	W. H. Huston.....	490,789	Jan. 31	2906	747	62	643
Combination-wrench.....	W. W. Shoe.....	496,913	May 9	863	227	63	793
Combustion apparatus.....	A. Bryce.....	510,673	Dec. 12	1418	{ 350 351	65	1690
Comminuter. Hollow-roll.....	J. M. Cooper.....	495,665	Apr. 18	1842	461	63	375
Comminuting-machine.....	H. A. Hannum. (Reissue).....	11,298	Jan. 3	712	{ 190 191	62	153
Commode.....	G. C. Corwin.....	506,905	Oct. 17	1879	468	65	381
Commode.....	C. Kelley.....	507,820	Oct. 31	3454	848	65	701
Commode.....	D. K. Osbourne.....	499,438	June 13	1175	280	63	1610
Commode.....	J. Towle.....	499,310	June 13	929	226	63	1566
Commode apparatus. Night.....	O. H. Ebert.....	495,546	Apr. 18	1646	414	63	342
Commode. Portable.....	F. C. Prindle.....	507,841	Oct. 31	3496	860	65	707
Commutation and a fluid electric commutator. Electric.....	C. E. Emery.....	511,328	Dec. 26	2561	{ 624 665	65	1926
Commutating apparatus for dynamo-electric machines.....	E. J. Houghton and W. White.....	492,291	Feb. 21	1950	487	62	1171
Commutator-brush.....	C. O. C. Billberg.....	490,183	Jan. 17	1897	494	62	419
Commutator-brush.....	K. Koch.....	495,136	Apr. 11	990	248	63	202
Commutator-brush.....	H. G. Reist.....	501,960	July 25	2279	570	64	459
Commutator-brush and holder.....	J. F. McLaughlin.....	490,081	Jan. 17	1728	451	62	385
Commutator-brush for dynamos.....	D. W. Dunn.....	494,629	Apr. 4	164	39	63	33
Commutator-brush holder.....	R. N. Bayles.....	504,901	Sept. 12	973	{ 250 251	64	1467
Commutator-brush holder.....	C. F. Goodrich.....	489,185	Jan. 3	311	86	62	71
Commutator-brush holder.....	A. J. Shaw.....	501,193	July 11	1055	267	64	207
Commutator-brush holder.....	J. J. Wood.....	507,344	Oct. 24	2644	650	65	534
Commutator-brush holder for dynamo-electric machines.....	E. Thomson.....	497,361	May 16	1587	401	63	937
Commutator-brushes. Composition and process of producing same for.....	R. Hirsch and H. Meminger.....	510,341	Dec. 5	820		65	1565
Commutator connection.....	N. C. Bassett.....	501,049	July 11	815	212	64	164
Commutator-connector.....	E. D. Priest.....	495,058	Apr. 11	826	209	63	173
Commutator for dynamo-electric machines.....	H. F. Parshall.....	499,350	June 13	1018	245	63	1582
Commutator for dynamo-electric machines.....	E. Thomson.....	496,456	May 2	108	29	63	638
Commutator for dynamo-electric machines.....	E. P. Warner.....	504,379	Sept. 5	107	27	64	1290
Commutator for dynamo-electric machines and constructing same.....	A. W. Meston.....	493,439	Mar. 14	1051	271	62	1580
Commutator for dynamo-electric machines or motors.....	B. S. Paterson.....	495,561	Apr. 18	1670	421	63	346
Commutator for dynamos and electric motors.....	H. Groszwith and R. Ashley.....	489,000	Jan. 3	36	10	62	9
Commutator for dynamos or motors.....	J. A. Williams.....	492,176	Feb. 21	1779	444	62	1136
Commutator for electric generators or motors.....	M. W. Hassan.....	497,123	May 9	1182	302	63	849
Compass. Automatic recording.....	J. J. Townsend. (Reissue).....	11,380	Nov. 7	680	{ 166 167	65	884

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Compass. Beam.....	M. E. Gladfelter	494,475	Mar. 28	2769	695	62	1934
Compass. Beam.....	J. H. Hurley	499,999	June 20	2079	504	63	1782
Compass-joint.....	F. Aborn	499,193	June 13	759	181	63	1537
Compass. Mariner's.....	E. S. Ritchie	503,164	Aug. 15	1559	383	64	880
Compass. Ship's recording.....	J. Hope	505,361	Sept. 19	1723	445 446 447	64	1620
Compasses. Drafting.....	B. H. Toquet	511,177	Dec. 19	2311	566	65	1867
Compasses. Trammel-point for beam.....	W. J. and A. W. Houck	510,139	Dec. 5	501	114	65	1504
Compensator for signal or other wires.....	W. Saunders	507,596	Oct. 31	3090	754	65	630
Composing-stick.....	A. A. Hill	499,546	June 13	1352	321	63	1642
Composite board or strip for walls, &c.....	E. Strippgen	492,849	Mar. 7	117	30	62	1380
Composite material for moldings, &c., and making same.....	S. Grimstad	510,855	Dec. 12	1770	434	65	1753
Compound engine.....	A. von Borries	511,581	Dec. 26	2987	728	65	2005
Compound engine.....	J. Klein	494,425	Mar. 28	2696	676	62	1922
Compound engine.....	J. S. Parmenter	494,075	Mar. 21	2120	541	62	1800
Compound engine.....	E. Reynolds and E. Cheshire	505,004	Sept. 12	1149	294	64	1501
Compound engine. Concentric.....	J. Player	499,585	June 13	1416	338	63	1652
Compound engine. Tandem.....	J. Player	499,584	June 13	1409	336	63	1650
Compound spring.....	G. H. Chatillon	505,092	Sept. 19	1301	335	64	1543
Compress. Steam.....	W. H. Bryant	494,701	Apr. 4	272	69	63	55
Compressor.....	D. Neale	489,980	Jan. 17	1553	406	62	350
Concentrating-machine.....	F. G. Gould and J. K. Firth	492,007	Feb. 21	1513	378	62	1081
Concentrator.....	J. A. Coombes	493,070	Mar. 7	461	116 117	62	1451
Concentrator.....	D. W. Humphries	504,923	Sept. 12	1013	261	64	1476
Concrete-distributing apparatus.....	E. L. Ransome	490,632	Jan. 24	2650	682	62	579
Concrete-mixing machine.....	E. L. Ransome	490,631	Jan. 24	2649	682	62	579
Concrete pipes in situ. Manufacturing monolithic.....	E. L. Ransome	507,521	Oct. 24	2941	65	65	590
Concrete walks, &c. Method of and apparatus for forming joints in.....	R. G. Mayhew	499,173	June 6	725	173	63	1516
Concrete work. Non-shearing rod for strengthening.....	T. A. Lee	505,664	Sept. 26	2278	578	64	1739
Condenser.....	D. S. Abbott and C. G. Redstone	500,701	July 4	268	73	64	50
Condenser.....	J. H. Fitts and W. E. Anderson	500,196	June 27	2430	593	63	1854
Condenser.....	J. Laichinger	495,417	Apr. 11	1432	360	63	282
Condenser.....	H. Rassbach	507,039	Oct. 17	2096	519 520	65	421
Condenser.....	L. Schutte	493,123	Mar. 7	547	136 137	62	1467
Condenser.....	F. J. Weiss	496,761	May 2	586	157	63	724
Condenser. Electrical.....	W. Stanly, Jr., and W. B. Tobey	498,907	June 6	285	66	63	1443
Condenser. Electrical.....	A. Wurta	503,186	Aug. 15	1591	391	64	887
Condenser. Steam.....	C. Steinbarth	494,655	Apr. 4	200	50, 51	63	41
Condenser. Surface.....	J. F. Allen	495,128	Apr. 11	981	245 246	63	200
Condenser. Surface.....	F. M. and C. H. Wheeler	510,373	Dec. 5	873	210	65	1576
Condensers. Apparatus for preventing the backflow of water from.....	L. Schutte	508,246	Nov. 7	435	106	65	839
Condensers. Working.....	W. Stanley, Jr., J. F. Kelly, and C. C. Chesney	505,860	Oct. 3	93	25	65	19
Condensing and feed-water apparatus. Combined.....	F. M. Wheeler and G. W. Lyon	506,292	Oct. 10	858	211 212	65	175
Condensing apparatus.....	N. A. Christensen	502,922	Aug. 8	1158	285	64	794
Condensing apparatus.....	F. M. Wheeler	510,107	Dec. 5	447	100	65	1494
Condensing, refrigerating, and evaporating apparatus. Surface.....	E. Theisen	496,757	May 2	580	155	63	723
Conductor support and insulator.....	D. T. Bennett	503,519	Aug. 15	2115	530 531	64	980
Conductor support and insulator.....	W. B. Essick	503,039	Aug. 8	1342	331	64	828
Conduit.....	G. Sterling	502,474	Aug. 1	378	90	64	636
Conduit-joint with switch and cut-off valve.....	T. Lee	498,558	May 30	3519	871	63	1310
Conduit. Pass.....	W. A. Sweet	510,450	Dec. 12	1007	240 241	65	1615
Conduit provided with conduit-couplings.....	T. C. Chappell	509,567	Nov. 23	2669	646 647	65	1304
Conduits. Clearer for slotted.....	J. C. Love	498,437	May 30	3312	825	63	1275
Confectionery-case.....	C. B. Overbaugh	502,634	Aug. 1	643	154	64	685
Confectionery-kettles. Apparatus for operating.....	R. Savage	499,890	June 20	1921	466 467	63	1754
Confectionery-machine.....	J. C. Fillinger	494,559	Apr. 4	37	8	63	8
Confectionery. Machine for coating.....	D. M. Holmes	490,769	Jan. 31	2870	736 737	62	636
Confectionery. Machine for coating.....	D. M. Holmes	492,205	Feb. 21	1820	455 456	62	1144
Confectionery, &c. Process of and apparatus for packing.....	J. R. Stout	500,303	June 27	2596	635	63	1883
Confections. Machine for making.....	A. Van Ness	503,885	Aug. 22	2694	675 676	64	1105
Confections. Machine for molding.....	C. H. Grebenstein	504,449	Sept. 5	220	58, 59	64	1311
Confessional. Folding.....	G. A. Firnstein	490,873	Jan. 31	3026	778	62	668
Confessional. Portable.....	M. H. Sullivan	494,179	Mar. 28	2303	583	62	1849
Conformator.....	A. S. Adler and W. S. Black	506,761	Oct. 17	1644	412	65	338
Conformator.....	C. H. Vause	496,675	May 2	454	122	63	702
Connector.....	C. Bell	507,403	Oct. 24	2738	672	65	553
Connector.....	H. L. Webb	503,181	Aug. 15	1584	389	64	885
Converter.....	C. Vattier	503,179	Aug. 15	1581	389	64	885
Contact apparatus.....	E. Thomson	508,651	Nov. 14	1100	271	65	960
Contact device and switch. Overhead.....	C. J. Van Depoele	495,383	Apr. 11	1383	345	63	273
Continuous kiln.....	P. L. Youngren	491,396	Feb. 7	557	141	62	855
Converter.....	C. M. Allen	496,033	Apr. 25	2405	608	63	493
Converter-core. Laminated.....	C. F. Scott	509,770	Nov. 28	2985	722	65	1363
Convertible chair.....	C. Schulte	491,602	Feb. 14	897	225	62	942

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Convertible chair.....	J. H. Woodman.....	509,277	Nov. 21	2132	512	65	1190
Conveyer.....	A. E. Baxter and A. G. Mather.....	511,315	Dec. 19	2535	617 618	65	1908
Conveyer.....	J. M. Dodge.....	499,525	June 13	1317	310 311	63	1635
Conveyer.....	J. M. Dodge.....	499,526	June 13	1319	311	63	1635
Conveyer.....	J. M. Dodge.....	499,527	June 13	1320	311	63	1635
Conveyer.....	M. Garland.....	491,344	Feb. 7	471	121	62	838
Conveyer.....	R. L. Hassell.....	493,772	Mar. 21	1615	411	62	1705
Conveyer.....	H. Mock.....	503,326	Aug. 15	1826	452	64	928
Conveyer.....	J. W. Nothery.....	498,903	June 6	279	65	63	1442
Conveyer.....	C. W. Reneau.....	489,831	Jan. 10	1293	338	62	284
Conveyer.....	C. S. Schenck.....	502,588	Aug. 1	567	136	64	670
Conveyer.....	D. J. Sheldrick.....	509,251	Nov. 21	2097	505	65	1184
Conveyer.....	J. G. Zeller.....	510,626	Dec. 12	1335	327 328	65	1674
Conveyer and manufacturing same.....	T. Wrigley.....	511,393	Dec. 26	2691	652 653	65	1950
Conveyer. Chain.....	C. O. Bartlett.....	505,431	Sept. 26	1849	475 476	64	1657
Conveyer-chain.....	J. Pollock.....	505,296	Sept. 19	1629	421	64	1604
Conveyer. Endless-chain.....	G. W. McCaslin.....	503,870	Aug. 22	2675	670	64	1101
Conveyer. Metallic.....	J. B. Allfree.....	505,806	Oct. 3	3	1	65	3
Conveyer. Pneumatic.....	H. C. Kelly, Jr.....	494,274	Mar. 28	2456	618	62	1876
Conveyer. Spiral.....	A. E. Baxter and A. G. Mather.....	504,193	Aug. 29	3217	801	64	1220
Conveyer. Spiral.....	B. F. Radford.....	499,175	June 6	729	173	63	1517
Conveyer-troughs. Gate for.....	J. M. Dodge.....	489,289	Jan. 3	472	131	62	103
Conveyers. Flight for endless.....	F. Miller.....	501,289	July 11	1198	303	64	233
Conveying and drying apparatus.....	S. H. Bassett.....	501,048	July 11	813	211	64	163
Conveying apparatus.....	J. L. Board.....	506,357	Oct. 10	969	240 241	65	196
Conveying apparatus.....	J. M. Dodge.....	501,771	July 18	1985	491	64	391
Conveying apparatus.....	T. S. Miller.....	496,203	Apr. 25	2659	668	63	541
Conveying apparatus.....	T. S. Miller.....	503,381	Aug. 15	1913	474	64	944
Conveying apparatus.....	T. S. Miller.....	503,800	Aug. 22	2583	644	64	1083
Cooker. Steam.....	H. P. Barney.....	496,290	Apr. 25	2798	700	63	567
Cooker. Steam.....	W. F. Daggett.....	500,118	June 27	2286	555	63	1228
Cooker. Steam.....	E. P. Doty.....	492,195	Feb. 21	1806	451	62	1141
Cooker. Steam.....	E. C. Fisher.....	506,219	Oct. 10	720	181	65	148
Cooker. Steam.....	W. J. H. Gluck.....	507,359	Oct. 24	2673	657	65	540
Cooker. Steam.....	G. Goff.....	499,984	June 20	2055	498	63	1777
Cooker. Steam.....	S. W. Harman.....	496,056	Apr. 25	2448	618	63	501
Cooker. Steam.....	J. A. Kendall.....	510,798	Dec. 12	1624	404	65	1728
Cooker. Steam.....	C. R. Long and C. H. Kline.....	501,952	July 25	2267	567	64	456
Cooker. Steam.....	B. F. and C. O. Metzler.....	509,543	Nov. 28	2631	636	65	1296
Cooker. Steam.....	E. H. Moorman.....	511,351	Dec. 26	2609	634	65	1935
Cooker. Steam.....	T. N. Scott.....	489,718	Jan. 10	1125	290	62	248
Cooker. Steam.....	S. D. Smith.....	510,718	Dec. 12	1488	365	65	1704
Cooker-valve.....	E. P. Doty.....	503,787	Aug. 22	2567	639	64	1080
Cooking and heating purposes. Heating attachment for.....	H. Roth and W. Schmidt.....	496,210	Apr. 25	2677	672	63	544
Cooking and smoking apparatus.....	J. S. and C. E. Baker.....	492,257	Feb. 21	1905	475	62	1162
Cooking apparatus.....	W. T. Martin.....	495,821	Apr. 18	2084	526	63	418
Cooking apparatus.....	F. M. Strong.....	504,256	Aug. 29	3317	829	64	1239
Cooking apparatus. Gas.....	J. Ruthven.....	489,762	Jan. 10	1197	313 314	62	263
Cooking apparatus. Steam.....	A. J. Iden.....	493,091	Mar. 7	496	124	62	1457
Cooking-boiler. Sectional.....	C. W. Wynn.....	491,865	Feb. 14	1300	321	62	1024
Cooking canned goods. Means for.....	F. B. Merrill and G. H. Lovell.....	498,358	May 30	3192	795	63	1251
Cooking device. Meat.....	A. Reubold.....	508,759	Nov. 14	1251	312	65	1009
Cooking machine. Corn.....	G. Burnham, Jr.....	503,577	Aug. 22	2222	557	64	1016
Cooking-pot.....	L. Sinn.....	489,041	Jan. 3	96	27	62	24
Cooking utensil.....	T. J. Clement.....	492,271	Feb. 21	1927	481	62	1166
Cooking utensil.....	F. E. Montanus.....	507,828	Oct. 31	3471	854	65	703
Cooking utensil.....	G. H. Nicholls.....	508,831	Nov. 14	1359	336	65	1028
Cooking utensil.....	A. W. Obermann.....	507,281	Oct. 24	2537	624	65	512
Cooking utensil.....	C. Philippot.....	504,243	Aug. 29	3294	822	64	1234
Cooking utensil. Bean.....	N. Ames.....	507,199	Oct. 24	2400	591	65	488
Cooking-vessel.....	C. J. Parker.....	503,353	Aug. 15	1866	462	64	935
Cooler:							
See Beer-cooler.....	Milk-cooler.....						
Brine-cooler.....	Water-cooler.....						
Ice-cream cooler.....	Wine-cooler.....						
Liquid-cooler.....							
Cooling apparatus.....	T. Burkhard.....	494,841	Apr. 4	511	128	63	99
Cooling-room.....	P. J. Daemicke.....	496,867	May 9	771	205	63	776
Coop.....	S. P. Cloyd.....	505,439	Sept. 26	1860	478 479	64	1660
Coop. Chicken.....	G. T. Ridings.....	506,831	Oct. 17	1758	442	65	359
Coop. Folding chicken.....	B. Miller.....	508,331	Nov. 7	572	140	65	864
Coop. Hen.....	E. B. Voss.....	494,181	Mar. 28	2305	584	62	1849
Coping.....	A. Rick, Jr.....	490,501	Jan. 24	2427	626	62	535
Copper. Apparatus for electrolyzing.....	C. B. Schoenmehl.....	494,232	Mar. 28	2390	603 604	62	1865
Copper. Hardening.....	P. Helbig.....	509,619	Nov. 28	2752		65	1320
Copper. Refining slimes from the electrolytic refining of.....	D. K. Tuttle and C. Whitehead.....	509,634	Nov. 28	2771		65	1324
Copper. Separating and recovering.....	J. Douglas.....	506,985	Oct. 17	2006		65	405
Copy-book. Penmanship.....	A. J. Creamer.....	498,628	May 30	3633	899	63	1330
Copy-holder.....	A. M. Bayless.....	497,485	May 16	1785	449	63	971
Copy-holder.....	W. H. Bramlette and W. H. Evans.....	508,863	Nov. 14	1417	351 352	65	1040
Copy-holder.....	E. H. Carr.....	499,966	June 20	2027	491	63	1772
Copy-holder.....	W. O. Crane.....	504,414	Sept. 5	165	44	64	1301

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Copy-holder.....	H. E. Gifford.....	510,130	Dec. 5	488	111	65	1502
Copy-holder.....	J. J. Hill.....	496,122	Apr. 25	2545	641	63	519
Copy-holder.....	L. Hirt.....	511,145	Dec. 19	2257	553	65	1857
Copy-holder.....	D. M. Kirkpatrick.....	511,530	Dec. 26	2903	707	65	1990
Copy-holder.....	N. G. Leslie.....	500,715	July 4	293	79	64	54
Copy-holder.....	J. M. Phillips.....	502,991	Aug. 8	1277	312	64	815
Copy-holder.....	H. H. Potter and N. J. Fortney.....	499,801	June 20	1765	428	63	1726
Copy-holder.....	A. B. Reid.....	494,305	Mar. 23	2502	631	62	1886
Copy-holder.....	W. E. Younger.....	510,950	Dec. 19	1938	473	65	1797
Copy-holder and printer's guide.....	J. W. Searle.....	501,234	July 11	1114	282	64	218
Copy-holder and rest. Extension.....	J. H. Ambruster.....	489,518	Jan. 10	845	220	62	192
Copy-holder and tablet. Combined.....	B. F. Stuart.....	511,032	Dec. 19	2064	511	65	1820
Copying and recording apparatus. Autographic.....	L. E. Levassor.....	498,436	May 30	3309	824	63	1274
Copying-book.....	J. P. Julia.....	489,959	Jan. 17	1520	397	62	343
Copying-book. Manifold.....	H. Scheckelhoff.....	495,521	Apr. 18	1606	404	63	335
Copying-book. Manifold.....	H. Scheckelhoff.....	495,522	Apr. 18	1607	405	63	335
Copying-cloth. Letter-press.....	R. Spargin.....	506,610	Oct. 10	1384	347	65	277
Copying. Device for facilitating.....	J. J. Hill.....	489,953	Jan. 17	1511	395	62	341
Copying. Device for facilitating.....	J. J. Hill.....	489,954	Jan. 17	1514	395	62	341
Copying-machine. Roller.....	H. Hurwitz and A. Schapiro.....	510,643	Dec. 12	1370	335	65	1680
Copying-press.....	H. M. Hoyt.....	493,271	Mar. 14	784	203	62	1529
Copying-press.....	E. W. Rider.....	510,296	Dec. 5	760	184	65	1553
Cord-covering machine.....	T. Adams.....	492,618	Feb. 28	2491	618	62	1293
Cord for sashes, &c.....	E. Maynard.....	492,582	Feb. 28	2429	605	62	1282
Cord or twine shearing mechanism.....	E. T. and E. H. Marble.....	492,408	Feb. 28	2143	535	62	1222
Cordage-making machine.....	B. J. McGee.....	505,632	Sept. 26	2226	564	64	1728
Core-bar.....	F. L. Clark.....	491,470	Feb. 7	676	169	62	877
Core-barrel.....	J. V. Smith.....	489,188	Jan. 3	316	87	62	72
Core-driver.....	G. W. Stewart.....	493,192	Mar. 7	651	166	62	1486
Core. Green-sand.....	C. F. Bingham.....	507,406	Oct. 24	2744	674	65	554
Core-machine.....	A. E. Hammer.....	506,226	Oct. 10	735	183	65	151
Core-making machine.....	W. Ireton.....	505,466	Sept. 26	1899	489	64	1667
Core-spindle.....	J. McAdams.....	492,226	Feb. 21	1862	465	62	1152
Core-support.....	E. R. Göhler.....	498,848	June 6	175	44	63	1423
Core-supports. Machine for making.....	A. W. Needham.....	506,717	Oct. 17	1566	391	65	323
Cores for casting pipe-elbows, &c. Machine for making.....	A. E. Hammer.....	506,227	Oct. 10	740	184	65	151
Cores for casting pipe-tees, &c. Machine for making.....	A. E. Hammer.....	506,228	Oct. 10	745	185	65	152
Corer and slicer. Apple.....	F. W. Winckler.....	498,528	May 30	3460	858	63	1300
Cork. Bottle.....	M. Lintz.....	489,081	Jan. 3	149	41	62	36
Cork cutting and facing machine.....	J. A. Snyder.....	492,846	Mar. 7	113	28, 29	62	1380
Cork-cutting machine.....	S. F. Rote and L. K. Landis.....	491,375	Feb. 7	523	134	62	848
Cork-driver.....	A. and A. Iske.....	491,052	Jan. 31	3341	852	62	729
Cork-extractor.....	E. A. Butts and H. L. Page.....	508,367	Nov. 7	633	155	65	875
Cork-extractor.....	H. S. Martin.....	505,920	Oct. 3	187	47	65	36
Cork, &c. Machine for the reduction of.....	R. G. de Vasson.....	490,817	Jan. 31	2944	755	62	651
Cork mat for bath-rooms.....	A. Morton.....	491,851	Feb. 14	1276	316	62	1019
Cork-retainer.....	A. J. B. Laussedat.....	502,126	July 25	2540	637	64	508
Corks by grinding and machinery for the purpose. Manufacture of.....	J. E. Howard.....	510,539	Dec. 12	1183	285	65	1647
Corkscrew.....	C. Meerroth.....	509,819	Nov. 28	3073	743	65	1381
Corkscrew.....	C. Puddefoot.....	501,468	July 11	1486	374	64	226
Corkscrew.....	E. Walker.....	501,975	July 25	2299	575	64	462
Corkscrew.....	A. R. Weisz.....	495,366	Apr. 11	1389	347	63	275
Corkscrew, match-holder, &c. Combined.....	P. Dean.....	502,351	Aug. 1	171	40	64	597
Corn and cob crusher and grinder.....	F. S. Rich.....	503,357	Aug. 15	1876	465	64	937
Corn-cob pipes. Machine for filling the interstices of.....	H. Lamparter.....	496,883	May 9	808	212	63	783
Corn-crib.....	J. Beckley, Sr.....	499,200	June 13	768	182	63	1538
Corn-crib drying attachment.....	J. Welch.....	504,258	Aug. 29	3320	830	64	1239
Corn-cutter.....	T. S. Valentine, Sr.....	493,135	Mar. 7	566	141	62	1470
Corn from the cob. Machine for cutting green.....	W. Sprague.....	494,799	Apr. 4	440	108	63	85
Corn-husker.....	V. Falkner.....	490,429	Jan. 24	2305	109	62	510
Corn-husker and fodder-shredder.....	G. W. Packer.....	506,642	Oct. 10	1431	358	65	287
Corn-husker and fodder-shredder. Combined.....	G. W. Packer.....	494,511	Mar. 28	2832	709	62	1947
Corn-husking device.....	W. F. Lillie.....	505,711	Sept. 26	2364	597	64	1754
Corn-husking machine.....	A. Smith.....	500,434	June 27	2804	690	63	1920
Corn-husking machine.....	C. H. Taylor.....	497,693	May 16	2111	527	63	1029
Corn-popper.....	J. F. Johnson.....	510,027	Dec. 5	317	71	65	1469
Corn-popper.....	J. C. Tutt.....	496,021	Apr. 25	2388	604	63	490
Corn-popper.....	W. D. Winfield.....	495,864	Apr. 18	2156	541	63	431
Corn-popping apparatus.....	W. B. Donathen.....	489,939	Jan. 17	1489	389	62	337
Corn-popping machine.....	R. W. Hacker.....	495,886	Apr. 18	2192	551	63	437
Corn product.....	B. G. Hudnut.....	491,428	Feb. 7	599	151	62	863
Corn-sheller.....	C. F. Search.....	500,159	June 27	2372	574	63	1844
Corn-sheller. Hand.....	W. Bayley.....	497,486	May 16	1786	449	63	971
Corn-shock-binding device.....	H. Johnson.....	502,672	Aug. 1	725	174	64	699
Corn-silking machine.....	H. R. Stickney and H. C. Baxter.....	509,496	Nov. 23	2558	619	65	1282
Corn-splitting machine.....	R. E. Poindexter.....	498,857	June 6	244	57	63	1436
Corn-splitting machine.....	R. E. Poindexter.....	506,440	Oct. 10	1124	220	65	227

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Cornstalk-cutter	J. W. Roach	496,003	Apr. 25	2359	596 597	63	485
Cornstalk gatherer and shocker	J. S. Collins	497,707	May 16	2132	532 533	63	1034
Cornstalk-rake. Revolving	J. A. Paxton	504,242	Aug. 29	3293	822	64	1234
Cornstalk-shocker	O. D. Mowrer	505,225	Sept. 19	1504	392	64	1570
Corn-thinner	C. Garnett	492,721	Feb. 28	2647	655	62	1325
Corn-thinner	J. L. Tandy	501,594	July 18	1684	420	64	339
Corner-brace	H. White	493,882	Mar. 21	1786	456	62	1737
Cornice	T. E. Denegar	511,197	Dec. 19	2341	572	65	1872
Cornice and curtain-support. Combined window-	J. M. Hoffman	499,547	June 13	1353	321	63	1642
Cornice-brake	J. H. Crocker	504,710	Sept. 12	654	165	64	1405
Corpse-dressing table	L. B. Huddleston	503,969	Aug. 29	2849	714 715	64	1152
Corrugated tube for boilers, &c	L. Silverman	494,033	Mar. 21	2050	523 524	62	1787
Corrugating-machine	B. Hall	491,259	Feb. 7	314	79, 80	62	809
Corrugating-machine	B. Hall	505,600	Sept. 26	2169	549	64	1718
Corrugating-tool	J. Blumer	501,044	July 18	1766	440	64	354
Corset	E. R. Caperton	507,482	Oct. 24	2858	701	65	576
Corset	D. Kops	496,124	Apr. 25	2547	642	63	520
Corset	H. J. Lyon	506,705	Oct. 17	1541	385	65	319
Corset	V. H. Oberly	509,483	Nov. 28	2539	613	65	1279
Corset	J. K. Ross	500,431	June 27	2799	689	63	1919
Corset	E. Schweinburg	490,455	Jan. 24	2343	607	62	517
Corset	E. L. Smith	492,172	Feb. 21	1772	442	62	1134
Corset. Abdominal	W. J. Teufel	489,698	Jan. 10	1093	283	62	243
Corset-clasp	D. Essex	505,288	Sept. 19	1609	418	64	1599
Corset-clasp	H. F. Hambruch	507,679	Oct. 31	3326	790	65	657
Corset-fastening	H. E. Carter and W. H. Snyder	505,437	Sept. 26	1858	478	64	1660
Corset-fastening	J. A. Parry	501,098	July 11	905	232	64	180
Corset or dress stay	C. S. Cole	500,471	June 27	2850	702	63	1929
Corset-shield	D. Basch	489,783	Jan. 10	1329	322	62	270
Corset-shield	R. W. Parramore	490,495	Jan. 24	2419	624	62	533
Corset-stay	M. W. Henius	503,909	Aug. 22	2738	687	64	1114
Corset-stay	J. Janowitz	496,313	Apr. 25	2843	710	63	576
Corset-stay	J. M. Van Orden	489,700	Jan. 10	1094	283	62	243
Corset-steel	E. Wilson	505,150	Sept. 19	1389	356	64	1558
Corset-stiffener	C. K. Pevey	494,078	Mar. 21	2125	542 543	62	1801
Corset-stiffener	H. H. Wagener	501,221	July 11	1096	278	64	215
Corset-stiffener	D. H. Warner	500,638	July 4	163	42	64	32
Corset-waist	I. M. Rew	509,327	Nov. 21	2325	538	65	1208
Corundum. Machine for grinding gangue contain-	M. Balmes	509,789	Nov. 28	3022	730	65	1371
Cot. Aerial cradle	A. Wastall	505,797	Sept. 26	2498	631	64	1779
Cot. Canvas	C. Poirier	496,279	Apr. 25	2782	696	63	564
Cot. Lounge	J. R. Kidder	497,580	May 16	1931	485	63	997
Cot or hammock hook	C. S. McRee	499,644	June 13	1502	361	63	1667
Cot. Portable folding	B. D. Morrell	505,409	Sept. 19	1804	465 466	64	1636
Cotter. Spring	W. Smith	500,162	June 27	2376	576	63	1845
Cotton. Apparatus for handling seed	J. A. Bachman and F. S. Clark	507,773	Oct. 31	3377	826 827	65	655
Cotton-bag carrier	A. F. Laird	492,028	Feb. 21	1551	386	62	1088
Cotton-bales. System of tracks for transferring	W. W. Bierce	492,319	Feb. 21	1996	497	62	1181
Cotton-chopper	F. S. Hyde	492,867	Mar. 7	152	36, 37	62	1339
Cotton-chopper	D. W. Pate	496,343	Apr. 25	2974	742	63	601
Cotton-chopper	J. D. Schofield	504,756	Sept. 12	737	183 184	64	1422
Cotton-chopper	J. S. Weber	497,106	May 9	1148	294	63	843
Cotton chopper and cultivator	E. M. Nolan	489,640	Jan. 10	1008	262 263	62	225
Cotton chopper and scraper	W. A. Talley	500,679	July 4	238	63	64	45
Cotton-chopping machine	W. Nivens	496,229	Apr. 25	2703	677	63	548
Cotton-cleaner	H. Rembert	506,134	Oct. 3	529	136 137	65	103
Cotton-cleaner	J. N. Smith	497,219	May 9	1317	336	63	874
Cotton cleaner and conveyer. Seed-	F. E. Smith	494,902	Apr. 4	597	150	63	116
Cotton-condenser and flue	F. Garraux	491,013	Jan. 31	3265	834	62	713
Cotton-condenser flue	W. Crooks	490,271	Jan. 24	2059	538	62	461
Cotton conveyer. Seed-	F. C. Gammons	494,101	Mar. 21	2161	551 552	62	1808
Cotton conveyer. Seed-	F. C. Gammons	507,358	Oct. 24	2671	656	65	519
Cotton conveyers. Mechanism for automatically oper-	F. C. Gammons	500,804	July 4	433	114	64	80
Cotton-distributor for gin-feeders	M. R. Davis	506,771	Oct. 17	1659	416	65	341
Cotton feeder and cleaner	A. Oliphant	496,367	Apr. 25	2946	736	63	595
Cotton feeder. Seed-	W. E. Elam	508,376	Nov. 7	649	159	65	878
Cotton-gin brush	W. E. Elam and R. S. Thomas	493,691	Mar. 21	1482	379	62	1679
Cotton-gin feed-regulator	J. Hollingsworth and C. Banister	509,536	Nov. 28	2621	634	65	1294
Cotton-gin rib	G. Lemain	510,073	Dec. 5	392	86	65	1483
Cotton-gin. Roller	W. Dearborn	504,775	Sept. 12	773	195	64	1428
Cotton-gin. Roller	O. F. Goodwin	497,652	May 16	2043	509	63	1018
Cotton-gin. Roller	W. E. McCall	489,825	Jan. 10	1285	336	62	282
Cotton-gin. Roller	F. L. Montgomery	499,560	June 13	1374	337 338	63	1645
Cotton-gin. Roller	S. F. Prevatt	509,765	Nov. 28	2977	720 721	65	1362
Cotton-gin. Roller	M. Prior	511,711	Dec. 26	3194	782 783	65	2041
Cotton-gin saw	W. M. Brown	500,500	July 4	37	12	61	9
Cotton-gin. Saw	H. J. Davis, J. Rice, and J. C. McDaniel	504,023	Aug. 29	2934	734 735	64	1166

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Cotton-gin. Saw	F. Garraux	490,745	Jan. 31	2837	728	62	629
Cotton-gin. Saw	N. Whalley	506,452	Oct. 10	1144	284	63	231
Cotton. Ginning	J. A. Bachman	508,126	Nov. 7	243	61	63	803
Cotton-ginning apparatus	R. King	510,269	Dec. 5	716	173	65	1545
Cotton-grader	L. A. Greene	499,358	June 13	1030	249	63	1525
Cotton-grader and nail-arrester	T. D. Ruffin	508,842	Nov. 14	1375	340	65	1032
Cotton handling and feeding machine. Seed.	R. S. Munger	509,759	Nov. 28	2967	719	65	1360
Cotton. Machine for cleaning seed.	B. Cannon	495,392	Apr. 11	1398	350	63	276
Cotton. Machine for receiving, cleaning, and distributing seed.	W. S. Reeder	506,728	Oct. 17	1584	400	65	326
Cotton-opener beater.	R. Schaellibaum	503,256	Aug. 15	1703	419	64	907
Cotton openers and lappers. Damper for	R. Schaellibaum	503,255	Aug. 15	1701	418	64	906
Cotton-opening machine	W. Hurst	510,642	Dec. 12	1366	334	65	1680
Cotton-picker	H. H. Call and A. A. Clough	490,101	Jan. 17	1764	459	62	392
Cotton-picker	H. H. Call and A. A. Clough	492,378	Feb. 21	2090	522	62	1198
Cotton-picker. Pneumatic.	G. A. Mauermann	492,133	May 23	2799	700	63	1168
Cotton-picking finger	C. A. Weller	508,358	Nov. 7	618	152	63	873
Cotton-press	W. T. Bessonette	492,132	Feb. 21	1702	423	62	1119
Cotton-press	W. T. Bessonette	508,909	Nov. 21	1530	372	65	1074
Cotton-press	F. Garraux	498,052	May 23	2030	671	63	1146
Cotton-press	J. L. Hayward	501,419	July 11	1422	356	64	273
Cotton-press	W. S. Liddell	500,238	June 27	2496	610	63	1867
Cotton-press	J. L. McCutcheon	502,313	Aug. 1	97	23	64	583
Cotton-sack carrier	A. F. Laird and J. M. Hill	509,540	Nov. 28	2627	635	65	1295
Cotton-scoop	W. C. Brown	495,579	Apr. 18	1703	429	63	352
Cotton-scraper	B. F. Cadenhead	489,119	Jan. 3	214	56	62	49
Cotton-scraper	W. Lum	508,431	Nov. 14	738	182	65	909
Cotton. Treating	H. Anthobi	500,732	July 4	323	86	64	61
Coulomb-counter	G. Hummel	491,560	Feb. 14	819	208	62	927
Counter attachment. Bar-room.	J. McNaney	489,388	Jan. 3	621	168	62	134
Counterbalance and guide for reciprocating mechanisms.	M. N. Forney	429,648	Jan. 10	1018	265	62	227
Counter for miscellaneous items. Pocket.	E. Bersbach and A. W. Zietlow	501,596	July 18	1687	421	64	340
Counter shaping and cutting machine.	C. H. Helms and C. Reinders	507,814	Oct. 31	3445	846	65	699
Counter-seat	G. A. Moss	508,961	Nov. 21	1609	396	65	1090
Counting apparatus for printing-presses, &c.	R. A. Hart	489,073	Jan. 3	143	40	62	35
Counting-register.	W. N. Durant	491,537	Feb. 14	779	199	62	919
Counting-register.	M. T. Meyer	507,023	Oct. 17	2065	510	65	417
Counting tickets. Gage for	C. H. Farnham	491,800	Feb. 14	1200	300	62	1003
Coupling.							
See Air-brake coupling.	Insulating-coupling.						
Car-coupling.	Link-and-pin coupling.						
Car and air-brake coupling.	Locomotive-coupling.						
Carriage-coupling.	Locomotive-pilot draw-bar coupling.						
Carriage-gear coupling.	Pipe-coupling.						
Collar-coupling.	Pipe or hose coupling.						
Eaves-trough coupling.	Plow-coupling.						
Electric-conduit coupling.	Pole-coupling.						
Electro-magnetic safety-coupling.	Pole or thill coupling.						
Fifth-wheel coupling.	Pulley-coupling.						
Fire-hose coupling.	Shaft-coupling.						
Hame-coupling.	Steam-tight coupling.						
Hoop-coupling.	Springs-coupling.						
Hose-coupling.	Thill coupling.						
Hose or pipe coupling.	Trolley-wire coupling.						
Hose-pipe coupling.	Vehicle-coupling.						
	Vehicle-reach coupling.						
	Wagon-reach coupling.						
	Water-closet coupling.						
	Whiffletree-coupling.						
	Wire-coupling.						
Coupling	W. H. Hampson	508,705	Nov. 14	1176	290	65	994
Coupling	J. Long	510,353	Dec. 5	838	202	65	1569
Coupling device for vehicle-eveners.	E. B. Perry	506,250	Oct. 10	789	195	65	161
Coupling for tubular frames.	J. S. Johnson	493,166	Mar. 7	617	155	62	1480
Coupling-gage	G. B. Hazlehurst and F. J. Cole	491,174	Feb. 7	188	48	62	783
Coupling-rod connection	E. P. Warner	502,794	Aug. 8	941	229	64	754
Coupling-rods. Manufacture of jaws for	S. H. Stupakoff	501,851	July 18	2096	517	64	410
Cover. Box.	J. R. Barry	505,213	Sept. 19	1489	388	64	1577
Cover-fastener for storage-vessels	E. Newman	506,928	Oct. 17	1924	476	65	389
Cover-fastening. Pot.	C. J. P. Biengraber	505,432	Sept. 26	1850	476	64	1658
Cover-fastening. Pot.	C. Tilger and P. Brenner	508,066	Nov. 7	135	38	65	784
Cover for barrels, &c. Inside.	F. J. Friedrichs and H. C. Fliege	503,414	Aug. 15	1954	485	64	951
Cover for cups, jugs, &c. Removable spring.	J. J. Mockler	511,538	Dec. 26	2920	710	65	1993
Cover for frying-pans, pots, or other cooking utensils.	D. D. Davies	496,820	May 2	687	181	63	741
Cover for household utensils	A. Schott	495,684	Apr. 18	1869	469	63	379
Cover for pots, urns, jugs, &c.	R. Boas	505,647	Sept. 26	2256	571	64	1735
Cover for show-barrels. Hinged	W. R. and E. O. Hind	503,930	Aug. 22	2766	693	64	1119
Cover for vessels. Air-tight.	A. H. Perry	497,057	May 9	1074	275	63	830
Cover-holder	M. A. Green	492,329	Feb. 21	2011	500	62	1184
Cover. Milk-jar	C. N. Wilcox	501,176	July 11	1033	261	64	203
Cover. Milk-pan	S. Newell	494,157	Mar. 28	2268	576	62	1842

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Cover. Sap-bucket.....	M. R. Moss.....	502,740	Aug. 8	846	206	64	736
Cover. Spring.....	E. W. Mersereau.....	496,979	May 9	951	249	63	809
Cover. Stew-pan.....	G. Pfeil.....	496,278	Apr. 25	2781	696	63	564
Cover. Tobacco-pail.....	E. A. Davis.....	494,465	Mar. 28	2756	691	62	1932
Cow-tail holder.....	J. Cooper.....	490,213	June 13	786	187	63	1541
Cracker-box.....	J. C. Loughry.....	505,110	Sept. 19	1328	343	64	1548
Cracker-machine.....	C. S. Fowler and L. A. Rockwell.....	498,641	May 30	3656	{ 904 905 }	63	1334
Cracker-stacking machine.....	P. J. Danehy.....	508,092	Nov. 7	189	50, 51	65	793
Cradle.....	F. C. Hannahs.....	509,848	Nov. 28	3119	753	65	1389
Cradle.....	J. W. C. McCurdy.....	496,531	May 2	217	57	63	858
Cradle. Automatic.....	G. Denegri.....	511,127	Dec. 19	2224	545	65	1851
Cradle. Swinging.....	P. T. Resser.....	493,786	Mar. 21	1637	417	62	1709
Cranberry-gatherer.....	J. E. Sturdy.....	489,239	Jan. 3	397	110	62	89
Crane.....	H. Aiken.....	491,933	Feb. 14	1402	350	62	1044
Crane.....	H. Aiken.....	507,303	Oct. 24	2578	{ 633 634 }	65	521
Crane.....	L. Atwood.....	493,605	May 30	3584	888	63	1322
Crane.....	J. Hemphill and J. Fawell.....	489,634	Jan. 10	1002	261	62	223
Crane.....	J. Hemphill and J. Fawell.....	489,635	Jan. 10	1003	261	62	224
Crane.....	J. Horton.....	508,476	Nov. 14	811	{ 201 202 }	65	924
Crane. Charging.....	H. Aiken.....	489,779	Jan. 10	1223	{ 320 321 322 }	62	268
Crane. Electric traveling.....	W. H. Morgan.....	496,945	May 9	908	238	63	801
Crane. Electrically-operated overhead traveling.....	W. H. Morgan.....	496,427	May 2	53	15, 16	63	628
Crane. Hydraulic.....	J. H. Rogers.....	497,216	May 9	1313	{ 334 335 }	63	874
Crane. Jib.....	E. W. Naylor.....	491,126	Feb. 7	95	26	62	767
Crane. Jib.....	E. W. Naylor.....	491,127	Feb. 7	96	27	62	767
Crane. Magnetic.....	W. H. Morgan.....	496,432	May 2	70	20, 21	63	631
Crane-operating mechanism.....	C. W. Parsons.....	504,937	Sept. 12	1034	266	64	1479
Crane. Overhead traveling.....	T. R. Morgan, Sr.....	496,434	May 2	74	32	63	632
Crane. Overhead traveling.....	W. H. Morgan.....	509,756	Nov. 28	2964	717	65	1359
Crane. Overhead traveling.....	W. H. Morgan.....	509,757	Nov. 28	2965	717	65	1360
Crane. Overhead traveling.....	W. H. Morgan.....	510,041	Dec. 5	332	75, 76	65	1473
Crane. Pillar.....	W. H. Morgan.....	496,433	May 2	72	21	63	632
Crane. Portable.....	C. H. King.....	501,147	July 11	966	251	64	194
Crane. Steam hydraulic.....	W. S. Halsey.....	505,220	Sept. 19	1497	390	64	1578
Crane. Supporting.....	F. A. Kirby.....	509,227	Nov. 21	2058	496	65	1177
Crane. Traveling.....	J. B. Anderson.....	495,574	Apr. 18	1694	427	63	351
Cranes. Girder for traveling.....	H. Weickel.....	499,622	June 13	1472	{ 352 353 }	63	1662
Cranes. Trolley for overhead traveling.....	T. R., Sr., and W. H. Morgan.....	509,758	Nov. 28	2965	718	65	1360
Crank.....	R. S. Lovelace.....	503,865	Aug. 22	2668	669	64	1100
Crank. Adjustable.....	H. E. Marchand.....	490,879	Jan. 31	3040	781	62	671
Crank-handle.....	W. I. Gong.....	508,218	Nov. 7	395	96	65	832
Crank-power.....	P. Bright.....	490,134	Jan. 17	1822	476	62	405
Crank-power for machinery.....	A. Wayne.....	503,394	Aug. 15	1029	479	64	947
Crank-shaft.....	C. K. Longenecker.....	491,487	Feb. 7	698	176	62	882
Crank-shaft bracket for bicycles, &c.....	R. Perkins.....	496,132	Apr. 25	2558	644	63	522
Crank-shaft-supporting device.....	G. S. Strong.....	497,357	May 16	1582	399	63	935
Crank-shafts. Machine for bending.....	F. Hart.....	495,631	Apr. 18	1783	{ 448 449 }	63	365
Crank-shafts. Machine for making.....	E. Thomas and T. L. Fitzgerald.....	510,103	Dec. 5	441	98, 99	65	1493
Crank. Locking device for folding.....	D. F. Latin.....	503,747	Aug. 22	2512	625	64	1070
Crate.....	J. W. and A. Glidewell.....	488,997	Jan. 3	32	9	62	9
Crate and fruit-drier. Combined.....	G. W. Crawford.....	496,819	May 2	685	181	63	741
Crate, box, &c. Folding.....	D. Harrah.....	490,281	Jan. 24	2076	542	62	465
Crate. Can.....	C. Moseley and J. Walsh.....	495,355	Apr. 11	1338	335	63	266
Crate. Carrying.....	A. E. Moss and B. Hillyard.....	507,446	Oct. 24	2809	688	65	566
Crate. Erg.....	C. T. Belt.....	495,773	Apr. 18	2017	510	63	406
Crate. Folding.....	S. I. Butters.....	502,481	Aug. 1	389	93	64	638
Crate. Folding.....	S. C. Myers.....	506,181	Oct. 3	618	{ 158 159 }	65	120
Crate. Folding shipping.....	C. A. Daniels.....	502,429	Aug. 1	302	72	64	621
Crate. Knockdown.....	J. Myers.....	505,061	Sept. 12	1239	{ 318 319 }	64	1518
Crate or carrier. Fruit or vegetable.....	J. E. Routh.....	504,623	Sept. 5	499	{ 128 129 }	64	1364
Crate or case.....	G. H. Brown.....	497,300	May 16	1491	376	63	919
Crate. Vegetable or fruit.....	H. E. Bullock.....	507,991	Nov. 7	21	7	65	762
Crayon or pencil.....	A. K. Cross.....	508,469	Nov. 14	798		65	920
Crayons. Machine for making school.....	L. V. Moulton.....	492,361	Feb. 21	2065	516	62	1194
Cream-puff-filling machine.....	L. J. Anger.....	504,857	Sept. 12	905	274	64	1455
Cream-separator.....	J. J. Berrigan.....	501,039	July 4	793	208	64	144
Cream-separator. Centrifugal.....	A. Malmros.....	495,352	Apr. 11	1333	334	63	265
Creamer and butter-extractor. Centrifugal.....	A. Wahlin.....	498,829	June 6	134	33	63	1416
Creamer. Centrifugal.....	J. J. Berrigan.....	501,040	July 4	795	208	64	145
Creamer. Centrifugal.....	J. E. Folk.....	504,430	Sept. 5	496	50	64	1307
Creamer. Centrifugal.....	S. C. Haulberg.....	498,914	June 6	297	68	63	1445
Creamer. Centrifugal.....	A. Lentach.....	507,442	Oct. 24	2805	687	65	566
Creamer. Centrifugal.....	P. M. and D. T. Sharples.....	496,622	May 2	361	98	63	685
Creamer. Centrifugal.....	N. G. Williams.....	500,787	July 4	405	107	64	75
Credit-balance register.....	A. L. Norfleet.....	502,133	July 25	2550	639	64	510
Cremating-furnace.....	E. C. Morse.....	492,987	Mar. 7	341	86	62	1426
Crematory.....	D. F. Donegan.....	496,046	Apr. 25	2432	{ 613 614 }	63	498
Creosote compound.....	B. R. Seifert.....	501,235	July 11	1115		64	218
Cresol, &c. Compound for.....	J. Messinger, G. Vortmann, and H. Janssen.....	495,204	Apr. 11	1099		63	222
Cresting. Ridge.....	W. H. Mullins.....	490,581	Jan. 24	2537	653	62	557
Cresting. Roof.....	G. M. Vance.....	493,344	Mar. 14	905	232	62	1550

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Crib. Child's.	M. B. Records	508,240	Nov. 7	426	103	65	837
Crib. Folding	J. G. Abbott and S. R. Robinson	504,646	Sept. 5	533	137	64	1371
Crib. Folding	C. Bignon	506,659	Oct. 17	1465	369	65	304
Crib. Portable	W. J. Adam	500,459	June 27	2837	698	63	1927
Crimping-iron	M. Campbell	489,217	Jan. 3	365	101	62	83
Crimping-machine	W. E. Frost	501,044	July 4	802	209	64	146
Crimping-machine	J. N. Heald	500,128	June 27	2315	560 561	63	1835
Crimping-machine	J. Zeh	491,913	Feb. 14	1369	341	62	1037
Crimping-tool	F. C. Wilson	502,339	Aug. 1	143	33	64	592
Crocheting-machine	J. M. Merrow and W. H. Stedman	505,275	Sept. 19	1582	412 413	64	1594
Crocheting-machine	G. D. Munsing	507,238	Oct. 24	2462	606 607	65	499
Crockery-ware, pipes, &c. Composition of matter for the manufacture of	J. B. F. Frédureau	510,065	Dec. 5	380		65	1481
Cross-tie and railway construction. Metallic	J. M. Price	504,540	Sept. 5	381	95	64	1341
Cross-tie and railway-support. Metallic	J. M. Price	503,253	Aug. 15	1698	418	64	905
Cross-tie. Metallic	N. M. Thomas	491,229	Feb. 7	275	69	62	800
Crozing and howeling machine	J. A. Seaman	490,314	Jan. 24	2133	555	62	477
Crozing and howeling machine	J. A. Seaman	490,315	Jan. 24	2134	555 556	62	477
Crozing-machine	H. Campbell	492,137	Feb. 21	1710	426	62	1121
Crozing-machine	H. Campbell	505,591	Sept. 26	2157	545 546	64	1716
Crucibles. Apparatus for electrically heating	W. Mitchell	494,586	Apr. 4	90	22	63	19
Crucibles. Means for electrically heating	W. Mitchell	494,585	Apr. 4	89	21	63	19
Crupper	W. T. Baker and T. B. Doris	493,572	Mar. 14	1287	329	62	1625
Crupper	J. W. Fitzgerald	494,195	Mar. 23	2328	590	62	1854
Crusher:							
See Corn and cob crusher. Rock-crusher.							
Ore-crusher.							
Crushing-machine	R. McCully	500,596	July 4	88	25	64	18
Crushing-machine	R. McCully	500,597	July 4	90	25, 26	64	18
Crushing-machine	R. McCully	500,598	July 4	92	26, 27	64	18
Crushing-machine	R. McCully	501,843	July 18	2081	514 515	64	408
Crushing or grinding machine	C. Kimplen	507,140	Oct. 24	2289	562 563	65	468
Crushing or grinding mill	W. A. Merralls	501,433	July 11	1437	360	64	276
Cryptographic instrument	R. Harte	492,677	Feb. 28	2581	638	62	1311
Cube-box	N. Z. Fulton	508,298	Nov. 7	518	126	65	854
Cue-rack	J. Dockstader	489,373	Jan. 3	595	160	62	128
Cue-tip-cutting tool	J. R. Higgs	509,599	Nov. 28	2725	658	65	1315
Cuff	F. C. Dumas	503,762	Aug. 22	2532	630	64	1073
Cuff	A. D. Marble	493,830	Mar. 21	1709	435	62	1722
Cuff-fastener	F. J. Horstman	506,781	Oct. 17	1677	422	65	344
Cuff-fastener	H. D. B. Williams	497,040	May 9	1046	287	63	825
Cuff-holder	A. Alexander, Jr	496,841	May 9	720	191	63	767
Cuff-holder	E. Carpenter	489,626	Jan. 10	991	258	62	221
Cuff-holder	A. S. Fisher	499,219	June 13	793	188	63	1543
Cuff-holder	O. Gronberg	506,778	Oct. 17	1672	422	65	343
Cuff-holder	W. C. Holmes	501,882	July 18	2154	534	64	420
Cuff-holder	J. V. Pilcher	492,968	Mar. 7	311	79	62	1421
Cuff-holder	J. V. Pilcher	502,581	Aug. 1	558	133	64	668
Cuff-holder	J. V. Smith	507,940	Oct. 31	3645	902	65	735
Cuffs, &c. Holder for	R. Katzer	503,858	Aug. 22	2659	666	64	1099
Culinary chopper	J. B. Coe	489,647	Jan. 10	1017	265	62	227
Culinary device	S. E. Dysinger	510,010	Dec. 5	293	65	65	1445
Culinary utensil	J. H. Norton	502,748	Aug. 8	861	210	64	739
Culinary vessel	J. Cunningham	504,022	Aug. 29	2933	734	64	1166
Culinary vessel	W. Hailes	506,849	Oct. 17	1784	449	65	364
Culinary-vessel handle	E. B. Manning	489,256	Jan. 3	428	119	62	95
Cultivating sugar-beets. Machine for	W. V. Gaffey	495,794	Apr. 18	2046	518	63	411
Cultivator	S. L. Allen	509,857	Dec. 5	5	1, 2	65	1412
Cultivator	C. Aulsber	500,842	July 4	492	128	64	90
Cultivator	D. E. Barton	500,702	July 4	270	73	64	51
Cultivator	C. Bizi	491,632	Feb. 14	938	236	62	952
Cultivator	A. J. Bolster	489,844	Jan. 10	1315	343	62	288
Cultivator	J. L. Brinly	501,818	July 18	2053	505	64	402
Cultivator	J. W. Brown	496,850	May 9	734	195	63	769
Cultivator	R. S. Buch	502,171	July 25	2617	659 660	64	523
Cultivator	A. W. Butt	491,797	Feb. 14	1193	298 299	62	1002
Cultivator	L. S. Butt	505,506	Sept. 26	1977	508	64	1681
Cultivator	E. A. Cardinal and J. Love	499,415	June 13	1139	272 273	63	1603
Cultivator	M. Casey	491,873	Feb. 14	1313	324	62	1026
Cultivator	W. F. Cochran	507,309	Oct. 24	2587	636	65	523
Cultivator	B. F. Coon	493,398	Mar. 14	984	254	62	1562
Cultivator	E. A. Cox	489,708	Jan. 10	1110	286	62	246
Cultivator	A. R. Davis	492,509	Feb. 23	2319	575	62	1257
Cultivator	A. T. Donaldson	497,369	May 16	1600	404	63	939
Cultivator	H. Eastman	496,727	May 2	530	141	63	715
Cultivator	H. W. Eisenhart	495,404	Apr. 11	1415	356	63	279
Cultivator	C. T. Eldredge	500,873	July 4	540	140	64	98
Cultivator	H. P. Erb	502,957	Aug. 8	1216	299 300	64	804
Cultivator	E. B. Farnsworth	506,171	Oct. 3	605	151	65	117
Cultivator	J. R. Finney	499,187	June 6	744	177	63	1520
Cultivator	G. W. French and E. Einfeldt	509,027	Nov. 21	1706	422	65	1109
Cultivator	M. B. Gooing	490,765	Jan. 31	2866	735	62	635
Cultivator	M. B. Gooing	510,969	Dec. 19	1973	484	65	1804

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Cultivator	J. G. Griffin	494,985	Apr. 4	714	181	63	137
Cultivator	W. Haumer	493,707	Mar. 21	1499	384	62	1662
Cultivator	C. H. Harmon, D. and A. McRae	497,658	May 16	2054	513	63	1019
Cultivator	W. Hewitt	496,605	May 2	330	91	63	679
Cultivator	C. Hobson	497,124	May 9	1183	302	63	850
Cultivator	A. Hodgson	508,712	Nov. 14	1186	292	65	996
Cultivator	G. K. Jackson	498,656	May 30	3685	911	63	1339
Cultivator	I. V. Kelly	497,883	May 23	2421	604	63	1102
Cultivator	J. Killefer	503,145	Aug. 15	1523	374	64	874
Cultivator	D. F. Lawrence	499,745	June 20	1665	400	63	1709
Cultivator	A. Leineweber	508,028	Nov. 7	71	20, 21	65	771
Cultivator	H. M. Little	494,010	Mar. 21	2017	514	62	1781
Cultivator	T. Lull	490,151	Jan. 17	1848	482	62	409
Cultivator	L. Luppen	508,481	Nov. 14	824	204	65	926
Cultivator	M. Macleod	501,285	July 11	1193	202	64	232
Cultivator	J. Macphail	507,552	Oct. 31	2998	736	65	615
Cultivator	J. Macphail	508,433	Nov. 14	741	183	65	910
Cultivator	J. Macphail	508,434	Nov. 14	743	183	65	910
Cultivator	A. Mattijetz	510,281	Dec. 5	738	179	65	1549
Cultivator	R. Miller	492,692	Feb. 28	2600	643	62	1315
Cultivator	F. E. Montgomery	494,341	Mar. 28	2561	645	62	1897
Cultivator	W. L. Nieman and W. Hieronymus	510,812	Dec. 12	1644	409	65	1732
Cultivator	E. A. Ovenshire	492,307	Feb. 21	1980	493	62	1178
Cultivator	J. F. Packer	498,294	May 30	3084	769	63	1233
Cultivator	J. A. Parker	502,135	July 25	2553	640	64	511
Cultivator	A. G. Perry	495,365	Apr. 11	1354	339	63	268
Cultivator	E. Pridmore	500,349	June 27	2677	657	63	1898
Cultivator	N. B. and J. B. Robinson	495,207	Apr. 11	1103	274	63	223
Cultivator	B. T. Scott	493,124	Mar. 7	549	137	62	1467
Cultivator	O. A. Smith	494,749	Apr. 4	353	89, 90	63	70
Cultivator	G. L. Spring	489,507	Jan. 10	828	217	62	189
Cultivator	C. P. Sutton	490,322	Jan. 24	2142	559	62	479
Cultivator	W. H. T. Tomlin	494,993	Apr. 4	723	184	63	138
Cultivator	J. D. and A. C. Tower	489,346	Jan. 3	559	151	62	120
Cultivator	W. H. Traphagen	504,406	Sept. 5	151	39, 40	64	1298
Cultivator	P. C. Vann	498,867	June 6	206	50	63	1429
Cultivator	W. A. Wagner	491,822	Feb. 14	1227	307	62	1010
Cultivator	J. F. Waltrous	491,618	Feb. 14	920	231	62	948
Cultivator	A. C. Wickham	506,575	Oct. 10	1338	336	65	269
Cultivator and fertilizer-distributor	D. W. Bricker	494,457	Mar. 28	2743	688	62	1930
Cultivator and harrow. Combined	J. A. Heard	494,986	Apr. 4	715	181	63	137
Cultivator and harrow. Listed-corn	R. Lyons	496,884	May 9	810	213	63	783
Cultivator and irrigator. Plow	J. W. Askew	496,288	Apr. 25	2796	699	63	567
Cultivator and planter	J. W. Mullins	495,901	Apr. 18	2211	557	63	441
Cultivator and planter	G. W. Randolph	509,766	Nov. 28	2978	721	65	1362
Cultivator attachment. Wheel	S. D. Poole	510,091	Dec. 5	421	94	65	1489
Cultivator. Beet	G. G. Crowley	498,241	May 30	2966	744	63	1216
Cultivator. Beet-root	W. Miskovsky	508,959	Nov. 21	1607	394	65	1090
Cultivator-blade	B. F. Darby	504,969	Sept. 12	1090	279	64	1490
Cultivator. Disk	A. J. Bolster	489,845	Jan. 10	1317	343	62	288
Cultivator. Disk	A. F. Brown and W. R. Knaub	499,711	June 20	1603	387	63	1699
Cultivator. Disk	E. Miller	499,844	June 20	1838	448	63	1739
Cultivator disk attachment	A. Caldwell	501,916	July 25	2221	553	64	448
Cultivator-disk cleaner	A. Caldwell	501,917	July 25	2222	554	64	448
Cultivator. Double-shovel	W. W. Hinkle and I. H. Gaither	491,176	Feb. 7	191	49	62	784
Cultivator. Combination	T. J. Bottoms	508,912	Nov. 21	1534	374	65	1075
Cultivator. Combination	W. S. H. Wailes	507,295	Oct. 24	2554	629	65	516
Cultivator. Corn	G. D. Houston	510,916	Dec. 19	1874	460	65	1785
Cultivator for listed corn	E. Dimity	494,130	Mar. 28	2225	567	62	1835
Cultivator. Fruit-tree	D. M. Smyth	505,965	Oct. 3	255	68	65	50
Cultivator, &c. Garden	G. Adair	504,189	Aug. 29	3212	800	64	1219
Cultivator. Garden	L. M. Siegner	508,995	Nov. 21	1659	408	65	1101
Cultivator. Hand	T. T. Rodes	509,558	Nov. 28	2656	643	65	1301
Cultivator, harrow, and cotton-planter	G. W. Randolph	509,826	Nov. 28	3082	745	65	1383
Cultivator hoe attachment	E. A. O. Eriksen and W. H. Day	491,676	Feb. 14	1001	252	62	965
Cultivator. Lister	J. H. Spencer	493,878	Mar. 21	1777	453	62	1736
Cultivator. Lister	J. A. Horduan	501,940	July 25	2251	562	64	454
Cultivator. Rotary	J. Carothers	499,211	June 13	782	166	63	1541
Cultivator-tooth	F. B. Harvey	499,991	June 20	2066	500	63	1779
Cultivator-tooth	R. Wilson	493,741	Mar. 21	1572	400	62	1696
Cultivator-tooth. Spring	G. Moore	503,288	Aug. 15	1756	434	64	916
Cultivator. Tree	A. Moler	509,544	Nov. 28	2633	636	65	1296
Cultivator. Walking	E. A. Ovenshire	510,044	Dec. 5	345	78	65	1475
Cultivator. Wheel	E. A. Couch	500,799	July 4	427	112	64	79
Cultivator. Wheel	E. Einfeldt	509,024	Nov. 21	1703	421	65	1108
Cultivator. Wheel	W. C. Moore	510,923	Dec. 19	1883	462	65	1787
Culvert	C. B. Davis	491,408	Feb. 7	576	144	62	858
Culvert. Metallic	E. D. Lewis	494,576	Apr. 4	718	19	63	16
Cup							
See Billiard-chalk cup.	Oil-cup.						
Drinking-cup.	Paint or varnish cup.						
Egg-cup.	Sponge-cup.						
Feeding-cup.	Telescoping cup.						
Cup and saucer		O. Walter	Aug. 15	2104	527	64	978
Cupola or blast furnace		A. P. Rushforth	Nov. 28	2478	597	65	1267

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Curb and conduit. Combined	N. Sampson	506,018	Oct. 3	335	89	65	66
Curb-box cover	D. O'Neil	492,227	Feb. 21	1863	465	62	1153
Curbing. Street	F. Haines	508,308	Nov. 7	538	132	65	857
Curling-iron	R. C. Bookser	501,646	July 18	1769	440	64	354
Curling-iron	W. M. Cleeland	507,108	Oct. 24	2216	547	65	456
Curling-iron	G. L. and H. C. Hart	496,259	Apr. 25	2754	689	63	558
Curling-iron	W. Lonsdale	406,575	May 2	289	77	63	672
Curling-iron	H. P. Myers	498,966	June 6	418	97	63	1465
Curling-iron	W. Pentoney	497,526	May 16	1851	467	63	983
Curling-iron	H. Saxton	502,385	Aug. 1	230	54	64	608
Curling-iron heater	T. Hipwell	496,565	May 2	276	73	63	669
Curling-iron heater. Electric	S. B. Jenkins	491,313	Feb. 7	419	109	62	827
Curling-iron holder	E. E. Chapman	502,456	Aug. 1	348	83	64	620
Curling-iron holder	H. Story	500,106	June 20	2244	546	63	1809
Curling-iron holder for gas-fixtures	D. Heer	500,232	June 27	2478	607	63	1865
Curling-iron. Self-heating	E. Fontaine	511,297	Dec. 19	2511	611	65	1903
Curling-tool	B. Westervelt	495,765	Apr. 18	2002	507	63	403
Currents, &c. Machine for cleaning	W. Vickers	492,644	Feb. 28	2529	627	62	1301
Current-controlling device	W. H. Morgan	509,322	Nov. 21	2218	535 536	65	1206
Current generator. Alternating	O. Patin	491,811	Feb. 14	1213	303 304	62	1007
Current generator. Alternating	A. Schmid	505,927	Oct. 3	194	49	65	38
Current generator. Alternating	W. Stanley, Jr., and J. F. Kelly	499,446	June 13	1189	283	63	1613
Current machines. Regulating parallel-circuited alternate	C. Hoffmann	510,862	Dec. 12	1777	437	65	1755
Current meter. Alternating	W. Stanley, Jr.	494,513	Mar. 28	2837	710	62	1947
Current-motor	J. T. Bibb	500,465	June 27	2843	700	63	1928
Current-motor	L. C. Neal	502,931	Aug. 8	1173	289	64	797
Current motor. Alternating	W. Hochhausen	510,601	Dec. 12	1288	314 315	65	1666
Current motor. Alternating	J. F. Kelly and C. C. Chesney	508,721	Nov. 14	1196	297	65	999
Current motor. Alternating	W. Stanley, Jr., and J. F. Kelly	505,859	Oct. 3	91	25	65	19
Current motor. Rotary	J. H. F. Gorges	510,534	Dec. 12	1175	283	65	1645
Current motors. Regulation of alternating	M. von Dolivo-Dobrowolsky	503,038	Aug. 8	1341	331	64	827
Current protector. Strong	C. D. Haskins	499,425	June 13	1153	276	63	1606
Current systems. Equalizer for rotary	P. Nordmann	501,094	July 11	897	230	64	179
Current-transformer	W. H. Hornberger	508,422	Nov. 14	722	180	65	907
Current-wheel	W. F. Buckmann	495,780	Apr. 18	2027	513	63	407
Currents. Means for regulating multiphase	E. W. Rice, Jr.	508,638	Nov. 14	1078	267	65	976
Currents. Method of and means for producing alternating	E. Thomson	500,630	July 4	148	39	64	29
Carrier's beam	O. Geisler	511,521	Dec. 26	2889	703	65	1987
Currycomb	M. J. Bagley	495,871	Apr. 18	2172	545	63	433
Currycomb	J. Du Shane	505,756	Sept. 26	2432	614	64	1766
Currycomb	G. M. Hubbard	493,029	Mar. 7	406	101	62	1439
Currycomb	E. E. Miller	502,233	July 25	2721	686	64	539
Currycomb	G. W. Neuls	505,951	Oct. 3	929	60	65	45
Curtain-fastener	A. A. Froehlich	490,709	Jan. 31	2777	713	62	618
Curtain-fixture	J. L. Baker	492,705	Feb. 28	2622	649	62	1320
Curtain-fixture	G. A. Crisson	503,037	Aug. 8	1339	330	64	827
Curtain-fixture	C. E. Goodrich	509,078	Nov. 21	1798	442	65	1126
Curtain-fixture	C. E. Goodrich	509,161	Nov. 21	1933	473	65	1153
Curtain-fixture	A. W. Herr	502,074	July 25	2459	618	64	492
Curtain-fixture	G. W. MacKenzie	507,146	Oct. 24	2299	565	65	470
Curtain-fixture	R. Malin	507,443	Oct. 24	2806	687	65	566
Curtain-fixture	J. F. Snapp	506,344	Oct. 10	948	236	65	192
Curtain-fixture	N. W. Stearns	506,346	Oct. 10	951	237	65	192
Curtain-fixture	J. Villard	492,447	Feb. 28	2201	550	62	1237
Curtain-fixture for bay-windows	R. K. Ortt and M. A. Shearer	509,238	Nov. 21	2075	500	65	1180
Curtain-fixture hanger	W. Martin	502,823	Aug. 8	991	242	64	763
Curtain holder. Adjustable window	H. W. and E. W. Hutchinson	511,431	Dec. 26	2756	666	65	1961
Curtain-holding device	E. E. Piper and G. H. Davis	491,588	Feb. 14	868	220	62	934
Curtain or blind support	J. Fraley	507,266	Oct. 24	2508	618	65	507
Curtain or shade roll	J. A. Howell	503,601	Aug. 22	2277	568	64	1024
Curtain-pole guard-rail attachment	R. K. Ortt and M. A. Shearer	508,116	Nov. 7	227	58	65	800
Curtain-poles. Adjustable bearing for	J. Heimke	495,332	Apr. 11	1304	327	63	260
Curtain-ring	J. M. Guilbert	505,625	Sept. 26	2204	553	64	1725
Curtain ring and pin. Combined	J. Lines	504,532	Sept. 5	369	93	64	1338
Curtain-rod and bracket	J. Day	502,659	Aug. 1	691	165	64	693
Curtain-rod and bracket. Extension	J. G. Brothwell and F. K. Phillips	502,654	Aug. 1	683	164	64	691
Curtain-roller. Coach	J. A. Howell	504,163	Aug. 29	3157	788	64	1209
Curtain-stretcher	E. R. Osgood	490,230	Jan. 17	1976	518	62	434
Curtain stretcher-frames. Easel attachment for lace	A. P. Bohlinger	505,306	Sept. 19	1632	424	64	1605
Curtain. Window ventilating	W. Amos	507,520	Oct. 24	2940	721	65	590
Curtain with stained-glass panes. Metallic	J. Herard	510,507	Dec. 12	1099	265	65	1633
Curtains and blinds. Adjustable stand for	L. Beer	498,226	May 30	2959	737 738	63	1211
Curtains. Appliance for hanging and adjusting window	V. C. Baltzell	492,755	Feb. 28	2697	669	62	1334
Cushion:							
See Treadle-cushion.							
Cushion	W. H. Goodnow	509,729	Nov. 23	2924	707	65	1351
Cuspidor	C. R. McComb	502,312	Aug. 1	96	22	64	583
Cuspidor	D. P. Simmons	497,419	May 16	1672	422	63	952
Cuspidor-holder	C. C. Howard	511,617	Dec. 26	3053	743	65	2015
Cut-off engine. Variable	J. Abell	499,493	June 13	1260	300	63	1625
Cut-off. Rain-water	M. A. Laska	498,663	May 30	3696	913	63	1342
Cut-out	N. F. Adams	509,713	Nov. 28	2895	701	65	1346
Cut-out	P. J. Barrett	499,497	June 13	1266	301	63	1626
Cut-out	L. W. Miller	507,150	Oct. 24	2310	568	65	472
Cut-out	E. Thomson	506,383	Oct. 10	1021	254	65	207
Cut-out and circuit-protector	J. O. Heinze, Jr.	496,308	Apr. 25	2833	708	63	573
Cut-out and lightning-arrester. Combined	E. F. Hammarström	493,380	Mar. 14	960	247	62	1563

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Cut-out apparatus for networks of multiple electrical conductors.	P. Nordmann	497,680	May 16	2085	{ 520 521 }	63	1025
Cut-out. Automatic	C. Hoffmann	502,518	Aug. 1	454	110	64	650
Cut-out. Automatic electric	F. B. Badt	493,672	Mar. 21	1449	370	62	1672
Cut-out. Electric	C. H. Crockett and C. C. Allen	493,755	Mar. 21	1592	405	62	1700
Cut-out. Electric	E. Egger	500,229	June 27	2486	607	63	1865
Cut-out. Electric	W. P. Mashinter	498,560	May 30	3521	871	63	1311
Cut-out. Electric	O. F. Persson	499,930	June 20	1977	480	63	1763
Cut-out. Electric	W. B. Potter	489,983	Jan. 17	1566	410	62	352
Cut-out. Electric	H. N. Prentice	504,938	Sept. 12	1038	{ 266 267 }	64	1480
Cut-out. Electric	E. Thomson	508,652	Nov. 14	1101	272	65	980
Cut-out. Electric	A. Wright	496,807	May 2	668	177	63	738
Cut-out. Electric-circuit	M. Leavy	490,292	Jan. 24	2092	545	62	469
Cut-out. Electric double-pole fixture	H. E. Werline	509,500	Nov. 28	2562	620	65	1283
Cut-out. Electric pendant	H. E. Werline	509,501	Nov. 28	2565	620	65	1284
Cut-out. Electric time	F. Beland	505,808	Oct. 3	5	2	65	4
Cut-out. Electrical	L. B. Matson	503,867	Aug. 22	2670	669	64	1100
Cut-out for electric-light circuits. Automatic	C. Cuno	497,491	May 16	1798	451	63	973
Cut-out for electric-lighting systems	J. S. George, Jr.	500,201	June 27	2439	595	63	1856
Cut-out for electric signaling-boxes. Automatic	J. F. Mehren	494,786	Apr. 4	420	105	63	82
Cut-out for electric signaling mechanisms. Automatic	J. F. Mehren	494,787	Apr. 4	421	105	63	82
Cut-out. Fusible	E. Thomson	502,330	Aug. 1	133	30	64	590
Cut-out. Fusible	S. A. Young and C. Alden	500,248	June 27	2509	613	63	1869
Cut-out. Multiple terminal	L. P. Bonebrake	493,328	Mar. 14	886	226	62	1546
Cut-out. Multiple thermal	W. S. Hill	495,038	Apr. 11	797	202	63	168
Cut-out. Rosette	C. E. Barry	493,884	Mar. 21	1783	456	62	1738
Cut-out. Safety	O. Offrell	500,601	July 4	96	28	64	19
Cut-out. Safety	O. Offrell	508,629	Nov. 14	1063	264	65	973
Cut-out. Thermal	W. M. Goodridge	504,344	Sept. 5	49	14	64	1280
Cutlery. Table	A. W. Cox	498,627	May 30	3632	890	63	1330
Cutlery. Tongs for use in hardening	G. W. Watrous and C. B. Snow	490,778	Jan. 31	2892	741	62	640
Cutter:							
See Bale-band cutter	Glass-cutter.						
Band-cutter.	Glass tube cutter.						
Biscuit-cutter.	Ice-cutter.						
Bolt-cutter.	Kraut-cutter.						
Bolt or rod cutter.	Lard or butter cutter.						
Bread-cutter.	Meat-cutter.						
Brick or tile cutter.	Meat or bread cutter.						
Buttonhole-cutter.	Milling-cutter.						
Cabbage-cutter.	Oil-cloth cutter.						
Cake-cutter.	Paper-cutter.						
Cake or biscuit cutter.	Pipe-cutter.						
Cigar-cutter.	Planer-cutter.						
Cigar-tip cutter.	Potato-cutter.						
Cigar-wrapper cutter.	Punching-cutter.						
Corn-cutter.	Rotary cutter.						
Cornstalk-cutter.	Stalk-cutter.						
Egg-cutter.	Stalk or trash cutter.						
Envelope-cutter.	Stock-cutter.						
Fabric or paper cutter.	Stone-cutter.						
Feed-cutter.	Straw-cutter.						
Film-cutter.	Thrashing-machine band-cutter.						
Finger or toe nail cutter.	Thread-cutter.						
Flue-cutter.	Tobacco-cutter.						
Fodder-cutter.	Tube-cutter.						
Fruit and vegetable cutter.	Twine-cutter.						
Gear-wheel cutter.	Vegetable-cutter.						
Cutter and cutter-holder	Vegetable or meat cutter.						
Cutter-head	Vine-cutter.						
Cutter-head	Washer-cutter.						
Cutter-head	Weed-cutter.						
Cutter-head and bit. Rotary	J. Martignoni	495,256	Apr. 11	1189	298	63	239
Cutter-head for panel-raising machines	H. Ernsberger	509,301	Nov. 21	2180	524	65	1200
Cutter-head for wood-turning machines	W. Morgan	501,685	July 18	1836	457	64	365
Cutter-head. Rotary	T. B. Reese	491,373	Feb. 7	520	133	62	847
Cutters. Making rotary toothed	A. Priode	508,181	Nov. 7	325	81	65	818
Cutting and gripping tool.	F. Stutzman	511,471	Dec. 26	2820	681	65	1973
Cutting. Device for holding lining or other materials for	S. K. White and D. H. Bacon	503,632	Aug. 23	2327	580	64	1033
Cutting-gage and marker. Combined	K. Nelson	501,956	July 25	2273	568	64	457
Cutting implement	H. W. Winter	501,555	July 18	1628	407	64	329
Cutting material into curved forms. Machine for	J. Lindsay	509,920	Dec. 5	124	28	65	1433
Cutting-off and forming tool.	D. R. Rouch	491,026	Jan. 31	3298	842	62	721
Cutting-table	A. A. Waldie	508,453	Nov. 14	770	190	65	915
Cutting tapering openings. Tool for	P. A. Dudley and F. G. Kleckler	497,568	May 16	1917	453	63	995
Cutting tool. Surface	A. Olmesdahl	511,453	Dec. 26	2792	{ 675 676 }	65	1967
Cutting-tools or tool-heads. Shank for holding rotary	G. E. Witherell	504,688	Sept. 5	613	157	64	1386
Cyanides and ammonia. Method of and apparatus for producing	V. Jones	495,252	Apr. 11	1184	297	63	237
Cyanides. Making	R. Quinn	489,265	Jan. 3	442	122	62	97
Cyanides. Process of and apparatus for making	J. H. Steen	492,310	Feb. 21	1983	493	62	1178
Cycle	S. E. Freeman	503,656	Aug. 22	2360	589	64	1040
Cycle-brake construction	T. B. Fogarty	500,651	July 4	186	48, 49	64	37
Cycle-braking mechanism	D. J. Playfair	507,753	Oct. 31	3332		65	677
	W. Siepermann	509,957	Dec. 5	183	43	65	1444
	C. E. Hadley	495,732	Apr. 18	1950	491	63	393
	J. G. Xander	493,201	Mar. 7	661	169	62	1488
	A. Perkins	505,776	Sept. 26	2467	622	64	1773
	R. E. Hammer	511,614	Dec. 26	3048	742	65	2014

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Cycle. Carrier.....	J. Warrick.....	499,810	June 20	1780	431	63	1729
Cycle change-gear.....	E. L. Rosenfeld.....	509,329	Nov. 21	2228	538 539	65	1202
Cycle. Child's.....	O. Gebricke.....	501,501	July 18	1538	387	64	311
Cycle clock-attaching device.....	E. Kuhn.....	490,750	Jan. 31	2844	730	62	630
Cycle driving mechanism.....	W. W. Carns.....	501,054	July 11	820	213	64	165
Cycle-handle.....	A. Straus.....	490,459	Jan. 24	2331	608	62	520
Cycle mud-guard.....	J. Gardner and D. Marshall.....	505,290	Sept. 19	1612	419	64	1600
Cycle mud-guard.....	C. E. Hadley.....	500,889	July 4	562	146	64	103
Cycle-pedal attachment.....	W. L. Ferguson.....	493,696	Mar. 21	1487	380	62	1680
Cycle-pedal. Dust-proof.....	A. Perkins.....	500,942	July 4	628	166	64	115
Cycle-saddle.....	T. Guthrie and W. T. Hall.....	503,236	Aug. 15	1669	410	64	900
Cycle speed-gearing.....	G. Glydon.....	510,252	Dec. 5	687	164	65	1540
Cycle speed-multiplying mechanism.....	H. Trépreau.....	502,332	Aug. 1	136	31	64	590
Cycle-stand.....	J. S. Slater.....	511,367	Dec. 26	2635	640 641	65	1940
Cycle-stand.....	E. Wood.....	503,185	Aug. 15	1591	391	64	8-7
Cycle umbrella attachment.....	G. H. Coffin.....	497,068	May 9	1091	280	63	8-3
Cycle-wheel.....	A. C. Brown.....	504,413	Sept. 5	163	43	64	1301
Cycle-wheel.....	A. Perkins.....	502,500	Aug. 1	424	100	64	645
Cycle-wheel.....	A. Perkins.....	506,858	Oct. 17	1798	451	65	366
Cycle-wheel.....	J. Roussat.....	501,166	July 11	1019	258	64	200
Cycle-wheel shoe.....	H. Gregorv.....	492,510	Feb. 28	2321	576	62	1258
Cycles. Construction of.....	J. M. and W. Starley.....	500,971	July 4	692	182	61	126
Cycles. Flexible and collapsible mud-guard for.....	M. F. Taintor.....	508,782	Nov. 14	1282	319	65	1015
Cycloidal surfaces. Machine for forming.....	J. T. Wilkin.....	497,998	May 23	2597	649 650	63	1132
Cyclometer.....	C. H. Clawson.....	508,405	Nov. 14	707	173 174	65	903
Cyclometer.....	C. F. Fernald.....	503,953	Aug. 29	2824	705	64	1147
Cyclometer.....	J. S. Hilliard.....	508,941	Nov. 21	1578	386 387	65	1083
Cyclometer.....	G. E. Kühn.....	503,485	Aug. 15	2069	516	64	971
Cyclometer.....	E. J. Merry.....	491,730	Feb. 14	1090	278	62	984
Cyclometer actuating device.....	C. H. Clawson.....	508,406	Nov. 14	709	174	65	903
Cyclometer. Adjustable.....	C. Coulern-Meuri.....	510,328	Dec. 5	802	194	65	1562
Cyclone cave.....	O. O. Walker.....	503,669	Aug. 22	2412	601	64	1049
Cylinders. Mechanism for operating intermittently-revolving.....	G. F. Melndoe.....	498,445	May 30	3321	827	63	1276
Dado-head.....	G. W. De Grasse.....	510,961	Dec. 19	1958	479 480	65	1801
Dam. Flexible.....	L. Debarle.....	495,788	Apr. 18	2038	516	63	409
Dam or levee.....	J. D. Brazier.....	496,292	Apr. 25	2800	701	63	568
Dampener. Crease or seam.....	W. A. Blair.....	491,331	Feb. 7	448	116	62	633
Damper.....	D. U. Cory.....	500,261	June 27	2529	618	63	1872
Damper.....	T. Davidson.....	509,019	Nov. 21	1695	418	65	1107
Damper.....	G. T. Moe.....	499,747	June 20	1671	401	63	1740
Damper-controlling mechanism for heating apparatus.....	E. Fales.....	498,251	May 30	3000	747 748	63	1218
Damper. Fireplace.....	E. J. Johnson.....	509,911	Dec. 5	111	25	65	1431
Damper for household stoves.....	A. Flechtner.....	493,580	Mar. 14	1298	331	62	1627
Damper. Furnace-pipe.....	F. S. Lang.....	493,363	Mar. 14	940	241	62	1558
Damper-governor.....	G. C. Hicks.....	508,709	Nov. 14	1182	291	65	995
Damper. Pipe-section.....	A. W. Walker.....	492,854	Mar. 7	125	31	62	1382
Damper-regulating apparatus.....	P. and J. St. Mary.....	491,3-4	Feb. 7	538	137	62	851
Damper-regulator.....	J. H. Blake.....	504,659	Sept. 5	531	141	64	1374
Damper-regulator.....	F. L. T. Carlman.....	493,149	Mar. 7	587	147	62	1474
Damper-regulator.....	A. Catchpole.....	510,060	Dec. 5	371	82, 83	65	1480
Damper-regulator.....	I. Z. Merriam.....	499,435	June 13	1172	260	63	1609
Damper-regulator for steam-boiler furnaces.....	E. J. Wood.....	505,932	Oct. 3	200	51	65	39
Damper-regulator. Thermostatic.....	I. F. and F. C. Beers.....	509,348	Nov. 21	2259	546	65	1214
Damper. Stove.....	F. O. Farwell.....	493,518	Mar. 14	1234	316	62	1614
Damper. Stove-pipe.....	C. T. Redfield.....	502,203	July 25	2668	674	64	533
Dandy-roll.....	J. C. Young and W. L. Davis.....	495,573	Apr. 18	1691	426	63	350
Danger-signal.....	F. Hanson.....	506,175	Oct. 3	610	156	65	118
Darning apparatus.....	H. Cardwell.....	511,681	Dec. 26	3151	770	65	2034
Darning implement.....	A. Bocher.....	501,817	July 18	2051	505	64	402
Dashboard.....	F. R. Tubbesing.....	490,692	Jan. 31	2752	708	62	613
Dash. Carriage.....	C. A. Behlen.....	500,980	July 4	717	188	64	130
Dash. Vehicle.....	C. A. Behlen.....	500,845	July 4	496	129	64	91
Dash rail and post. Carriage.....	A. Searls.....	496,101	Apr. 25	2515	636	63	514
Davit for putting out or taking in ships' boats.....	J. Sample.....	505,779	Sept. 26	2472	623	64	1774
Dead-centers. Device for overcoming.....	J. W. Turner.....	496,374	Apr. 25	2963	740	63	599
Dead-centers. Device for overcoming.....	C. A. Van Allen.....	500,044	June 20	2150	521	63	1794
Decoration. Interior or exterior.....	M. Samelson.....	494,724	Apr. 4	310	78, 79	63	62
Decorative films. Roll for holding and applying.....	W. H. Coe.....	508,809	Nov. 14	1428	354	65	1042
Decorticating reha, &c. Machine for.....	J. Longmore and W. L. Watson.....	493,778	Mar. 21	1625	413 414	62	1707
Decorticator.....	A. Vansteenkiste.....	510,304	Dec. 5	772	187 188	65	1556
Deflector. Automatic wind.....	B. V. Cruurine.....	504,563	Sept. 5	419	106	64	1347
Dehorning implement.....	R. G. Radler.....	503,617	Aug. 22	2306	575	64	1029
Dehorning implement.....	T. W. Tyler.....	500,443	June 27	2816	694	63	1923
Delivery-box.....	H. S. Tutbill.....	510,212	Dec. 5	624	147	65	1528
Dental apparatus.....	A. S. Richmond.....	489,235	Jan. 3	391	108	62	87
Dental apparatus.....	A. S. Richmond.....	492,434	Feb. 28	2180	545	62	1230
Dental apparatus for grinding teeth.....	D. E. Morse.....	506,522	Oct. 10	1264	316	65	254
Dental apparatus. Rheostat for controlling electrically-operated.....	J. P. B. Fiske.....	508,692	Nov. 14	1157	225	65	991
Dental appliance for obtunding nerves.....	W. P. Horton, Jr.....	493,723	Mar. 21	1535	391	62	1688
Dental articulation-cup.....	G. K. Bagby.....	502,164	July 25	2607	656	64	521
Dental articulator.....	C. F. Garretson.....	497,122	May 9	1181	302	63	849
Dental articulator.....	G. W. Simpson.....	501,741	July 18	1933	478	64	382
Dental boring apparatus.....	J. Weber and H. Hampel.....	493,846	Mar. 21	1732	441	62	1727

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Dental bracket.....	A. B. Elmorre.....	504,828	Sept. 12	857	220	64	1444
Dental bracket.....	E. R. Pettit.....	502,933	Aug. 8	1176	290	64	797
Dental broach.....	O. Johanson.....	498,554	May 30	3514	869	63	1309
Dental cement. Producing.....	M. Sichel.....	492,056	Feb. 21	1586		62	1095
Dental chair.....	G. W. Archer.....	506,200	Oct. 10	686	173	65	141
Dental chair.....	M. Butler.....	490,637	Jan. 31	2657	685	62	595
Dental chair.....	T. N. Clark.....	508,564	Nov. 14	961	236	65	952
Dental chair.....	A. P. Gould.....	489,675	Jan. 10	1054	274	62	235
Dental chair.....	A. P. Gould.....	491,097	Feb. 7	51	14, 15	62	758
Dental chair.....	A. P. Gould.....	491,098	Feb. 7	53	15, 16	62	759
Dental chair.....	A. P. Gould.....	493,379	Mar. 14	959	247	62	1563
Dental chair.....	D. A. Nash.....	500,103	June 20	2237	544	63	1808
Dental chair.....	E. T. Starr.....	490,516	Jan. 24	2450	631	62	540
Dental chair.....	D. Stuck.....	491,611	Feb. 14	909	228	62	945
Dental-chair bracket.....	D. Stuck.....	491,610	Feb. 14	908	227	62	945
Dental disk and carrier.....	R. G. Stanbrough.....	503,258	Aug. 15	1705	419	64	907
Dental-disk holder.....	N. Morgan.....	493,893	Mar. 21	1802	459	62	1740
Dental-disk holder.....	E. Nelson.....	505,121	Sept. 19	1347	347	64	1551
Dental-disk holder.....	R. G. Stanbrough.....	505,400	Sept. 26	1932	498	64	1074
Dental-disk holder.....	W. H. Towne.....	506,350	Oct. 10	958	238	65	194
Dental drill.....	W. S. How.....	503,744	Aug. 22	2506	624	61	1068
Dental engine.....	F. H. Berry.....	489,117	Jan. 3	210	56	62	48
Dental engine.....	B. S. Brown.....	504,487	Sept. 5	287	73, 74	64	1323
Dental engine.....	A. W. Browne.....	503,737	Aug. 22	2493	620	64	1066
Dental engine.....	J. S. Campbell. (Reissue).....	11,376	Oct. 17	2181	540	65	436
Dental engine.....	C. Doriot.....	503,740	Aug. 22	2499	621	64	1067
Dental engine.....	C. Doriot.....	504,490	Sept. 5	295	75	64	1325
Dental engine.....	C. Doriot.....	504,491	Sept. 5	298	76	64	1325
Dental engine.....	A. P. Gould.....	491,099	Feb. 7	56	16	62	759
Dental engine.....	F. K. Hesse.....	489,416	Jan. 3	655	177	62	141
Dental engine.....	W. A. Johnston and A. W. Browne.....	501,075	July 11	851	220	64	171
Dental engine.....	R. D. King.....	500,139	June 27	2338	564	63	1838
Dental engine.....	L. S. Pfouts.....	510,484	Dec. 12	1060	255	65	1625
Dental engine.....	C. E. Rhone.....	492,432	Feb. 28	2175	514	62	1229
Dental engine.....	C. E. Rhone.....	492,433	Feb. 28	2178	515	62	1229
Dental-engine angle attachment.....	S. P. Sharp.....	491,499	Feb. 7	714	180	62	886
Dental-engine attachment.....	A. H. Peck and C. E. Allshouse.....	493,289	Mar. 14	819	210	62	1535
Dental-engine bracket. Extensible.....	H. Hobbs.....	509,901	Dec. 5	99	22	65	1428
Dental-engine brake.....	H. T. Eachus.....	497,370	May 16	1601	404	63	939
Dental-engine brake.....	P. V. Guerry.....	510,856	Dec. 12	1771	435	65	1753
Dental-engine handpiece.....	S. H. Brooks.....	504,704	Sept. 12	646	164	64	1404
Dental engines. Flexible shaft for.....	A. W. Browne.....	492,266	Feb. 21	1920	479	62	1165
Dental filings. Preparing.....	A. W. Johnston.....	503,419	Aug. 15	1962	487	64	953
Dental flask.....	E. A. Levering.....	497,723	May 16	2154	538	63	1038
Dental forceps.....	C. E. Blake, Sr.....	491,514	Feb. 14	750	191	62	912
Dental forceps.....	C. E. Blake, Sr.....	491,515	Feb. 14	751	191	62	913
Dental forceps.....	C. E. Blake, Sr.....	491,516	Feb. 14	752	191	62	913
Dental forceps.....	C. E. Blake, Sr.....	491,517	Feb. 14	753	191	62	913
Dental forceps.....	C. E. Blake, Sr.....	491,518	Feb. 14	753	192	62	913
Dental forceps.....	C. E. Blake, Sr.....	491,519	Feb. 14	754	192	62	913
Dental forceps.....	H. Walter.....	511,067	Dec. 19	2117	523	65	1830
Dental forceps.....	A. Whitlock.....	491,932	Feb. 14	1401	349	62	1044
Dental furnace.....	J. H. Downie.....	499,015	June 6	486	113	63	1476
Dental handpiece.....	C. M. Spencer.....	511,029	Dec. 19	2060	510	65	1819
Dental heater.....	T. G. Lewis.....	509,176	Nov. 21	1960	478	65	1158
Dental hot-air syringe.....	F. B. Norris.....	497,964	May 23	2541	635	63	1122
Dental implements. Electrical apparatus for operating.....	O. H. Pieper.....	510,048	Dec. 5	350	79	65	1476
Dental impression-tray.....	H. A. Burlingame.....	508,677	Nov. 14	1132	279	65	987
Dental machine for grinding artificial tooth-crowns.....	R. G. Stanbrough.....	490,930	Jan. 31	3133	803	62	688
Dental mallet.....	J. H. Demonet.....	504,912	Sept. 12	993	256	64	1472
Dental plate.....	J. A. A. Schoondermark.....	493,843	Mar. 21	1728	440	62	1727
Dental plate.....	J. R. Watson.....	493,800	Mar. 21	1670	426	62	1715
Dental plates. Apparatus for casting aluminium.....	W. M. Sharp.....	502,209	July 25	2679	676	64	535
Dental plugger.....	A. A. Dillehay.....	502,352	Aug. 1	172	40	64	598
Dental plugger.....	C. Doriot.....	504,489	Sept. 5	293	75	64	1325
Dental plugger.....	A. E. Peck.....	492,830	Mar. 7	90	22	62	1375
Dental plugger.....	F. J. Richards.....	494,227	Mar. 28	2382	601	62	1864
Dental plugger. Pneumatic.....	J. H. Heivly.....	499,632	June 13	1484	356	63	1664
Dental suction-valves to plates. Securing.....	A. E. Ahrens.....	506,762	Oct. 17	1647	412	65	338
Dental tool.....	H. C. Wofford.....	501,127	July 11	954	244	64	188
Dental-tool holder.....	C. M. Richmond.....	495,267	Apr. 11	1208	303	63	241
Dental use. Surgical forceps for.....	C. E. Blake, Sr.....	491,464	Feb. 7	666	167	62	876
Dental vulcanizer.....	G. B. Snow.....	499,602	June 13	1435	344	63	1656
Dental work. Electric motor for.....	J. Keller.....	493,431	Mar. 14	1034	267	62	1577
Dentist's device for saving gold-filings.....	A. J. and F. F. Douds.....	510,963	Dec. 19	1962	480	65	1802
Deodorizing and disinfecting apparatus.....	G. P. Kato, Jr., and R. W. Carman.....	507,656	Oct. 31	3197	783	65	652
Deodorizing hydrocarbon oils.....	A. Kayser.....	508,479	Nov. 14	821	204	65	925
Depth-gage.....	A. Snoeck.....	490,860	Jan. 31	3003	771	62	663
Derailing-switch.....	W. Wharton, Jr.....	505,076	Sept. 12	1275	328	64	1524
Derrick.....	L. Dumbauld.....	493,690	Mar. 21	1480	379	62	1678
Derrick.....	W. A. Ross.....	498,816	June 6	115	30	63	1412
Derrick winding attachment.....	E. F. Atherton.....	490,259	Jan. 24	2031	531	62	457

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Designs on bottles, vases, or similarly-shaped articles and means therefor. Producing raised metallic	J. H. Scharling	492,840	Mar. 7	101	25	62	1377
Desk	F. H. Cutler	505,595	Sept. 26	2163	547	64	1717
Desk	M. R. Hubbell	496,057	Apr. 25	2449	618	63	501
Desk	W. MacNeece	489,611	Jan. 10	975	254	62	218
Desk	F. D. Pooley	510,705	Dec. 12	1465	362	65	1699
Desk	G. W. Wasson	506,351	Oct. 10	959	239	65	194
Desk. Adjustable	R. Bryant	498,842	June 6	162	39	63	1420
Desk. Adjustable	G. M. Childs	493,480	Mar. 14	1118	287	62	1591
Desk. Adjustable	S. J. Reynolds	491,249	Feb. 7	301	76	62	806
Desk and copy-holder. Combined	B. F. Stuart and F. W. Willson	511,031	Dec. 19	2062	511	65	1819
Desk and organ combined. School	M. E. Punttenney	506,938	Oct. 17	1936	479	65	392
Desk and seat. School	J. Hauss	506,496	Oct. 10	1233	304	65	246
Desk attachment	J. W. Neff	499,142	June 6	668	161	63	1507
Desk, bureau, and book and dressing case. Combined writing.	N. P. Shulin	492,877	Mar. 7	168	40	62	1391
Desk. Combined sitting and standing	A. Hopkins	505,765	Sept. 26	2452	617	64	1770
Desk. Office	J. A. Lawson	498,175	May 23	2860	715	63	1179
Desk or cabinet	T. Billington	494,406	Mar. 28	2671	670	62	1917
Desk. Portable	O. H. White	492,316	Feb. 21	1991	496	62	1180
Desk-receptacle	E. P. Carolan and E. H. and J. R. Terrell	490,225	Jan. 17	1970	516	62	433
Desk. School	G. A. Bobrick	498,703	May 30	3766	929	63	1353
Desk. School	G. A. Bobrick	511,262	Dec. 19	2445	596	65	1892
Desk. School	A. Manchain	492,940	Mar. 7	264	67	62	1411
Desk-support	F. W. Tobey	491,615	Feb. 14	916	231	62	947
Desk-support	F. W. Tobey	509,000	Nov. 21	1669	411	65	1102
Desk-switch	D. J. Willis	499,770	June 20	1716	411	63	1717
Desk. Wall	I. G. Richardson	509,101	Nov. 21	1845	451 } 452	65	1136
Desk. Writing	C. O. Schneider	494,649	Apr. 4	191	48	63	39
Desks. Device for operating the slides or rests of	J. B. Pooley	500,610	July 4	122	32, 33	64	24
Desulphurizing-furnace	T. Thomas	491,274	Feb. 7	336	85	62	813
Detachable handle for pans, &c.	C. H. Hommel	509,738	Nov. 28	2938	711	65	1354
Detector:							
See Coin-detector.	Hot-box detector.						
Electric-current-meter detector.	Shoplifting-detector.						
Time-detector.							
Detent mechanism	A. H. Jacot	489,480	Jan. 10	772	204	62	178
Detonating compound	S. Rodgers	489,761	Jan. 10	1197		62	263
Dial. Sun	C. E. Chamberland	490,185	Jan. 17	1899	494	62	420
Dials. Apparatus for enameling	D. R. Buchanan	503,525	Aug. 15	2126	533 } 534	64	982
Diamonds, &c. Setting for	N. M. Seidlitz	506,268	Oct. 10	813	200	65	166
Dice-box. Coin-controlled	W. Edge and W. J. Fitzgerald	500,478	June 27	2858	704	63	1930
Dice. Coin-controlled machine for throwing	B. M. Abell	500,313	June 27	2619	639 } 640	63	1888
Dice-machine. Coin-controlled	W. R. Pope	493,363	May 30	3202	786 } 787	63	1253
Dice-shaking machine. Coin-controlled	O. G. Klugel	502,495	Aug. 1	417	98, 99	64	643
Dice-thrasher. Coin-controlled	L. French	497,314	May 16	1512	381	63	923
Dice-throwing machine. Coin-controlled	W. Cahoon, Jr.	502,876	Aug. 8	1068	263	64	778
Dice-throwing machine. Coin-controlled	P. G. Williams and A. W. Roovers	491,971	Feb. 14	1460	364	62	1056
Die:							
See Ax-making die.	Machine-die.						
Forging-die.	Trimming-die.						
Forging and bending die.	Type-die.						
Welding-die.							
Die	M. G. Fuller	508,694	Nov. 14	1159	286	65	992
Die and die-holder for drawing steel rods, &c.	S. and W. Moltrup. (Reissue)	11,318	Mar. 28	2893	724	62	1957
Die for shaping double-tapered metal bars	J. P. Myer and H. Carlton	497,101	May 9	1142	292	63	842
Die-head. Revolving	H. A. Cumfer	494,415	Mar. 28	2683	673	62	1919
Die-plate	L. C. Wetzel	498,595	May 30	3569	884	63	1320
Die-stock	F. Armstrong	495,214	Apr. 11	1113	278	63	225
Die-stock	J. G. Jackson	504,084	Aug. 29	3024	755	64	1184
Die-stock	B. Thayer	491,453	Feb. 7	651	163	62	872
Die-stock. Adjustable	H. W. Oster	490,676	Jan. 31	2732	703 } 704	62	609
Dies. Apparatus for making	G. F. Champney	499,821	June 20	1800	438 } 439	63	1732
Dies for producing designs on soft metal. Making	B. F. Kelsey	491,179	Feb. 7	196	50	62	785
Dies. Machine for making	G. F. Champney	499,822	June 20	1806	439	63	1733
Dies. Making	G. F. Champney	499,820	June 20	1797	437 } 438	63	1732
Diffusion-cell locking device	H. P. Dyer	499,529	June 13	1321	312	63	1636
Digester	O. S. Jacobs	495,342	Apr. 11	1317	331	63	262
Digger:							
See Canal-digger.	Potato-digger.						
Post-hole digger.							
Digging implement	T. Bennett	506,900	Oct. 17	1872	466	65	379
Digging-machine	E. J. Bentinck and J. A. Renner	509,286	Nov. 21	2155	518	65	1195
Digging machine. Vegetable	J. Burns	495,017	Apr. 11	764	195	63	162
Dipper-handle socket	G. W. Knapp	509,173	Nov. 21	1955	477	65	1157
Direct-acting and compound engine	E. W. Harden	490,348	Jan. 24	2190	570	62	489
Direct-acting engine	W. A. Drewett	503,231	Aug. 15	1663	409	64	899
Direct-acting engine	J. G. Leyner	508,430	Nov. 14	736	182	65	909
Direct-acting engine	W. H. and M. R. Rust	502,502	Aug. 1	428	102	64	645
Directory holder and operator	A. F. George	500,099	June 20	2231	543 } 544	63	1808
Dirt or garbage receptacle	P. W. St. George	502,595	Aug. 1	580	139	64	673
Disconnecter. Automatic	W. A. Cullen	497,310	May 16	1507	379	63	922
Dish. Butter	L. Beard	493,326	Mar. 14	884	226	62	1546
Dish-cleaner	W. A. Adams	502,159	July 25	2601	654	64	520
Dish-cleaner	M. D. Colbath	505,191	Sept. 19	1452	373	64	1569

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Dish-cleaner	R. G. Ferguson	493,261	Mar. 14	765	195	62	1526
Dish-cleaner	S. W. Harman	495,329	Apr. 11	1299	326	63	259
Dish-cleaner	O. O. Hodgdon	498,549	May 30	3505	{ 866 867 }	63	1308
Dish-cleaner	A. Insinger	501,347	July 11	1306	{ 326 327 }	64	251
Dish-cleaner	C. Palmleaf	499,031	June 6	506	118	63	1479
Dish-cleaner	J. K. Purinton	506,726	Oct. 17	1582	399	65	326
Dishcloth-holder	C. Abell	504,647	Sept. 5	534	137	64	1371
Dish-cover	R. Abbott	508,198	Nov. 7	362	89	65	826
Dish-drainer	J. Chase	503,278	Aug. 15	1736	429	64	912
Dish-drainer	A. A. Lyle	497,673	May 16	2074	518	63	1023
Dish-drainer	E. C. Marshall	507,233	Oct. 24	2455	605	65	498
Dish-drainer	F. Mitchell	510,185	Dec. 5	576	134	65	1519
Dish-drainer, bread-board, and cutting-board. Combined	J. D. Johnston	508,885	Nov. 14	1445	358	65	1044
Dish handle and support	A. H. Barthold	511,189	Dec. 19	2329	570	65	1870
Dish-washing machine	G. S. Blakeslee	506,030	Oct. 3	351	93, 94	65	69
Dish-washing machine	M. Groenendyke	489,190	Jan. 3	319	88	62	72
Disinfectant	H. P. Weidig	497,082	May 9	1111	.....	63	837
Disinfectant and deodorizer	A. E. Woolf	490,797	Jan. 31	2918	.....	62	645
Disinfectant apparatus	J. C. Lyon	497,100	May 9	1140	292	63	842
Disinfecting apparatus	F. S. Coon	492,662	Feb. 28	2562	635	62	1307
Disinfecting apparatus	S. G. Plumb	495,563	Apr. 18	1672	422	63	347
Disinfecting apparatus	J. L. Stratton and F. Murdock	510,825	Dec. 12	1673	416	65	1737
Disinfecting device	H. L. Bennett	500,734	July 4	326	87	64	61
Disinfecting device	G. N. and F. G. Botsford	499,957	June 20	2013	488	63	1770
Disinfecting device	G. G. Crosby	509,426	Nov. 28	2414	{ 584 585 }	65	1254
Disinfecting device	J. Pickering	492,631	Feb. 28	2511	632	62	1298
Disinfecting or vaporizing device	R. C. Woodcock and C. T. Kingzett	502,544	Aug. 1	504	120	64	659
Disintegrating clay, ores, &c. Machine for	H. S. Albrecht	504,689	Sept. 5	615	157	64	1386
Disintegrating vegetable substances	H. J. Bird and G. Kaffenberger	505,936	Oct. 3	205	.....	65	41
Disintegrator	M. W. Leonhardt	500,916	July 4	597	156	64	110
Disk-sharpener	H. Casey	499,907	June 20	1947	{ 472 473 }	63	1758
Disks. Mechanism for controlling the action of oscillating	F. Lambert	490,025	Jan. 17	1644	427	62	367
Disks. Mechanism for controlling the action of oscillating	F. Lambert	490,026	Jan. 17	1646	428	62	368
Disks. Mechanism for controlling the action of oscillating	F. Lambert	511,705	Dec. 26	3185	720	65	2040
Display-box	F. Fear	495,949	Apr. 18	2279	574	63	455
Display-cabinet	M. F. Dyer	505,035	Sept. 12	1199	{ 308 309 }	64	1510
Display-cabinet for ribbons, laces, &c.	C. P. Burch	511,264	Dec. 19	2449	{ 597 598 }	65	1893
Display-card for textile fabrics	A. Schnellen	494,650	Apr. 4	193	48, 49	63	40
Display-case. Cutlery	W. L. Dempsey	506,103	Oct. 3	471	122	65	92
Display case or cabinet	M. Corsini	506,474	Oct. 10	1193	296	65	240
Display-frame	W. O. Rogers	500,745	July 4	340	90	64	64
Display glove-case	E. M. Rosenthal	489,691	Jan. 10	1084	281	62	241
Display glove-case	E. M. Rosenthal	504,114	Aug. 29	3080	771	64	1195
Display-hanger	E. W. Buehl	510,468	Dec. 12	1041	249	65	1621
Display-rack	M. R. Dickson	504,913	Sept. 12	995	256	64	1472
Display-rack	C. Frankel	499,420	June 13	1146	275	63	1605
Display-rack	C. Frankel	500,879	July 4	550	143	64	100
Display-rack	C. Frankel	504,916	Sept. 12	1003	259	64	1474
Display-rack	D. Goldstein	499,881	June 20	1909	464	63	1751
Display-rack	H. W. McKinne	511,639	Dec. 26	3087	754	65	2022
Display-rack. Adjustable	R. A. Lindner	507,740	Oct. 31	3310	810	65	673
Display-shelf and carpet-elevator	T. Bessing and W. A. Barker	493,542	Mar. 14	1223	313	62	1612
Display-shelf and elevator. Combined	T. Bessing and W. A. Barker	495,164	Apr. 11	1041	259	63	211
Display-stand	M. Anthony	500,839	July 4	488	127	64	89
Display-stand	B. Massé	499,326	June 13	958	231	63	1571
Display-stand	W. S. McDonald	489,027	Jan. 3	72	20	62	18
Display-stand	H. I. Platsbek	511,060	Dec. 19	2105	520	65	1828
Display-stand	W. E. Stow	493,128	Mar. 7	554	138	62	1468
Display-stand. Corset	E. A. Gage, Jr.	506,875	Oct. 17	1824	457	65	370
Display-stay for shoes	J. C. F. Dick	499,375	June 13	1055	256	63	1529
Display-table	W. Macnamar	508,627	Nov. 14	1059	{ 262 263 }	65	972
Display-tray	F. A. Gruebel	508,700	Nov. 14	1169	288	65	993
Display-tray	G. E. Sanger	497,254	May 9	1374	349	63	884
Displaying boots or shoes. Device for	C. F. Porter	498,694	May 30	3750	925	63	1350
Displaying stand. Carpet	C. Hafkemeyer	502,716	Aug. 8	817	198	64	730
Distance and altitude instrument	W. H. Pratt	508,556	Nov. 14	949	233	65	950
Distillation of hydrochloric acid. Apparatus for the	E. Solvay	503,557	Aug. 15	2186	546	64	994
Distilling and concentrating glycerine and heavy oils. Apparatus for	A. F. Trageser	510,734	Dec. 12	1512	374	65	1707
Distilling and rectifying apparatus	A. G. Burkhardt and G. Schüle	508,913	Nov. 21	1535	374	65	1075
Distilling and refrigerating apparatus. Combined ammonia	J. E. Fuller	489,897	Jan. 10	1388	361	62	302
Distilling apparatus	C. H. Denison	511,730	Dec. 26	3230	792	65	2048
Distilling apparatus. Automatic	E. Rund	496,488	May 2	148	42	63	646
Distilling apparatus. Water	W. Allderdice	497,742	May 16	2177	544	63	1043
Distilling apparatus. Water	W. Rochlitz	505,641	Sept. 26	2245	569	64	1732
Distilling apparatus. Water	J. E. Thomas and E. P. Grow	491,028	Jan. 31	3301	842	62	721
Distilling mash	R. Ilges	502,079	July 25	2467	620	64	494
Distilling tar, &c. Method of and apparatus for	F. Lennard	499,557	June 13	1365	{ 324 325 326 }	63	1644
Distilling volatile substances. Apparatus for	F. G. du Pont	503,586	Aug. 22	2239	561	64	1019
Distilling wood-waste	F. J. Bergmann	504,264	Aug. 29	3327	64	1241

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Distribution systems. Safety device for	H. C. Wirt	499,275	June 13	870	211	63	1536
Ditches. Instrument for determining the inclination of	W. C. Stevens	508,253	Nov. 7	453	{ 110 111 406 407 }	{ 65 62 }	842 1105
Ditching and grading machine	G. W. Dye	492,087	Feb. 21	1632	{ 407 172 173 }	{ 62 64 }	827 1906 1410
Ditching-machine	T. P. Concaannon	503,036	Aug. 8	1338	330	64	827
Ditching-machine	G. W. Decker	494,368	Mar. 28	2609	655	62	1906
Ditching-machine	O. Hughes and J. S. Hull	504,728	Sept. 12	676	{ 172 173 }	{ 64 64 }	1410
Ditching-scoop	A. G. Myers	499,437	June 13	1174	280	63	1609
Dividers	H. Esser	494,132	Mar. 23	2227	567	62	1835
Dividers	C. A. Strand	499,053	June 6	544	128	63	1485
Dividers attachment	W. S. Smith	504,116	Aug. 29	3083	771	64	1195
Diving apparatus	G. W. Smith	503,753	Aug. 22	2519	627	64	1071
Diving-armor	A. Hemenger	496,686	May 2	467	120	63	705
Doll	A. J. Holland	503,967	Aug. 29	2847	714	64	1151
Doll	F. B. Schultz	504,627	Sept. 5	504	129	64	1365
Doll. Automatic crying	J. P. King	469,014	Jan. 3	55	16	62	14
Doll-heads. Apparatus for molding	L. A. J. Vallée and A. L. G. Schultz	500,682	July 4	240	63, 64	64	45
Doll-pattern	L. M. Bowden	511,111	Dec. 19	2198	540	65	1847
Doll-producing blank	I. A. Gutsell	503,316	Aug. 15	1808	419	64	924
Dolls. Making	F. M. Scott and A. F. Seymour	508,770	Nov. 14	1268	315	65	1013
Door	E. B. Hayes	491,114	Mar. 21	2191	560	62	1814
Door alarm. Jail	W. S. Hull	494,923	Apr. 4	626	159	63	121
Door and hinge	N. E. Wilson	503,730	Aug. 22	2477	616	64	1062
Door and key fastener	D. H. Livingstone	511,022	Dec. 19	2052	508	65	1817
Door-bolt	A. E. Durland	497,445	May 16	1719	434	63	960
Door-bolt	H. Gaedtker	510,781	Dec. 12	1594	397	65	1723
Door-check	D. D. Reeves	508,635	Nov. 14	1073	266	65	975
Door-check	J. Cabus	505,893	Oct. 3	147	38	65	29
Door-check	J. M. David	510,163	Dec. 5	539	125	65	1512
Door-check	T. S. Dublin	507,889	Oct. 31	3561	877	65	720
Door-check	S. E. Foreman, E. M. Lord, and A. M. Foreman	509,305	Nov. 21	2186	525	65	1201
Door-check	W. Gilfillan	497,651	May 16	2041	{ 508 509 }	{ 63 64 }	1017 1353
Door-check	D. H. Haywood	504,581	Sept. 5	443	113	64	1353
Door-check	G. Hoffmeier	507,618	Oct. 31	3126	765	65	639
Door-check	W. H. McCoy	493,442	Mar. 14	1057	272	62	1581
Door-check	S. F. Oliver and J. M. Reed	490,920	Jan. 31	3118	800	62	685
Door-check	J. S. Patten	493,112	Mar. 7	530	133	62	1464
Door-check	T. Rae	490,925	Jan. 31	3124	801	62	686
Door-check	K. Reichert	505,329	Sept. 19	1673	431	64	1611
Door-check	E. P. Sartell	490,504	Jan. 24	2432	627	62	536
Door-check	W. E. Shepard	510,715	Dec. 12	1486	367	65	1703
Door-check	J. Speirs	511,099	Dec. 19	2176	536	65	1842
Door-check	J. G. Whittier	497,395	May 16	1636	414	63	946
Door-check	R. L. Wilburn	504,142	Aug. 29	3125	781	64	1203
Door-check	G. W. Wright	491,155	Feb. 7	146	39	62	777
Door check and lock	J. J. Ridgway	498,491	May 30	3392	844	63	1289
Door check and spring	G. E. Dudley	504,826	Sept. 12	857	219	64	1444
Door check and spring. Combined	S. S. Allin	505,744	Sept. 26	2412	610	64	1762
Door-check. Pneumatic	J. W. Wetmore	502,841	Aug. 8	1017	248	64	769
Door-closer	W. E. Mitchell	506,925	Oct. 17	1919	475	65	389
Door-closing device	H. C. Montgomery	490,032	Jan. 17	1655	{ 429 430 }	{ 62 63 }	370 707
Door-closing device	C. Scriven	490,990	Jan. 31	3233	826	62	707
Door. Combined screen and storm	C. R. Moore	507,151	Oct. 24	2311	568	65	472
Door. Combined screen and storm	C. H. Sheldon	497,899	May 23	2445	611	63	1106
Door. Combined screen and weather	E. Mitchell	507,827	Oct. 31	3470	854	65	703
Door. Electrically-controlled	F. Callahan	509,116	Nov. 21	1866	457	65	1140
Door-fastener	E. H. Rooney	506,196	Oct. 3	652	166	65	126
Door-fastener	F. W. Tobey	508,999	Nov. 21	1668	411	65	1102
Door-fastener. Adjustable	J. Murray and C. E. Haynes	506,789	Oct. 17	1687	424	65	346
Door for cat or dog houses	G. Clement	499,656	June 13	1520	365	63	1669
Door-frames. Setting-gage for	R. Steedman	493,566	Mar. 14	1271	325	62	1621
Door. Flexible	F. Jeffs	508,720	Nov. 14	1196	297	65	998
Door. Flexible	H. N. H. Lugin	490,448	Jan. 24	2329	{ 604 605 }	{ 62 63 }	515 123
Door. Grain	J. Sheridan	500,963	July 4	677	178	64	123
Door-hanger	G. A. Colton	502,705	Aug. 8	803	194	64	728
Door-hanger	J. W. Conchar	491,081	Feb. 7	31	8	62	754
Door-hanger	W. Cronk	510,000	Dec. 5	262	61	65	1459
Door-hanger	H. L. Ferris	498,467	May 30	3359	837	63	1283
Door-hanger	O. F. Gardner	499,222	June 13	797	189	63	1543
Door-hanger	W. Kees	504,591	Sept. 5	458	117	64	1355
Door-hanger	J. H. Lawrence	496,127	Apr. 25	2552	643	63	521
Door-hanger	R. W. Lund	509,131	Nov. 21	1894	463	65	1145
Door-hanger	E. Y. Moore and R. W. Lundy	500,148	June 27	2348	568	63	1840
Door-hanger	T. C. Prenty	502,582	Aug. 1	559	133	64	668
Door-hanger	O. Seely	496,009	Apr. 25	2370	599	63	486
Door-hanger	O. Seely	496,010	Apr. 25	2371	600	63	487
Door-hanger-rail bracket	A. L. Swett	497,479	May 16	1772	446	63	968
Door hanger. Sliding	J. Balderson	509,643	Nov. 28	2787	670	65	1326
Door hanger. Sliding	W. Grabler	503,535	Aug. 15	2142	537	64	985
Door hanger. Sliding	P. E. Nilson	511,208	Dec. 19	2357	{ 575 576 }	{ 65 66 }	1875 1840
Door-hanger track	R. W. Lundy	500,146	June 27	2346	567	63	1840
Door-hangers. Adjustable track for	R. W. Lundy	509,132	Nov. 21	1895	463	65	1145
Door-hanging gage	E. Wright	505,868	Oct. 3	103	27	65	21
Door-holding device	M. W. Reeves	500,036	June 20	2138	518	63	1792
Door-indicator	A. F. Brandenburg	500,316	June 27	2625	642	63	1889
Door lock. Sliding	I. C. Coin	508,917	Nov. 21	1541	375	65	1076
Door lock. Sliding	I. Davis	489,221	Jan. 3	370	103	62	84

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Door lock. Sliding.....	E. F. Doran	489,291	Jan. 3	473	131	62	103
Door lock. Sliding.....	E. E. Fasching	509,025	Nov. 21	1703	421	65	1109
Door lock. Sliding.....	E. Hubbell	490,251	Jan. 17	2013	526	62	441
Door lock. Sliding.....	L. E. Jacobus	490,441	Jan. 24	2320	602	62	513
Door lock. Sliding.....	J. H. Lewis and A. Weenink	509,130	Nov. 21	1293	463	65	1145
Door lock. Sliding.....	C. L. Mueller	509,089	Nov. 21	1827	448	65	1132
Door-machine	E. B. Hayes	497,978	May 23	2567	642	63	1127
Door-machine	E. B. Hayes	497,979	May 23	2570	642	63	1127
Door-mat	S. Armstrong	509,013	Nov. 21	1688	416	65	1106
Door-opener	A. Rapp	500,211	June 27	2456	599	63	1859
Door-opener. Automatic	M. C. Plummer and O. O. Dinsmore	511,455	Dec. 26	2795	676	65	1968
Door-opener. Electric	H. T. Johnson	508,518	Nov. 14	893	220	65	939
Door-opening device	W. J. Weymouth	511,668	Dec. 26	3129	765	65	2030
Door opening or closing device	J. H. Whitaker	505,376	Sept. 19	1747	453	64	1625
Door-operating apparatus. Electric	O. H. Hicks and R. F. Troy	505,270	Sept. 19	1570	410	64	1592
Door-operating apparatus. Electric	O. H. Hicks and R. F. Troy	505,271	Sept. 19	1574	410	64	1593
Door-operating apparatus. Electric	O. H. Hicks and R. F. Troy	507,269	Oct. 24	2515	620	65	508
Door-operating device	P. Berger	503,782	Aug. 22	2359	637	64	1079
Door-operating device	C. L. Rice	503,985	Aug. 29	2869	719	64	1155
Door-operating device. Cell-	W. W. La Chance	508,026	Nov. 7	68	20	65	771
Door-operating device. Sliding	F. H. Mueller	491,121	Feb. 7	90	25	62	766
Door or shutter. Fireproof	J. Gascoigne	505,518	Sept. 26	2004	513	64	1686
Door or shutter opener	J. Birkey	504,318	Sept. 5	9	3	64	1272
Door or window screen	E. Goff	493,703	Mar. 21	1494	383	62	1681
Door-register for watchmen. Electric	W. R. Patterson	504,741	Sept. 12	713	178	64	1417
Door. Revolving storm-	D. G. Rush	501,538	July 18	1593	401	64	321
Door. Screen	A. Drummond	498,508	May 30	3429	851	63	1295
Door-securer	J. N. Beall	504,653	Sept. 5	542	139	64	1372
Door-securer	C. M. Fowler	504,207	Aug. 29	3241	808	64	1224
Door-securer	F. J. Hales	503,536	Aug. 15	2143	538	64	986
Door-securer	J. H. Matthews	496,887	May 9	816	215	63	784
Door-securer	J. Noland	489,230	Jan. 3	386	106	62	86
Door. Sliding	J. R. Bodell	494,840	Apr. 4	510	127	63	98
Door. Sliding	L. Hendershot	494,142	Mar. 28	2347	572	62	1838
Door. Sliding	H. J. Lohman	500,016	June 20	2105	509	63	1786
Door. Sliding	J. S. McAnarney	492,502	Feb. 28	2309	572	62	1255
Door. Sliding	T. J. Vander Bent	499,766	June 20	1709	410	63	1716
Door-spring	J. Cartland	511,294	Dec. 19	2507	611	65	1903
Door-spring	G. W. Wright	491,156	Feb. 7	148	39	62	777
Door spring and check	H. W. Larsson and J. A. Brouillard	511,299	Dec. 19	2513	612	65	1904
Door spring and check	G. W. Wright	491,154	Feb. 7	144	38	62	777
Door spring and check. Combined	F. Rock	490,886	Jan. 31	3052	783	62	673
Door spring, check, and latch. Combined	C. Winckhofer	501,702	July 18	1865	464	64	370
Door-stop	J. E. Fehn	506,681	Oct. 17	1502	377	65	311
Door-stop	G. W. Taylor and J. E. McElroy	511,662	Dec. 26	3120	762	65	2028
Door support. Sliding	J. R. Payson, Jr.	506,013	Oct. 3	329	86	65	64
Doors. Adjustable track for sliding	E. Y. Moore	492,413	Feb. 28	2151	538	62	1224
Doors. Automatic device for opening or closing	J. H. Whitaker	496,027	Apr. 25	2396	606	63	491
Doors. Device for simultaneously moving double	B. J. H. de Vry	503,361	Aug. 15	1885	467	64	938
Doors. Time releasing device for gravity	W. L. Weller, Jr.	505,415	Sept. 19	1816	469	64	1638
Doors, windows, &c. Guard for	L. F. Ryan	498,574	May 30	3539	876	63	1314
Doorway-conformator	J. Ort	509,582	Nov. 28	294	652	65	1309
Double-lap pipe	C. S. Hamlin	496,118	Apr. 25	2538	640	63	518
Double turning shovel and colter	J. H. Cole	503,123	Aug. 15	1489	366	64	867
Doubling and shearing machine	G. Mesta	494,819	Apr. 4	476	119	63	92
Doubling and twisting machines. Yarn-guide for	A. E. Rhoades	494,490	Mar. 28	2792	700	62	1939
Douche. Nasal	B. Stern	507,567	Oct. 31	3029	743	65	620
Douche-pan	O. McPheters	499,643	June 13	1501	360	63	1667
Dough-dividing machine	H. Bertram	507,063	Oct. 17	2132	529	65	427
Dough-dividing machine	H. Boldt	511,499	Dec. 26	2861	692	65	1980
Dough-dividing machine	A. Rudloff	508,984	Nov. 21	1643	404	65	1097
Dough-dividing machine	H. Unzicker	498,500	May 30	3559	882	63	1318
Dough-machine	J. H. Mitchell	489,973	Jan. 17	1540	402	62	347
Dough-mixer	T. Gaskins	504,873	Sept. 12	929	239	64	1459
Dough-mixer	J. H. Watson	496,925	May 9	881	231	63	796
Dough-mixer	M. A. Wilcox	509,987	Dec. 5	246	57	65	1456
Dough-mixing apparatus	S. L. Hall	500,656	July 4	200	52	64	39
Dough-mixing machine	G. W. Greig	507,360	Oct. 24	2674	657	65	540
Dough-raiser	J. S. Brown	489,153	Jan. 3	260	72	62	61
Dough-raiser	E. H. MacIntosh	505,364	Sept. 19	1734	449	64	1622
Dough-raising appliance	A. A. Davis	495,024	Apr. 11	777	192	63	164
Dough-receptacles. Collapsible cover-supporting frame for	K. L. Brewster	499,510	June 13	1301	305	63	1632
Dovetails. Pattern for molding	E. Kuhn	492,728	Feb. 28	2655	658	62	1327
Doweling. Method of and machine for	H. Campbell	502,656	Aug. 1	685	165	64	692
Downdraft-furnace	J. O'Brien and C. K. Pickles	496,322	Apr. 25	2862	714	63	579
Draft and advertising-coupon. Combined demand-	G. H. Drew	493,619	Mar. 14	1363	346	62	1639
Draft attachment. Spring	H. Barber	493,469	Mar. 14	1099	282	62	1589
Draft device for stacks	B. F. Taylor	499,607	June 13	1444	346	63	1657
Draft device. Spring	F. J. Blanke	493,240	Mar. 14	733	188	62	1520
Draft device. Spring	J. E. Norwood	498,684	May 30	3734	922	63	1347

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Draft-equalizer.....	F. W. Baguhn.....	495,953	Apr. 25	2288	577	63	471
Draft-equalizer.....	D. F. Cole.....	506,844	Oct. 17	1779	448	65	363
Draft-equalizer.....	H. Dickey.....	499,522	June 13	1314	310	63	1634
Draft-equalizer.....	O. S. Ellithorp.....	507,113	Oct. 24	2225	549	65	458
Draft-equalizer.....	J. W. Gamble.....	505,398	Sept. 19	1787	463	64	1633
Draft-equalizer.....	T. H. Hendershot and E. H. Ackerman.	497,981	May 23	2575	644	63	1128
Draft-equalizer.....	H. M. and R. M. Hickok.....	501,141	July 11	974	{ 248 249 }	{ 64 64 }	{ 192 192 }
Draft-equalizer.....	S. A. Holt.....	510,971	Dec. 19	1974	485	65	1804
Draft-equalizer.....	H. A. Irons and H. P. Hill.....	492,294	Feb. 21	1956	488	62	1172
Draft-equalizer.....	G. Jones.....	500,808	July 4	438	115	64	81
Draft-equalizer.....	J. Jones.....	489,009	Jan. 3	49	14	62	13
Draft-equalizer.....	W. Lewis.....	492,939	Mar. 7	263	67	62	1411
Draft-equalizer.....	M. McDunn.....	507,632	Oct. 31	3154	772	65	644
Draft-equalizer.....	A. McKee.....	495,994	Apr. 25	2345	593	63	482
Draft-equalizer.....	A. Preston.....	496,443	May 2	88	25	63	635
Draft-equalizer.....	M. L. Ransom.....	507,559	Oct. 31	3008	738	65	617
Draft-equalizer.....	G. W. Raymond.....	496,955	May 9	920	241	63	804
Draft-equalizer.....	G. W. Raymond.....	508,120	Nov. 7	235	60	65	802
Draft-equalizer.....	J. H. Richford.....	510,710	Dec. 12	1476	365	65	1701
Draft-equalizer.....	P. V. Schandoney.....	490,214	Jan. 17	1954	512	62	429
Draft-equalizer.....	J. W. Steinmetz.....	508,778	Nov. 14	1277	317	65	1014
Draft-equalizer.....	I. T. Williams.....	493,323	Mar. 14	881	225	62	1545
Draft-evenner.....	H. H. Harnden.....	505,160	Sept. 19	1408	362	64	1561
Draft-evenner.....	W. F. Kehm.....	508,023	Nov. 7	65	19	65	770
Draft-evenner.....	L. A. McGilvra.....	489,753	Jan. 10	1185	310	62	261
Draft-evenner.....	L. W. Smith.....	492,995	Mar. 7	352	89	62	1428
Draft-hook.....	F. Giles.....	507,429	Oct. 24	2785	682	65	561
Draft-regulator.....	M. F. Campbell.....	495,473	Apr. 18	1538	386	63	322
Draft-regulator.....	P. W. Cornwell.....	491,082	Feb. 7	32	9	62	754
Draft-regulator.....	C. D. Howard.....	491,752	Feb. 14	1116	282	62	988
Draft-regulator. Automatic.....	H. L. Tyler.....	506,569	Oct. 10	1328	332	65	267
Draft-spring.....	H. Barber.....	510,669	Dec. 12	1413	348	65	1629
Draft-spring.....	N. H. Davis.....	503,408	Aug. 15	1943	483	64	950
Drafting device. Tailor's.....	A. L. Faestel.....	503,741	Aug. 22	2502	623	64	1067
Drafting-instrument.....	T. Tostevin.....	494,944	Apr. 4	651	166	63	125
Draftsman's tool.....	C. Ulrich.....	497,147	May 9	1214	310	63	855
Drain-pipe.....	A. W. Cram.....	492,191	Feb. 21	1800	449	62	1140
Drain-trap.....	T. J. Kieley.....	511,437	Dec. 26	2768	669	65	1963
Drainage-tube.....	C. B. Dolge.....	510,413	Dec. 12	944	227	65	1603
Drainer. Dish.....	C. S. Baird.....	499,951	June 20	2007	487	63	1768
Drainer. Floor.....	E. Coon.....	496,862	May 9	764	203	63	775
Drainer for draft apparatus.....	H. Strater. (Reissue).....	11,371	Oct. 3	682	172	65	129
Draining-board for bars.....	E. Neely.....	508,740	Nov. 14	1224	305	65	1004
Dramatic effects. Apparatus for producing illusory.....	W. H. Lytell.....	498,668	May 30	3702	914	63	1343
Dramatic effects. Apparatus for producing illusory.....	W. H. Lytell.....	498,669	May 30	3703	{ 914 915 }	{ 63 63 }	{ 1343 1343 }
Drapery fastening device.....	W. P. Miller.....	508,735	Nov. 14	1216	303	65	1003
Drapery hook and pin.....	F. S. McKenney.....	500,744	July 4	339	90	64	63
Draw-bar.....	G. D. Wadley.....	492,853	Mar. 7	123	31	62	1381
Draw-bar.....	G. D. Wadley.....	493,319	Mar. 14	875	223	62	1544
Draw-bar attachment.....	P. Brown.....	490,635	Jan. 31	2655	685	62	595
Draw-bar attachment.....	J. A. Hinson.....	500,331	June 27	2648	648	63	1293
Draw-bar attachment.....	W. J. Walker and A. L. Bedford.....	500,728	July 4	318	85	64	60
Draw-bar-spring pocket.....	C. T. Schoen.....	497,825	May 23	2318	581	63	1083
Draw-bars. Manufacture of.....	J. Green.....	491,480	Feb. 7	687	173	62	880
Drawer.....	J. P. Fox.....	497,235	May 9	1340	{ 341 342 }	{ 63 63 }	{ 879 879 }
Drawer-guide.....	D. M. Estey.....	511,601	Dec. 26	3028	738	65	2011
Drawer. Hardware.....	J. D. Warren.....	510,744	Dec. 12	1531	380	65	1712
Drawer. Paper-file.....	W. A. Borden.....	511,582	Dec. 26	2989	728	65	2005
Drawer-lock.....	L. C. Brown.....	505,799	Sept. 26	2502	{ 631 632 }	{ 64 64 }	{ 1780 1780 }
Drawer-pull.....	J. G. Hallas.....	508,878	Nov. 14	1436	356	65	1043
Drawer-slide and extension-support.....	V. R. Harvey.....	500,575	July 4	58	17	64	12
Drawers, &c. Device for partitioning.....	W. E. Richards.....	490,987	Jan. 31	3227	825	62	706
Drawers-stretcher.....	F. W. Gilroy.....	497,782	May 23	2258	566	63	1073
Drawing-board.....	A. H. Johnson.....	495,157	Apr. 11	1030	256	63	209
Drawing-board tilting device.....	L. P. Streeter.....	504,951	Sept. 12	1056	271	64	1483
Drawing-frame.....	J. E. Prest.....	507,079	Oct. 17	2157	534	65	432
Drawing-frame.....	C. S. Robinson.....	505,371	Sept. 19	1742	451	64	1623
Drawing-frame stop-motion.....	J. E. Prest.....	506,133	Oct. 3	527	136	65	102
Drawing-frame stop-motion device.....	A. Falls.....	434,558	Apr. 4	34	8	63	8
Drawing-frame stop-motion device.....	A. Falls.....	494,673	Apr. 4	227	57	63	46
Drawing-head evening mechanism.....	A. Falls.....	500,120	June 27	2289	556	63	1829
Drawing in perspective. Apparatus for.....	H. C. Gladding.....	497,317	May 16	1518	382	63	924
Drawing or plotting board.....	G. M. Graham.....	493,766	Mar. 21	1608	408	62	1703
Drawing or stamping press.....	E. Jordan.....	503,422	Aug. 15	1967	{ 488 489 }	{ 64 64 }	{ 953 953 }
Drawing-roll. Fluted or grooved.....	J. Dodd.....	494,271	Mar. 28	2450	618	62	1876
Drawing-rolls.....	F. H. Richards.....	505,887	Oct. 3	133	34	65	27
Drawing-roller. Fluted or grooved.....	J. Dodd.....	497,912	May 23	2467	616	63	1109
Drawing-table.....	F. H. Selden.....	511,466	Dec. 26	2812	680	65	1972
Drawing. Testing and correcting free-hand.....	A. K. Cross.....	491,160	Feb. 7	160	41	62	779
Drawings to stones, &c. Transferring.....	L. Benoit.....	493,812	Mar. 21	1629	.....	62	1718
Dredge.....	E. S. Bennett.....	493,226	Mar. 7	703	{ 180 181 }	{ 62 62 }	{ 1496 1496 }
Dredge and excavator.....	A. W. Robinson.....	508,122	Nov. 7	237	60, 61	65	802
Dredge-brace.....	F. J. Smith.....	498,824	June 6	128	32	63	1414
Dredge. Hydraulic.....	A. W. Robinson.....	504,750	Sept. 12	728	{ 181 182 }	{ 64 64 }	{ 1420 1420 }
Dredge-pump attachment.....	H. W. Yerrington.....	506,354	Oct. 10	965	240	65	195
Dredges and sand-pumps. Agitator for suction.....	W. T. Urie.....	491,748	Feb. 14	1112	281	62	987

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Dredger.....	L. W. Bates.....	503,732	Aug. 22	2481	617	64	1063
Dredger.....	L. W. Bates.....	503,733	Aug. 22	2483	617	64	1063
Dredger.....	L. W. Bates.....	503,734	Aug. 22	2485	618	64	1064
Dredger.....	J. Canan.....	505,974	Oct. 3	268	71	65	53
Dredger.....	W. T. Urie.....	510,736	Dec. 12	1517	375	65	1709
Dredger. Hydraulic.....	C. E. and F. Ellicott.....	503,655	Aug. 22	2358	589	64	1039
Dredger-mast.....	W. B. Pless.....	505,176	Sept. 19	1431	368	64	1566
Dredger or traveling crane.....	G. W. King.....	494,637	Apr. 4	173	42	63	35
Dredger or traveling crane.....	G. W. King.....	494,638	Apr. 4	174	42, 43	63	36
Dredger or traveling crane.....	G. W. King.....	494,639	Apr. 4	176	43, 44	63	36
Dredger. Steam vacuum.....	L. Hussey and E. D. Harsen.....	497,427	May 16	1687	426	63	955
Dredger suction-pipe.....	W. J. Dyer.....	510,591	Dec. 12	1273	309	65	1662
Dredging and pumping apparatus.....	J. A. Wade and J. Cherry.....	500,445	June 27	2819	694	63	1923
Dredging apparatus.....	W. E. Chilson.....	501,492	July 18	1524	363	64	308
Dredging apparatus.....	C. G. Collins.....	496,342	Apr. 25	2893	723	63	585
Dredging apparatus.....	C. G. Collins.....	496,343	Apr. 25	2895	724	63	585
Dredging apparatus.....	C. G. Collins.....	496,344	Apr. 25	2897	725	63	586
Dredging apparatus.....	C. G. Collins.....	501,870	July 18	2121	424	64	415
Dredging apparatus.....	W. M. Douglas.....	491,723	Feb. 14	1076	272	62	980
Dredging apparatus.....	J. E. Kauser.....	491,843	Feb. 14	1263	313	62	1017
Dredging apparatus.....	J. Price, Jr.....	500,818	July 4	452	118	64	83
Dredging apparatus.....	J. B. Quinn.....	496,699	May 2	486	119	63	707
Dredging-bucket.....	W. A. Collins.....	499,451	June 13	1199	130	63	1615
Dredging-machine.....	C. Gullmann.....	506,592	Oct. 10	1361	285	63	273
Dredging-machine.....	W. B. Pless.....	508,934	Aug. 8	1178	341	64	798
Dredging-machine.....	I. R. Taylor.....	497,735	May 16	2168	290	63	1041
Dredging-machine.....	W. T. Urie.....	498,143	May 23	2812	542	63	1170
Dredging-machine.....	J. E. Walsh.....	501,122	July 11	950	703	64	187
Dredging-machine. Centrifugal.....	J. L. Allison and R. G. Nash.....	494,094	Mar. 21	2149	704	62	1805
Dredging-machine. Hydraulic.....	J. M. Robbins.....	499,042	June 6	523	242	63	1482
Dredging-machine. Hydraulic.....	J. W. Sackett.....	508,766	Nov. 14	1258	123	65	1011
Dredging. Method of and apparatus for.....	W. M. Bailey.....	494,728	Apr. 4	317	314	63	63
Dredging-spuds. Device for locking and operating.....	F. H. and G. W. King.....	492,687	Feb. 28	2593	80, 81	62	1313
Drenching-bit.....	T. B. Swan.....	509,968	Dec. 5	200	641	65	1447
Dress-holder.....	G. Siebert.....	508,352	Nov. 7	606	47	65	870
Dress-protector.....	E. A. Lester.....	498,801	June 6	80	149	63	1403
Dress-shield.....	H. Moschowitz.....	500,928	July 4	614	200	64	112
Dress-shield.....	E. Pickhardt.....	495,512	Apr. 18	1594	160	63	333
Dress-shield fastening.....	E. F. Williams.....	494,613	Apr. 4	143	401	63	30
Dress-shields. Apparatus for manufacturing.....	S. S. Williamson.....	499,272	June 13	866	209	63	1555
Dress-shields. Apparatus for shaping.....	S. S. Williamson.....	499,271	June 13	864	210	63	1554
Dress-shields. Method of and device for forming.....	G. S. Squires.....	510,099	Dec. 5	432	207	65	1491
Dress-skirt.....	M. Aronson.....	494,404	Mar. 28	2669	96, 97	62	1916
Dress-stiffeners. Machine for making.....	I. D. Warner.....	500,636	July 4	160	669	64	32
Dress-waist fastening attachment.....	D. E. Wasson.....	492,701	Feb. 28	2614	42	62	1318
Dressing-machine. Centrifugal.....	J. Higginbottom.....	490,652	Jan. 31	2687	647	62	601
Drier:							
See Brewer's-grain drier. Garbage or rubbish drier.							
Centrifugal drier. Hay-drier.							
Clothes-drier. Laundry-drier.							
Fruit-drier. Preservative drier.							
Fruit or vegetable Sand or gravel drier.							
drier.							
Drier.....	A. Bornholdt.....	506,901	Oct. 17	1873	466	65	389
Drier.....	G. Boulet, Fils, and E. Donard.....	496,217	Apr. 25	2687	674	63	546
Drier.....	W. C. Byrne.....	491,075	Feb. 7	20	6	62	752
Drier.....	D. L. Humason.....	504,270	Aug. 29	3338	834	64	1243
Drier.....	T. and H. Smith.....	492,340	Feb. 21	2028	835	62	1187
Drier and boiler. Combined.....	E. Holthaus.....	504,269	Aug. 29	3336	504	64	1242
Drier and carbonizer.....	M. J. Spencer.....	490,171	Jan. 17	1876	505	62	415
Drier for cereals, &c.....	P. Borgarelli.....	504,320	Sept. 5	11	489	64	1273
Drill:							
See Breast-drill. Mining-drill.							
Coal-drill. Portable drill.							
Dental drill. Press-drill.							
Earth-drill. Radial drill.							
Electric drill. Ratchet-drill.							
Grain-drill. Rock-drill.							
Hand-drill. Rock or coal drill.							
Jumper-drill. Seed-drill.							
Metal-drill. Seeding-drill.							
Drill.....	C. Grotz.....	505,199	Sept. 19	1466	378	64	1572
Drill.....	H. Land.....	494,869	Apr. 4	554	140	63	108
Drill.....	A. G. Turner.....	499,312	June 13	932	227	63	1567
Drill-brace.....	H. A. L. Barry.....	504,147	Aug. 29	3131	783	64	1294

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Drill brace. Ratchet.	W. P. Nolan	506,931	Oct. 17	1928	477	65	390
Drill-hoe and cultivator-tooth. Combined	J. Muir	490,833	Jan. 31	2969	762	62	656
Drill-holder	W. G. Church	489,847	Jan. 10	1319	344	62	289
Drill-making machine.	R. L. Barclay	508,161	Nov. 7	299	74	65	813
Drill-press	H. H. Fuller	505,517	Sept. 26	2003	512	64	1686
Drill-press	A. J. F. Mill	503,153	Aug. 15	1536	377	64	876
Drill-press	W. Moore	510,648	Dec. 12	1377	337	65	1682
Drill-sharpening device	A. Campbell	491,766	Feb. 14	1144	287	62	993
Drill-shoes. Manufacture of	W. A. Van Brunt	499,061	June 6	554	130	63	1487
Drills. Die for pointing metal	F. H. Richards	494,226	Mar. 28	2381	601	62	1864
Drills. Tapping attachment for	A. Mill	489,317	Jan. 3	511	140	62	111
Drilling and turning. Bow for use in	I. Read	493,559	Feb. 28	2396	596	62	1275
Drilling devices. Floating support for	A. Fairchild	496,729	May 2	538	143	63	716
Drilling-machine.	A. Betts	493,471	Mar. 14	1102	282	62	1589
Drilling-machine.	T. Forstner	494,632	Apr. 4	167	40	63	34
Drilling-machine.	E. R. Lockwood	504,589	Sept. 5	470	120	64	1357
Drilling-machine.	L. J. Michaels and W. E. Green	510,039	Dec. 5	336	75	65	1472
Drilling-machine.	J. T. Snyder	489,044	Jan. 3	100	28	62	25
Drilling-machine.	J. T. Snyder	492,118	Feb. 21	1682	419	62	1114
Drilling-machine.	T. C. Sime	498,313	May 30	3114	776	63	1238
Drilling-machine.	D. C. Stover, F. W., E. A., and A. Hoefler.	506,865	Oct. 17	1806	453	65	367
Drilling-machine.	A. Vanderbeek and L. C. Worron.	504,289	Aug. 29	3364	841	64	1248
Drilling-machine.	L. E. Whiton	506,867	Oct. 17	1813	454	65	368
Drilling-machine.	S. A. Worcester and W. A. Morgan	492,567	Feb. 28	2405	599	62	1277
Drilling-machine.	R. F. Wyatt	510,148	Dec. 5	516	119	65	1507
Drilling-machine attachment.	J. J. Stevens	503,012	Aug. 8	1304	319	64	820
Drilling-machine. Electric rotary	R. M. Jones	495,738	Apr. 18	1960	494	63	395
Drilling-machine. Multiple	D. E. and L. E. Whiton	500,646	July 4	175	45	64	35
Drilling-machine. Portable	C. H. Peck	507,752	Oct. 31	3331	816	65	677
Drilling-machines. Electric motor for rotary	R. M. Jones	502,098	July 25	2496	627	64	499
Drilling machinery	M. Beal	510,860	Dec. 19	1813	448	65	1774
Drilling purposes, &c. Self-feeding ratchet-brace for hand.	W. H. Heeson	493,717	Mar. 21	1516	387	62	1685
Drilling-tool	H. A. Rogers and J. M. Runyan	492,053	Feb. 21	1583	394	62	1095
Drink-mixer	W. F. Adancourt	505,692	Sept. 26	2335	592	64	1748
Drink-mixer	E. J. Leyburn	489,821	Jan. 10	1280	335	62	281
Drink-mixer	F. W. McKinley	489,028	Jan. 3	72	20	62	18
Drinking-cup and advertising medium. Ephemeral.	A. L. Peirce	496,131	Apr. 25	2557	644	63	521
Drinking-places. Cup holding and lifting attachment for public	A. L. Peirce	494,346	Mar. 28	2570	647	62	1899
Drip-trough	J. A. Knisley	504,420	Sept. 5	180	47	64	1304
Driving-bit	F. Swales	497,931	May 23	2493	622	63	1114
Driving mechanism	J. W. Kenevel	498,936	June 6	329	77	63	1450
Driving mechanism	J. V. Motter	491,221	Feb. 7	260	64	62	797
Driving mechanism. Reversing	H. C. Baker	504,651	Sept. 5	538	138	64	1372
Driving mechanism. Safety	E. W. Ross	504,479	Sept. 5	273	71	64	1321
Driving wheel	G. D. Munasing	500,669	July 4	227	59	64	43
Driving wheel adjustment	S. H. Percy	501,625	July 18	1739	433	64	348
Drug-mixer	H. W. Barker	497,045	May 9	1052	269	63	826
Druggist's cabinet	J. W. Almack and C. D. Ferguson	506,147	Oct. 3	551	143	65	107
Drum	M. E. Converse	511,126	Dec. 19	2222	544	65	1851
Drum	S. E. Cox	504,910	Sept. 12	991	255	64	1472
Drum-case	E. Boulanger	501,318	July 11	1242	313	64	240
Drum. Heating.	C. J. Linberg	494,963	Apr. 4	681	175	63	130
Drum. Heating.	R. Pugh	502,999	Aug. 8	1285	314	64	816
Drum. Heating.	G. Q. Slocum	506,379	Oct. 10	1016	253	65	206
Drum. Heating.	F. A. Smith	501,901	July 18	2184	542	64	425
Drums or pulleys. Means for supporting	B. W. Grist	495,884	Apr. 18	2188	549	63	437
Drums or pulleys. Means for supporting	B. W. Grist	495,885	Apr. 18	2190	550	63	437
Dry battery	H. Koller	496,228	Apr. 25	2702	677	63	548
Dry closet	S. L. Bailey	507,202	Oct. 24	2403	592	65	488
Dry closet	H. H. Jensen	509,910	Dec. 5	110	25	65	1430
Dry closet or commode	H. A. Jukes. (Reissue)	11,373	Oct. 10	1452	365	65	291
Dry-closet system	F. G. Ward	493,320	Mar. 14	876	223	62	1544
Dry-goods board	G. Tetreau	511,175	Dec. 19	2308	565	65	1867
Dry-kiln. Natural-draft.	E. F. Rogers	497,687	May 16	2100	524	63	1028
Drying apparatus	D. W. Anderson	511,184	Dec. 19	2318	568	65	1869
Drying apparatus	F. S. Blair	508,363	Nov. 7	626	153	65	874
Drying apparatus	F. X. Hooper	499,460	June 13	1211	229	63	1617
Drying apparatus	E. F. Mead	505,116	Sept. 19	1338	345	64	1550
Drying brewers' grains, &c. Apparatus for	W. H. Butler	496,852	May 9	737	196	63	770
Drying brewers' grains. Apparatus for	C. H. Koyl	497,280	May 9	1427	363	63	892
Drying-frame. Roof	L. Oppenheimer	498,080	May 23	2722	681	63	1154
Drying-furnace for brewers' grains, &c	H. Adams and H. Eisert	507,085	Oct. 17	2165	536	65	433
Drying in vacuum. Apparatus for	E. Donard	491,338	Feb. 7	461	119	62	836
Drying-kiln	L. Pine	489,717	Jan. 10	1123	290	62	248
Drying-machine	J. J. de Kinder and A. S. Vogt	506,915	Oct. 17	1894	472	65	384
Drying-machine	J. J. de Kinder and A. S. Vogt	506,916	Oct. 17	1896	472	65	384
Drying-machine	J. J. de Kinder and A. S. Vogt	506,917	Oct. 17	1897	472	65	384
Drying-machine	J. K. Proctor	502,237	July 25	2730	688	64	544
Drying-machine	J. K. Proctor	504,747	Sept. 12	722	180	64	1419
Drying-roll driving-gear	W. C. Mackinney	503,380	Aug. 15	1912	474	64	944
Drying substances. Apparatus for	H. E. Miller	508,112	Nov. 7	220	57	65	799

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Dumb-bell, club, and exercising device. Combined.	L. W. Wooster	506,894	Oct. 17	1865	464	65	378
Dumb-waiter	J. J. Kelly	495,114	Apr. 11	946	238	63	195
Dumb-waiter	J. T. Westwood	490,462	Jan. 24	2356	610	62	520
Dumping apparatus. Automatic	J. R. Wilson	508,158	Nov. 7	293	73	65	812
Dumping-platform scotching device.	J. S. Kidd	511,021	Dec. 19	2051	507	65	1817
Duplicating apparatus	F. F. Daus	493,757	Mar. 21	1596	406	62	1701
Duplicating-machine	R. Morgeneier	509,931	Dec. 5	136	32.33	65	1435
Duplicating-machine. Automatic	R. Morgeneier	501,091	July 11	882	227 228 229	64	176
Dust-collector	L. S. Fletcher	505,977	Oct. 3	272	72	65	53
Dust-collector	A. P. Gould	502,883	Aug. 8	1079	266	64	780
Dust-collector	W. H. Hankinson	507,319	Oct. 24	2607	641	65	527
Dust-collector	E. W. Hoover	493,504	Mar. 14	1158	296	62	1598
Dust-collector	T. and G. M. Parkinson	499,799	June 20	1761	426	63	1725
Dust-collector	L. V. Rathbun	496,897	May 9	831	220 221	63	787
Dust-collector	H. Seck	493,565	Mar. 14	1269	325	62	1620
Dust-collector	H. W. Stone, Jr.	496,015	Apr. 25	2376	601	63	488
Dust collector and separator	M. F. Gale	502,071	July 25	2453	616	64	491
Dust-guard and ventilator. Transparent.	T. S. Hayward and F. S. Anderson	496,199	Apr. 25	2653	666 667	63	540
Dust-pan	D. K. Barnhart	492,455	Feb. 23	2216	554	62	1237
Dust-pan	W. N. Bates	497,401	May 16	1645	416	63	947
Dust-pan	P. Hill	490,200	Jan. 17	1925	500	62	424
Dust-pan	A. L. Hollander	490,875	Jan. 31	3029	779	62	669
Dust-pan	A. L. Hollander	504,474	Sept. 5	266	69	64	1320
Dust-pan	A. L. Hollander	504,879	Sept. 12	938	242	64	1461
Dust-pan	W. S. McCay	502,235	July 25	2723	687	64	543
Dust-pan	M. E. Minor	492,373	Feb. 21	2079	520	62	1197
Dust-pan	G. B. Sarchet	509,689	Nov. 28	2858	690	65	1340
Dust-pan foothold	O. M. Barber	510,762	Dec. 12	1567	391	65	1718
Dust-pans. Folding handle for	E. L. Hiatt	502,296	Aug. 1	65	15	64	578
Dust-separating machine	W. W. Green	508,611	Nov. 14	1035	255	65	966
Dust-separator	T. Lee	498,557	May 30	3518	870	63	1310
Dust. Treating flue	M. W. Iles	500,580	July 4	66	19	64	13
Dusting apparatus	L. F. Neal	500,415	June 27	2774	683	63	1915
Dye. Alizarin	R. E. Schmidt and P. Tust	496,139	Apr. 25	2566	63	523	
Dye. Black	L. Gans and M. Hoffmann	501,500	July 18	1538	64	311	
Dye. Black azo	R. Lauch and C. Krekeler	502,368	Aug. 1	199	64	602	
Dye. Black azo	A. F. Poirrier and D. A. Rosenstiehl	502,912	Aug. 8	1133	64	790	
Dye. Blackish-blue azo	J. Schmid	493,563	Mar. 14	1268	62	1620	
Dye. Blue	F. Bender	494,838	Apr. 4	507	63	98	
Dye. Blue	J. Brack	497,114	May 9	1160	63	846	
Dye. Blue	R. Kothe, M. Ulrich, and O. Dressel	511,532	Dec. 26	2907	65	1991	
Dye. Blue	E. Meyer	499,243	June 13	825	63	1548	
Dye. Blue	O. Nastvogel	496,435	May 2	75	63	632	
Dye. Blue	G. Schultz	511,653	Dec. 26	3106	65	2025	
Dye. Blue alizarin	R. E. Schmidt	502,765	Aug. 8	888	64	744	
Dye. Blue azo	M. Moeller	509,929	Dec. 5	133	65	1435	
Dye. Blue-black azo	T. Diehl	491,410	Feb. 7	577	62	853	
Dye. Blue-black azo	T. Diehl and M. Moeller	511,688	Dec. 26	3164	65	2036	
Dye. Blue-black tetrazo	M. Ulrich and R. Lauch	501,118	July 11	944	64	186	
Dye. Blue substantive	J. Bammann and M. Ulrich	498,759	June 6	9	63	1390	
Dye. Blue tetrazo	J. Bammann and M. Ulrich	498,873	June 6	224	63	1432	
Dye. Blue tetrazo	J. Bammann and M. Ulrich	498,874	June 6	226	63	1432	
Dye. Blue tetrazo	J. Bammann and M. Ulrich	499,198	June 13	764	63	1538	
Dye. Blue tetrazo	C. Duisberg	499,216	June 13	789	63	1542	
Dye. Brown	R. Gnehm and J. Schmid	491,422	Feb. 7	591	62	861	
Dye. Brown	R. Lauch	509,623	Nov. 28	2757	65	1321	
Dye. Brown	M. Ulrich and J. Bammann	509,635	Nov. 28	2773	65	1324	
Dye. Diazo	P. Ott	498,405	May 30	3257	63	1264	
Dye from alpha oxyvitic acid	B. R. Seifert	493,413	Mar. 14	1003	62	1572	
Dye. Glycine	E. von Porthelm	498,303	May 30	3099	63	1235	
Dye. Gray-black tetrazo	J. Schmid	493,564	Mar. 14	1269	62	1620	
Dye. Green-blue alizarin	R. Bohn	502,603	Aug. 1	598	64	675	
Dye. Greenish-blue	P. Ott	498,404	May 30	3256	63	1264	
Dye. Indigo-blue	A. Herrmann	490,408	Jan. 24	2273	62	506	
Dye. Orange	F. Bender	503,305	Aug. 15	1784	64	921	
Dye. Orange azo	C. Rudolph	497,032	May 9	1036	63	823	
Dye. Pink	H. Boedeker	493,241	Mar. 14	735	62	1521	
Dye. Red	R. Gnehm and J. Schmid	493,583	Mar. 14	1301	62	1628	
Dye. Red	C. Krekeler and P. Kraus	498,982	June 6	412	63	1464	
Dye. Red azo	A. G. Green and T. A. Lawson	500,761	July 4	368	64	68	
Dye. Red azo	A. G. Green and T. A. Lawson	500,762	July 4	370	64	69	
Dye. Reddish-blue azo	R. Lauch and C. Krekeler	502,369	Aug. 1	200	64	602	
Dye. Substantive brown	R. Lauch	503,148	Aug. 15	1527	64	874	
Dye. Tetrazo	J. Bammann and M. Ulrich	496,392	May 2	8	63	620	
Dye. Triphenylmethane	H. Hassencamp	498,471	May 30	3366	63	1284	
Dye. Triphenylmethane	F. Runkel	501,104	July 11	919	64	182	
Dye-vat spool	E. Maertens	497,053	May 9	1062	272	63	828
Dye. Violet	H. Hassencamp	501,069	July 11	841	64	169	
Dye. Violet azo	C. Müller	501,434	July 11	1439	64	277	
Dye. Violet blue induline	M. Ulrich. (Reissue)	11,308	Feb. 21	2093	62	1199	
Dye. Violet-red	J. Schmid and J. Mohler	491,378	Feb. 7	531	62	849	
Dye. Yellow-red	I. Lifschütz	500,917	July 4	598	64	110	
Dyeing and printing	F. Bender and M. Kämmerer	489,623	Jan. 10	988	62	221	
Dyeing aniline black	V. G. Bloede	499,649	June 13	1509	63	1668	
Dyeing apparatus	O. P. Amend	499,410	June 13	1124	63	1601	
Dyeing apparatus	S. C. Ayers	504,291	Aug. 29	3371	843	64	1249
Dyeing apparatus	J. G. Haslam	505,984	Oct. 3	286	74.75	65	56
Dyeing apparatus	A. Hinze	489,955	Jan. 17	1514	296	62	342
Dyeing apparatus	L. Weldon	501,856	July 18	2104	520	64	412

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Dyeing apparatus.	L. Weldon	508,261	Nov. 7	468	{ 113 114 }	65	844
Dyeing, &c. Apparatus for	A. and J. Graemiger	509,431	Nov. 28	2439	{ 587 588 }	65	1261
Dyeing, &c. Apparatus for	H. Schwabe	504,758	Sept. 12	740	184	64	1423
Dyeing, &c. Apparatus for	G. Young and W. Crippin	496,082	Apr. 25	2482	627	63	507
Dyeing apparatus. Yarn-	W. Laidlaw	501,517	July 18	1568	394	64	316
Dyeing black	V. G. Bloede	506,663	Oct. 17	1472	.....	65	306
Dyeing black	C. F. X. Noroy	493,286	Mar. 14	813	.....	62	1534
Dyeing black	W. Pfitzinger	501,160	July 11	1010	.....	64	198
Dyeing-frame	E. Keuser	499,170	June 6	720	721	63	1515
Dyeing-machine.	T. A. Clough and T. J. Bigger	491,336	Feb. 7	459	{ 118 119 }	62	835
Dyeing-machine.	J. H. Lorimer	505,471	Sept. 26	1906	491	64	1669
Dyeing-machine. Centrifugal	L. Weldon	505,497	Sept. 26	1943	501	64	1676
Dynamite.	A. Kranz	506,784	Oct. 17	1680	.....	65	344
Dynamo. Alternating-current	J. J. Wood	489,065	Jan. 3	127	34, 25	62	32
Dynamo or electric-motor brush.	F. H. Sandherr	504,177	Aug. 29	3184	796	64	1214
Dynamo or motor	R. C. Kintzing. (Reissue)	11,354	July 25	2785	703	64	554
Dynamo-regulator	W. H. Elkins	505,914	Oct. 3	178	45	65	35
Dynamo-regulator	W. H. Elkins	506,482	Oct. 10	1203	299	65	242
Dynamos and electric motors. Brush-holder for	R. Ashley	488,978	Jan. 3	5	2	62	4
Dynamos. Method of and apparatus for regulating alternating-current	H. Lemp	504,497	Sept. 5	311	78, 79	64	1328
Dynamos or motors. Friction-coupling for	E. Thomson	496,710	May 2	503	134	63	711
Dynamometer	H. C. Behr	498,857	June 6	152	37	63	1419
Dynamometer	H. C. Stone	504,286	Aug. 29	3359	840	64	1247
Dynamometer	J. A. Wade and J. Cherry	496,962	May 9	929	241	63	805
Dynamometer	J. A. Wade and J. Cherry	496,963	May 9	931	{ 244 245 }	63	806
Dynamometer	J. B. Webb	490,381	Jan. 24	2238	583	62	499
Dynamometer	E. J. Wood	495,175	Apr. 11	1059	263	63	214
Ear and bail for cooking-vessels	G. W. Bowers	506,302	Oct. 10	871	215	65	178
Ear. Apparatus for electrically treating the	W. A. Price	490,679	Jan. 31	2735	704	62	609
Earmark	J. A. Rogers	492,838	Mar. 7	99	24	62	1377
Ear-muff	I. B. Kleinert	503,703	Aug. 22	2435	606	64	1054
Ear-phone attachment.	C. W. Farr	501,600	July 18	1696	421	64	341
Earpiece	R. Seiffert	500,957	July 4	659	175	64	130
Ear-ring	J. Wodiska	502,801	Aug. 8	951	232	64	756
Earth boring and drilling machine	W. E. Everitt	502,958	Aug. 8	1219	300	64	804
Earth-carrier	J. J. Wishard	508,589	Nov. 14	1005	247	65	961
Earth-closet.	K. I. Passover	499,033	June 6	508	119	63	1479
Earth-drill	H. G. Smith	508,187	Nov. 7	336	83	65	820
Earth-mover	C. A. Bridgewater	490,243	Jan. 17	2002	524	62	459
Earthenware. Liquid material for the manufacture of fine	J. Klieber	500,585	July 4	73	.....	64	15
Easel	C. M. Carter	511,585	Dec. 26	2993	729	65	2006
Easel	A. K. Cross	511,324	Dec. 26	2554	623	65	1925
Easel	C. E. Fountain	510,250	Dec. 5	684	{ 163 164 }	65	1540
Easel	M. Schmirk	498,578	May 30	3544	878	63	1315
Easel-bracket.	J. Kroder	494,758	Apr. 4	366	92	63	72
Eaves-trough	L. S. Bonbrake	503,940	Aug. 29	2786	698	64	1140
Eaves-trough	L. M. Bowers and L. A. Galpin	506,766	Oct. 17	1651	414	65	339
Eaves-trough	F. M. Bowers and J. L. Dickelman	508,366	Nov. 7	632	155	65	875
Eaves-trough	W. S. Harris	493,497	Mar. 14	1147	293	62	1597
Eaves-trough	J. Wock	502,800	Aug. 8	950	231	64	756
Eaves-trough and support.	M. M. Blacker	503,119	Aug. 15	1482	364	64	866
Eaves-trough attachment	G. L. Fisk	493,697	Mar. 21	1487	381	62	1680
Eaves-trough cleaner	N. P. McKenney	510,515	Dec. 12	1111	268	65	1634
Eaves-trough coupling	J. M. Davidson	497,466	May 16	1750	441	63	965
Eaves-trough hanger	W. Baynes	511,035	Dec. 19	2069	512	65	1821
Eaves-trough hanger	L. S. Bonbrake	489,600	Jan. 10	962	250	62	215
Eaves-trough hanger	J. L. Faulhaber	506,874	Oct. 17	1823	456	65	370
Eaves-trough hanger	W. H. Mundwiler	505,717	Sept. 26	2373	599	64	1755
Eaves-trough protector	N. J. Planthaber	490,414	Jan. 24	2284	593	62	507
Eccentric	J. Clayton	510,118	Dec. 5	465	105	65	1497
Ecraseur	H. Haussmann and S. B. Dunn	511,202	Dec. 19	2347	574	65	1874
Edge-trimmer	H. C. Rice	508,183	Nov. 7	328	81, 82	65	819
Edger. Gang-	B. McIntire and C. J. Koefoed	504,231	Aug. 29	3275	818	64	1231
Edgers. Gravity-dog for gang-	J. Tarrant	491,201	Feb. 7	230	58	62	791
Edging for fabrics and forming same	J. M. Merrow	507,235	Oct. 24	2457	606	65	498
Edging or border	J. M. Merrow	507,236	Oct. 24	2459	606	65	499
Edging machine. Double-	C. B. Wessell	511,312	Dec. 19	2532	616	65	1907
Educational apparatus	C. M. Stone	511,470	Dec. 26	2816	681	65	1973
Educational appliance	C. C. Bristol	496,993	May 9	978	253	63	813
Educational appliance	J. L. Collins	501,675	July 18	1823	454	64	362
Educational appliance	A. Macfarlane	505,667	Sept. 26	2281	579	64	1740
Educational appliance	J. E. von Tassel	500,824	July 4	463	122	64	85
Educational cabinet.	C. L. Ellis	498,636	May 30	3648	903	63	1333
Egg-beater	A. C. Albrecht	495,925	Apr. 18	2245	{ 565 566 }	63	448
Egg-beater	J. D. Marvey	506,636	Oct. 10	1422	356	65	285
Egg-beater	G. W. Huber	505,766	Sept. 26	2453	617	64	1770
Egg-beater	H. F. Juergens	499,741	June 20	1661	399	63	1708
Egg-beater	B. D. McDowell	511,637	Dec. 26	3085	753	65	2021
Egg-beater	J. M. O'Neill	491,583	Feb. 14	853	216	62	934
Egg-beater	F. E. Paine	504,112	Aug. 29	3079	770	64	1195
Egg-carrier filler	E. S. Sheperd	489,664	Jan. 10	1041	271	62	232
Egg-case	F. F. Bischoff	489,118	Jan. 3	211	56	62	49
Egg-case	J. H. Bowley	509,838	Nov. 28	3103	750	65	1386
Egg-case	J. G. Reber and J. L. Sefton	500,296	June 27	2583	{ 631 632 }	63	1881
Egg-case. Rotatable	J. H. Bowley	496,184	Apr. 25	2628	662	63	535

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Egg-case tray or filler.....	F. M. Wade.....	497,225	May 9	1326	337	63	876
Egg-containing cases. Apparatus for rotating.....	J. H. Bowley.....	508,806	Nov. 14	1318	328	65	1022
Egg-cup.....	E. W. Orth.....	510,085	Dec. 5	414	92	65	1488
Egg cup and cooker.....	W. R. Hill.....	499,426	June 13	1154	277	63	1606
Egg-cutter.....	E. Berrini.....	490,133	Jan. 17	1821	475	62	405
Egg-cutter.....	C. Michel.....	503,431	Aug. 15	1980	491	64	955
Egg-holder.....	A. A. Anderson.....	499,080	June 6	580	139	63	1492
Egg-holder.....	A. A. Anderson.....	499,081	June 6	581	139	63	1492
Egg-holder.....	F. N. Jewett.....	508,021	Nov. 7	64	18	65	769
Egg or fruit carrier. Knockdown.....	T. S. Fitch.....	503,313	Aug. 15	1805	448	64	923
Egg-poacher.....	C. T. Gott.....	495,796	Apr. 18	2048	518	63	411
Egg-separator.....	J. M. Lucas.....	492,892	Mar. 7	188	46	62	1396
Egg shipping case.....	J. H. Bowley.....	499,708	June 20	1599	366	63	1698
Egg testing and handling device.....	W. N. B. Alderson.....	505,429	Sept. 26	1847	475	64	1657
Eggs. Extracting the contents of.....	M. J. Power.....	493,488	May 30	3388	843	63	1285
Eggs. Preserving.....	C. E. McClure.....	504,535	Sept. 5	372	94	64	1339
Ejector.....	W. B. Hollingshead.....	510,389	Dec. 5	908	217	65	1583
Ejector.....	W. H. Hooker.....	511,079	Dec. 19	2142	528	65	1835
Elastic woven fabric.....	W. Stokes and R. Hudson.....	495,762	Apr. 18	1994	504	63	401
Election-booth.....	O. H. Hasselman.....	494,808	Apr. 4	457	113	63	88
Electric accumulator.....	P. J. R. Dujardin.....	497,869	May 23	2400		63	1098
Electric alarm.....	H. F. Kolbe.....	496,690	May 2	475	127	63	706
Electric-arc disrupter.....	W. B. Potter.....	508,632	Nov. 14	1069	265	65	974
Electric-arc light.....	R. M. Hunter.....	495,461	Apr. 11	1507	378	63	296
Electric-arc-lighting system.....	D. Higham.....	510,260	Dec. 5	705	170	65	1543
Electric-arc-lighting system.....	T. Spencer.....	504,632	Sept. 5	511	133	64	1367
Electric battery.....	F. M. Archer.....	495,176	Apr. 11	1060	264	63	214
Electric battery.....	F. M. Archer.....	495,177	Apr. 11	1061	264	63	214
Electric battery.....	C. H. Bryan.....	489,668	Jan. 10	1045	272	62	233
Electric battery.....	J. H. Davis.....	489,938	Jan. 17	1488	389	62	337
Electric battery.....	L. F. Johnson.....	510,604	Dec. 12	1298	316	65	1668
Electric battery.....	H. W. Libbey.....	504,130	Aug. 29	3104	777	64	1199
Electric battery.....	J. H. Mason.....	501,151	July 11	992	252	64	195
Electric-battery cell.....	E. J. Wheelock.....	506,353	Oct. 10	963	240	65	195
Electric battery. Primary.....	E. Poppowitsch.....	511,159	Dec. 19	2276	557	65	1861
Electric body-battery.....	H. C. Wagner.....	501,550	July 18	1623	406	64	328
Electric body-wear.....	W. H. Payne.....	502,753	Aug. 8	865	211	64	740
Electric brake.....	E. B. Skinner.....	508,851	Nov. 14	1391	346	65	1035
Electric bunch-light.....	J. Dillon.....	496,474	May 2	131	36	63	642
Electric cable.....	H. W. Fisher.....	508,295	Nov. 7	515	125	65	853
Electric cable.....	T. Guillaume.....	502,358	Aug. 1	123	43	64	600
Electric cable.....	M. G. Kellogg.....	503,604	Aug. 22	2283	569	64	1026
Electric-cable junction-box.....	S. B. Fowler.....	506,683	Oct. 17	1504	377	65	312
Electric-call system.....	S. and E. W. Whitehall.....	510,457	Dec. 12	1023	244	65	1618
Electric-circuit breaker.....	E. M. Bentley.....	490,762	Jan. 31	2861	734	62	633
Electric-circuit breaker.....	E. Thomson.....	490,178	Jan. 17	1885	491	62	417
Electric-circuit-closing device.....	W. Sears.....	501,258	July 11	1155	292	64	224
Electric-circuit connection for signaling or telephone boxes.....	J. E. Smith.....	501,631	July 18	1747	435	64	350
Electric-circuit ground-detector.....	E. Weston.....	494,830	Apr. 4	491	123	63	95
Electric-circuit indicating apparatus.....	E. Thomson.....	508,662	Nov. 14	1114	275	65	983
Electric-circuit safety device.....	C. H. Rudd.....	511,461	Dec. 26	2802	678	65	1970
Electric-circuit switch.....	W. McNeill and J. H. Tinder.....	503,157	Aug. 15	1544	379	64	877
Electric-circuit switchboard.....	A. L. Rohrer.....	496,901	May 9	838	223	63	788
Electric-circuit testing and switching device.....	M. Robinson.....	507,691	Oct. 31	3243	794	65	660
Electric circuits. Means for closing.....	H. L. Tyler.....	494,765	Apr. 4	373	94	63	74
Electric circuits. Stand for controlling.....	E. R. Knowles.....	508,626	Nov. 14	1056	261	65	971
Electric circuits. Switch-box for controlling.....	E. R. Knowles and E. H. Park.....	508,625	Nov. 14	1052	260	65	971
Electric-coil spool.....	G. W. Demmick.....	495,026	Apr. 11	779	198	63	165
Electric conductor.....	J. W. Marsh.....	504,397	Sept. 5	136	36	64	1296
Electric conductor.....	J. W. Marsh.....	504,398	Sept. 5	137	36	64	1296
Electric-conductor clamp.....	A. H. Englund.....	498,776	June 6	41	9	63	1395
Electric-conductor switch.....	O. Offrell.....	501,191	July 11	1050	266	64	206
Electric-conductor tension device.....	J. C. Love.....	511,345	Dec. 26	2596	632	65	1932
Electric conductor. Underground.....	J. C. Henry.....	508,613	Nov. 14	1037	256	65	967
Electric conductors. Automatic safety-joint for.....	J. H. Curry.....	505,032	Sept. 12	1196	307	64	1510
Electric conductors. Covering.....	W. A. Conner.....	508,370	Nov. 7	636	156	65	876
Electric conduit.....	E. L. Ransome.....	490,630	Jan. 24	2649	682	62	579
Electric-conduit coupling.....	A. Noll.....	509,603	Nov. 28	2730	659	65	1316
Electric-conduit sections. Manufacturing.....	J. F. Cummings.....	497,535	May 16	1865	470	63	986
Electric connector and cut-out.....	C. H. Crockett and C. C. Allen.....	493,754	Mar. 21	1590	404	62	1700
Electric contact apparatus.....	J. P. B. Fiske.....	501,206	July 11	1073	273	64	211
Electric controller. Series multiple.....	A. P. Knight.....	507,547	Oct. 31	2986	733	65	612
Electric controlling device.....	T. W. Shepherd.....	493,602	Mar. 14	1339	341	62	1635
Electric conversion. System of.....	E. W. Rice, Jr.....	495,229	Apr. 11	1140	285	63	229
Electric converter.....	G. and A. Pfannkuche.....	499,852	June 20	1853	451	63	1742
Electric converter.....	W. Stanley, Jr.....	496,212	Apr. 25	2680	672	63	544
Electric-current generator. Alternating.....	S. Sheldon and J. J. Rooney.....	502,777	Aug. 8	910	222	64	748
Electric-current meter.....	W. T. M. Mottram.....	509,756	Nov. 28	2955	715	65	1357
Electric-current-meter detector.....	E. Thomson.....	508,660	Nov. 14	1112	274	65	982
Electric-current regulator.....	J. H. Clark.....	509,363	Nov. 28	2293	556	65	1232
Electric-current transformer.....	W. H. Hornberger.....	510,640	Dec. 12	1358	332	65	1679
Electric currents. Distribution of alternating.....	W. von Siemens.....	502,682	Aug. 1	744	179	64	703
Electric currents. Meter for alternating, pulsating, or intermittent.....	T. Duncan.....	501,000	July 4	732	192	64	133
Electric currents. System for transmitting.....	E. Baines.....	493,673	Mar. 21	1451	370	62	1672
Electric distribution.....	E. W. Rice, Jr.....	508,838	Nov. 14	1371	339	65	1031

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric distribution. Safety appliance for systems of	E. Thomson	497,838	May 23	2336	585 586	63	1086
Electric-distribution system	W. S. Moody	508,898	Nov. 14	1463	362	65	1048
Electric-distribution system	E. W. Rice, Jr.	508,839	Nov. 14	1372	339	65	1031
Electric distribution. System of	E. M. Bentley	502,272	Aug. 1	12	3	64	568
Electric distribution. System of	E. W. Rice, Jr.	510,487	Dec. 12	1066	256 257	65	1627
Electric distribution. System of	E. Thomson	496,020	Apr. 25	2383	603	63	489
Electric drill. Reciprocating	W. A. G. Birkin	494,053	Mar. 21	2079	531	62	1792
Electric drop-light hanger. Balanced	T. E. Stevens	492,847	Mar. 7	114	29	62	1380
Electric dry cell	R. Gabarro	503,415	Aug. 15	1955	465	64	952
Electric elevator	A. T. Chase	508,680	Nov. 14	1138	280	65	988
Electric elevator	E. R. Esmond	506,169	Oct. 3	603	153 154	65	117
Electric elevator	F. E. Herdman	492,160	Feb. 21	1755	437 438	62	1130
Electric elevator	F. B. Perkins	509,821	Nov. 28	3075	743	65	1381
Electric elevator	F. A. Perret	510,932	Dec. 19	1904	466	65	1791
Electric elevator	C. R. Pratt	509,397	Nov. 28	2364	573 574	65	1244
Electric engine	W. Lawrence	503,487	Aug. 15	2071	516 517	64	972
Electric fixtures. Junction-block for	F. A. Duggan	498,539	May 30	3486	862	63	1305
Electric generator	W. S. Hill	508,820	Nov. 14	1439	357	65	1044
Electric generator and motor	W. Stanley, Jr. and J. F. Kelly	500,301	June 27	2594	635	63	1883
Electric generator. Magneto	J. N. McLeod	495,139	Apr. 11	995	249	63	203
Electric generator or motor	C. E. Dressler	498,538	May 30	3484	862	63	1305
Electric generator or motor	W. T. Gooden and L. B. Atkinson	494,856	Apr. 4	533	134	63	103
Electric-generator regulator	E. Thomson	502,788	Aug. 8	931	226 227	64	752
Electric generator. Self-exciting alternate-current	P. Diehl	503,581	Aug. 22	2229	559	64	1017
Electric generators. Regulating self-exciting alternate-current	W. Stanley, Jr.	508,493	Nov. 14	843	209	65	930
Electric heater	S. M. Cook	497,771	May 23	2246	563	63	1071
Electric heater	C. L. Coombs	507,217	Oct. 24	2433	600	65	494
Electric heater	S. B. Jenkins	497,795	May 23	2272	571	63	1075
Electric heater	J. F. McLaughlin	490,082	Jan. 17	1730	451	62	365
Electric heater	T. E. Morford	490,034	Jan. 17	1658	430	62	370
Electric heater	C. E. Roehl, S. Z. Mitchell, and E. P. Wetmore	500,272	June 27	2545	622	63	1875
Electric heater	W. Snee	507,941	Oct. 31	3647	902	65	735
Electric heater	E. P. Wetmore	500,520	June 27	2937	721	63	1945
Electric heater for flat-irons, &c.	S. B. Jenkins	497,794	May 23	2271	570	63	1075
Electric heaters. Manufacturing	H. G. O'Neill	498,078	May 23	2717	679	63	1153
Electric induction apparatus. Magneto	C. J. Reed	510,613	Dec. 12	1315	321	65	1670
Electric igniting device	W. H. and G. E. Russell	499,596	June 13	1426	341	63	1654
Electric ignitor	W. F. West	500,644	July 4	173	44	64	34
Electric illuminating apparatus	E. A. Colby	498,878	June 6	230	54	63	1433
Electric illuminating apparatus	E. A. Colby	499,097	June 6	601	144	63	1495
Electric illumination	E. A. Colby	498,879	June 6	233	55	63	1434
Electric indicator	J. L. Bradley	504,196	Aug. 29	3221	802	64	1221
Electric indicator	W. B. Luce	500,404	June 27	2756	679	63	1912
Electric light	G. Fitch	506,428	Oct. 10	1214	303	65	244
Electric light	G. Sautter	499,473	June 13	1226	292	63	1619
Electric light and gas fixture coupling	G. Peeples	497,251	May 9	1371	348	63	884
Electric light and power stations. Shunt for	E. Weston	497,482	May 16	1776	447	63	969
Electric-light-bracket base	J. T. Robb	493,411	Mar. 14	1001	258	62	1571
Electric-light display system	D. M. Moore and C. M. Jacobs	496,366	Apr. 25	2945	735 736	63	595
Electric-light extinguisher. Automatic	G. M. Hughes and G. T. Reed	511,527	Dec. 26	2898	706	65	1989
Electric-light fixture	F. W. Davenport	504,866	Sept. 12	919	237	64	1457
Electric-light fixture	L. Filstrup	508,006	Nov. 7	42	13	65	766
Electric-light fixture	B. F. Flint	505,097	Sept. 19	1309	337	64	1544
Electric-light fixtures. Attaching device for	G. Peeples	496,792	May 2	638	170	63	733
Electric-light fixtures. Switch for	J. Hutchinson	493,868	Mar. 21	1765	450	62	1734
Electric-light hanger	J. P. Heben Dahl	504,082	Aug. 29	3017	754	64	1182
Electric light. Incandescent	H. D. Burnett and S. E. Doane	505,913	Oct. 3	177	45	65	35
Electric light. Pendant incandescent	W. A. Johnston and J. C. Davidson	504,475	Sept. 5	267	69	64	1320
Electric light. Revolving	B. F. Flint	505,098	Sept. 19	1310	338	64	1544
Electric-light rosette	C. N. Hammond	511,613	Dec. 26	3045	742	65	2014
Electric-light switch	E. Blasser	503,693	Aug. 22	2421	603	64	1051
Electric-light tower	H. Jones	510,479	Dec. 12	1053	252 253	65	1624
Electric-light wires. Bracket for	G. H. Bennett	489,861	Jan. 10	1332	348	62	292
Electric lighter	B. Tropp	500,357	June 27	2690	660	63	1900
Electric-lighting device	W. H. Clewley	500,192	June 27	2427	591	63	1853
Electric-lighting system	F. B. Badt	489,598	Jan. 10	959	249	62	214
Electric-lighting system	C. C. Chesney	502,702	Aug. 8	800	193	64	727
Electric-lighting system	H. M. Doubleday	489,526	Jan. 10	856	223	62	194
Electric-lighting system	H. Edmunds, Jr.	495,932	Apr. 18	2253	568	63	449
Electric-lighting system	J. B. McGiffert	509,443	Nov. 28	2464	592 593	65	1265
Electric-lighting system	C. L. Morey	500,026	June 20	2124	515	63	1789
Electric-lighting system	P. Nordmann	501,095	July 11	899	231	64	179
Electric-lighting system	G. B. Pennock	510,188	Dec. 5	581	135	65	1519
Electric-lighting system	R. W. Rollins	492,633	Feb. 28	2513	622	62	1298
Electric-lighting system	S. W. Rushmore	493,842	Mar. 21	1725	440	62	1726
Electric-lighting system	C. E. Scribner	498,312	May 30	3112	775 776	63	1238
Electric-lighting system	E. Thomson	508,647	Nov. 14	1092	270	65	979
Electric-lighting system	E. Thomson and E. W. Rice, Jr.	496,455	May 2	106	29	63	638
Electric-lighting system	L. Violet-Chabrand	503,688	Aug. 22	2409	600	64	1049
Electric-lighting system	A. G. Waterhouse	505,241	Sept. 19	1527	399	64	1584

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric-lighting system	T. A. Willard	502,559	Nov. 14	953	234	65	951
Electric-line work. Emergency-wagon for	E. S. Breed	510,113	Dec. 5	460	103	65	1496
Electric lock	O. A. Moyer and H. W. Rhodes	491,369	Feb. 7	515	132	62	846
Electric lock	L. B. Tinkham	504,469	Sept. 5	241	63	64	1315
Electric machine. Alternating-current dynamo.....	J. J. Wood	491,695	Feb. 14	1033	261 262	62	972
Electric machine and motor. Dynamo.....	H. P. Brown	493,679	Mar. 21	1458	372	62	1674
Electric machine and motor. Dynamo.....	W. K. Freeman	497,468	May 16	1752	441	63	965
Electric machine and motor. Dynamo.....	W. T. Goolden and L. B. Atkinson	489,302	Jan. 3	490	136	62	107
Electric machine and motor. Dynamo.....	R. M. Hunter	492,888	Mar. 7	183	44, 45	62	1395
Electric machine and water-motor. Combined dynamo.....	J. O. Heinze, Jr.	496,307	Apr. 25	2831	708	63	573
Electric-machine brush-holder. Dynamo.....	F. E. Averill	510,952	Dec. 19	1942	474	65	1798
Electric machine. Dynamo.....	A. S. Atwater	505,184	Sept. 19	1441	371	64	1567
Electric machine. Dynamo.....	A. S. Atwater	505,022	Sept. 26	2199	556	64	1724
Electric machine. Dynamo.....	F. Bain	493,745	Mar. 21	1577	401	62	1698
Electric machine. Dynamo.....	A. S. Baxendale	494,836	Apr. 4	505	127	63	97
Electric machine. Dynamo.....	W. S. F. Dillon	498,969	June 6	386	92, 93	63	1460
Electric machine. Dynamo.....	C. E. Dressler	498,537	May 30	3480	862	63	1304
Electric machine. Dynamo.....	R. Eickemeyer	510,472	Dec. 12	1045	250 251	65	1622
Electric machine. Dynamo.....	R. Eldredge	504,914	Sept. 12	996	257 258	64	1473
Electric machine. Dynamo.....	F. A. Feldkamp	506,774	Oct. 17	1665	418 419	65	342
Electric machine. Dynamo.....	F. A. Feldkamp	506,775	Oct. 17	1668	419 421	65	342
Electric machine. Dynamo.....	W. E. Freeman	492,151	Feb. 21	1741	434	62	1127
Electric machine. Dynamo.....	S. Hellebrandt	493,718	Mar. 21	1517	387 388	62	1685
Electric machine. Dynamo.....	C. Hoffmann	509,662	Nov. 28	2823	681	65	1333
Electric machine. Dynamo.....	F. H. Loveridge	500,403	June 27	2755	679	63	1912
Electric machine. Dynamo.....	R. Lundell	490,449	Jan. 24	2331	605	62	516
Electric machine. Dynamo.....	R. Lundell	490,809	Jan. 31	2932	753	62	648
Electric machine. Dynamo.....	W. M. Mordey	493,104	Mar. 7	519	130	62	1462
Electric machine. Dynamo.....	G. V. M. A. Parrot and A. C. Reigner	491,294	Feb. 7	390	99 100	62	821
Electric machine. Dynamo.....	C. E. Scribner	509,954	Dec. 5	177	42	65	1443
Electric machine. Dynamo.....	S. H. Short	506,740	Oct. 17	1606	404 405	65	330
Electric machine. Dynamo.....	D. H. Wilson	510,460	Dec. 12	1027	245 246	65	1618
Electric machine. Dynamo.....	E. Thomson	493,313	Mar. 14	862	219 220	62	1542
Electric machine. Dynamo.....	H. L. Tyler	501,117	July 11	941	241	64	186
Electric machine. Dynamo.....	C. Wachtel	490,460	Jan. 24	2352	608 609 610	62	520
Electric machine. Dynamo.....	T. L. Willson	495,538	Apr. 18	1636	410 411	63	340
Electric machine. Magneto.....	F. X. Hofbauer	502,670	Aug. 1	722	173	64	698
Electric machine. Magneto.....	J. N. McLeod	495,138	Apr. 11	992	249	63	202
Electric machine or electric motor. Dynamo.....	R. Lundell	505,665	Sept. 26	2280	578	64	1739
Electric machine or motor. Dynamo.....	C. S. Bradley	503,574	Aug. 22	2218	555	64	1015
Electric machine or motor. Dynamo.....	P. Lange	500,400	June 27	2752	677 678	63	1911
Electric machine or motor. Dynamo.....	R. Lundell	490,810	Jan. 31	2935	753	62	649
Electric machine or motor. Dynamo.....	H. J. Ryan	502,384	Aug. 1	228	54	64	608
Electric machine or motor. Dynamo.....	E. Thomson	508,658	Nov. 14	1109	273 274	65	982
Electric machine. Portable static	T. H. Patee	504,740	Sept. 12	708	177 178	64	1417
Electric-machine regulator.....	J. C. Henry	499,544	June 13	1349	320	63	1641
Electric-machine regulator. Dynamo.....	L. Bell	510,465	Dec. 12	1036	248	65	1620
Electric-machine regulator. Dynamo.....	A. M. Cullingworth	508,208	Nov. 7	377	92, 93	65	828
Electric-machine regulator. Dynamo.....	W. H. Elkins	501,059	July 11	830	216	64	166
Electric-machine regulator. Dynamo.....	J. C. Henry	504,216	Aug. 29	3251	811	64	1226
Electric-machine regulator. Dynamo.....	J. Keller	506,881	Oct. 17	1840	480	65	373
Electric-machine regulator. Dynamo.....	C. E. Scribner	509,953	Dec. 5	175	41	65	1442
Electric-machine regulator. Dynamo.....	C. E. Scribner	509,955	Dec. 5	179	42	65	1443
Electric-machine regulator. Dynamo.....	E. Thomson	509,499	Nov. 28	2561	619	65	1283
Electric machines and motors. Brush for dynamo.....	J. P. B. Fiske	501,060	July 11	831	216	64	167
Electric machines. Automatic regulator for dynamo.....	O. P. Philbrick	505,207	Sept. 19	1480	386 387	64	1575
Electric machines. Brush-holder for dynamo.....	E. R. Knowles	508,624	Nov. 14	1051	260	65	960
Electric machines. Brush-holder for dynamo.....	H. G. Reist	500,614	July 4	126	34	64	25
Electric machines. Brush-supporter for dynamo.....	A. Ekström	494,739	Apr. 4	337	85	63	66
Electric machines. Circuit-breaking device for reciprocating	C. H. Richardson	508,050	Nov. 7	103	30	65	778
Electric machines. Compounding dynamo.....	W. H. Knight	509,475	Nov. 28	2528	610	65	1277
Electric machines. Compounding dynamo.....	H. F. Parshall	509,486	Nov. 28	2543	614	65	1280
Electric machines. Connector for dynamo.....	H. G. Reist and J. P. B. Fiske	508,636	Nov. 14	1075	266	65	975
Electric machines. Current-regulator for dynamo.....	C. D. Haskins	511,523	Dec. 26	2891	704 705	65	1987
Electric machines. Device for regulating constant-current dynamo.....	O. Offelt	501,532	July 18	1585	399	64	319
Electric machines in parallel. Coupling of dynamo.....	A. Gay	490,959	Jan. 31	3181	814	62	697
Electric machines. Journal-bearing for dynamo.....	W. L. Silvey	489,505	Jan. 10	826	216	62	188
Electric machines. Machine for boring out the standards and field-magnets of dynamo.....	J. Riddell	508,639	Nov. 14	1079	267	65	976
Electric machines. Method of and means for compounding dynamo.....	E. Thomson	511,375	Dec. 26	2657	644 645	65	1945
Electric machines. Perforated pole-piece for dynamo.....	C. E. Scribner and E. P. Warner	496,449	May 2	95	27	63	636

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Electric machines. Pole-piece for dynamo.....	E. Thomson.....	498,327	May 30	3136	782	63	1242
Electric machines. Regulating dynamo.....	M. J. Wightman and H. Lemp.....	501,300	July 11	1227	310	64	236
Electric mat.....	W. G. James.....	490,353	Jan. 24	2199	573	62	491
Electric meter.....	L. Brillé.....	511,401	Dec. 26	2705	655	65	1952
Electric meter.....	F. J. Dibble.....	490,011	Jan. 17	1607	{ 419 420 141 142 143 }	62	361
Electric meter.....	J. Edmondson and J. Oulton.....	496,728	May 2	532	{ 142 143 }	63	715
Electric meter.....	O. Ericsson.....	496,871	May 9	780	207	63	778
Electric meter.....	O. Frölich.....	490,279	Jan. 24	2072	541	62	464
Electric meter.....	F. L. Gregory.....	503,595	Aug. 22	2259	565	64	1021
Electric meter.....	H. Illig.....	489,161	Jan. 3	269	75	62	62
Electric meter.....	J. Perry.....	509,095	Nov. 21	1838	450	65	1134
Electric meter.....	A. Reckenzaun.....	503,805	Aug. 22	2586	{ 645 646 647 737 738 }	64	1084
Electric meter.....	F. Teague.....	496,371	Apr. 25	2952	{ 737 738 }	63	596
Electric meter.....	M. E. Thompson.....	494,657	Apr. 4	202	51, 52	63	42
Electric meter.....	E. Thomson.....	508,661	Nov. 14	1113	274	65	983
Electric motor.....	R. Ashley.....	505,783	Sept. 26	2476	624	64	1775
Electric motor.....	A. H. Beard.....	510,059	Dec. 5	370	82	65	1479
Electric motor.....	F. H. Beers.....	492,524	Feb. 28	2338	580	62	1261
Electric motor.....	W. P. Carstarphen, Jr.....	508,129	Nov. 7	246	62	65	104
Electric motor.....	O. F. Conklin.....	511,196	Dec. 19	2340	572	65	1872
Electric motor.....	F. B. Crocker and S. S. Wheeler.....	494,978	Apr. 4	705	180	63	135
Electric motor.....	J. A. Davis and R. A. Fowden.....	506,208	Oct. 10	702	{ 177 178 }	65	144
Electric motor.....	J. A. Davis and R. A. Fowden.....	506,209	Oct. 10	706	178	65	145
Electric motor.....	E. R. Esmond.....	505,396	Sept. 19	1781	461	64	1631
Electric motor.....	J. W. Hansen.....	490,280	Jan. 24	2073	542	62	465
Electric motor.....	C. S. Jones.....	500,135	June 27	2330	563	63	1837
Electric motor.....	J. F. Kelly and C. C. Chesney.....	507,658	Oct. 31	3200	783	65	652
Electric motor.....	M. W. Long.....	501,842	July 18	2080	{ 513 514 55 57 }	64	407
Electric motor.....	J. MacHaffie.....	500,663	July 4	211	{ 56 57 }	64	41
Electric motor.....	A. W. Meston.....	491,970	Feb. 14	1457	363	62	1055
Electric motor.....	C. F. Winkler.....	510,662	Dec. 12	1401	345	65	1687
Electric motor. Alternate-current.....	W. Stanley, Jr.....	508,188	Nov. 7	338	83	65	820
Electric motor. Alternating-current.....	F. A. Wessel.....	503,183	Aug. 15	1587	390	64	886
Electric motor and driven machine. Combined.....	R. Fuller.....	495,547	Apr. 18	1647	414	63	342
Electric motor and dynamo-electric machine.....	R. M. Hunter.....	500,132	June 27	2323	562	63	1836
Electric motor and dynamo mica insulator.....	C. W. Jefferson.....	491,708	Feb. 14	1053	266	62	976
Electric motor and induction-coil. Combined.....	J. S. Nowotny.....	509,445	Nov. 28	2470	595	65	1266
Electric-motor apparatus.....	J. C. Davidson.....	508,000	Nov. 7	32	10	65	764
Electric-motor apparatus.....	{ W. A. Johnston, A. W. Browne, and J. C. Davidson. }	511,621	Dec. 26	3058	{ 745 746 747 748 }	65	2016
Electric-motor brush-holder.....	J. J. Robinson and F. B. Perkins.....	511,214	Dec. 19	2365	578	65	1877
Electric-motor circuit-controller.....	W. S. Hill.....	494,781	Apr. 4	408	{ 101 102 }	63	80
Electric-motor controlling device.....	C. G. Curtis.....	505,594	Sept. 26	2162	547	64	1717
Electric-motor hand-regulator.....	W. D. Packard.....	511,157	Dec. 19	2273	557	65	1860
Electric motor. Multiphase.....	P. A. N. Winand and C. O. C. Billberg.....	497,110	May 9	1155	296	63	845
Electric motor or dynamo.....	S. Paugh.....	502,377	Aug. 1	214	51	64	605
Electric motor or dynamo.....	H. K. Thiel.....	510,102	Dec. 5	440	98	65	1493
Electric motor or generator.....	W. Koedding.....	495,941	Apr. 18	2267	571	63	452
Electric motor or generator.....	J. F. McLaughlin.....	497,888	May 23	2428	605	63	1103
Electric-motor pedal-switch.....	L. Teal.....	497,144	May 9	1209	{ 308 309 }	63	854
Electric motor. Reciprocating.....	H. Pieper, Fils.....	507,449	Oct. 24	2813	{ 688 689 207 208 }	65	567
Electric motor. Reciprocating.....	A. R. Roe.....	510,367	Dec. 5	860	208	65	1573
Electric-motor-regulating apparatus.....	C. H. Richardson.....	503,750	Aug. 22	2516	626	64	1070
Electric-motor regulator.....	J. C. Davidson.....	503,453	Aug. 15	2009	498	64	961
Electric-motor regulator.....	G. H. Whittingham.....	499,769	June 20	1712	411	63	1717
Electric-motor regulator.....	J. A. Williams.....	491,829	Feb. 14	1237	309	62	1011
Electric-motor reversing-switch.....	J. G. Germann.....	510,596	Dec. 12	1281	{ 311 312 }	65	1664
Electric-motor-starting device.....	A. D. Adams.....	503,568	Aug. 22	2209	553	64	1013
Electric-motor switch.....	M. Immisch.....	493,361	Mar. 14	934	{ 239 240 }	62	1558
Electric-motor switching apparatus.....	P. Wright and J. W. Kinsey.....	509,505	Nov. 28	2573	622	65	1286
Electric motor. Variable-speed.....	C. Hering.....	489,709	Jan. 10	1111	287	62	246
Electric motors. Apparatus for controlling.....	S. S. Wheeler.....	503,690	Aug. 22	2414	{ 601 602 131 132 }	64	1050
Electric motors by alternating currents. Operating.....	A. Siemens.....	504,630	Sept. 5	509	{ 131 132 }	64	1366
Electric motors. Controlling and equalizing.....	D. Mason.....	496,522	May 2	205	55	63	656
Electric motors. Controlling-switch for.....	W. S. Hill.....	494,565	Apr. 4	58	14	63	12
Electric motors. Fluid-pressure device for controlling.....	H. F. Parshall and J. W. Darley, Jr.....	508,630	Nov. 14	1064	264	65	973
Electric motors for operating machinery. Utilizing.....	C. Hoffmann and E. Richter.....	496,567	May 2	278	74	63	669
Electric motors. Means for controlling.....	J. F. Ott and A. E. Kennelly.....	489,687	Jan. 10	1073	{ 279 280 }	62	239
Electric motors. Means for regulating.....	C. H. Richardson.....	501,961	July 25	2279	570	64	459

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Electric motors. Power-applying device for	A. H. Johnson	510,603	Dec. 12	1294	{ 315 316 }	{ 65	1667
Electric motors. Switch for controlling	H. Sawyer	505,064	Sept. 12	1246	320	64	1519
Electric motors. Switch for governing	E. F. Ramien	505,063	Sept. 12	1243	319	64	1518
Electric motors. Switch for operating shunt-wound	F. H. Berry	492,456	Feb. 28	2217	555	62	1237
Electric motors. System for operating	E. C. Morgan	507,629	Oct. 31	3143	769	65	642
Electric primary battery	T. Coad	505,392	Sept. 19	1776	460	64	1630
Electric regulating switch	E. A. Barber	511,187	Dec. 19	2326	569	65	1369
Electric regulator	D. M. Moore	502,444	Aug. 1	331	79	64	627
Electric regulator and switch	W. N. Jones, Jr	503,322	Nov. 7	560	137	65	861
Electric regulator for an engine driving a generator. Dynamo	R. M. Hunter	510,602	Dec. 12	1291	315	65	1666
Electric reporter	M. D. Porter	496,207	Apr. 25	2666	{ 670 671 }	{ 63	542
Electric search-light	R. M. Hunter	493,358	Mar. 14	923	238	62	1555
Electric search-light	R. M. Hunter	503,602	Aug. 22	2278	569	64	1024
Electric selecting device	S. S. Bogart	507,205	Oct. 24	2407	{ 593 594 }	{ 65	489
Electric selecting device	S. S. Bogart	507,206	Oct. 24	2411	{ 594 595 }	{ 65	490
Electric signal	F. H. Clarke	491,874	Feb. 14	1314	{ 324 325 }	{ 62	1026
Electric signal	G. W. Swartz	500,041	June 20	2144	520	63	1793
Electric signal and protective system	C. E. Ongley	499,988	June 6	421	98, 99	63	1466
Electric signal, switch moving, and interlocking mechanism	J. Ramsey, Jr., and E. W. Harden	494,489	Mar. 28	2788	{ 699 700 }	{ 62	1932
Electric snap-switch	G. W. Hart. (Reissue)	11,395	Dec. 12	1804	{ 444 445 }	{ 65	1760
Electric snap-switch	C. D. Haskins	501,068	July 11	840	218	64	168
Electric sprinkler and alarm. Automatic	C. S. Hurd	492,866	Mar. 7	151	36	62	1388
Electric switch	W. W. Alexander	506,297	Oct. 10	865	214	65	176
Electric switch	W. F. Bossert	493,243	Mar. 14	737	189	62	1521
Electric switch	A. M. Coyle	493,485	Mar. 14	1126	{ 288 289 }	{ 62	1593
Electric switch	W. H. Dingle and J. M. Urqu- hart	501,707	July 18	1874	466	64	371
Electric switch	J. S. Gibbs	490,746	Jan. 31	2838	728	62	629
Electric switch	J. S. Gibbs	510,533	Dec. 12	1174	283	65	1645
Electric switch	A. B. Herrick	504,528	Sept. 5	362	91, 92	64	1337
Electric switch	J. L. Hinds	511,240	Dec. 19	2407	586	65	1825
Electric switch	C. F. W. Höfer	501,071	July 11	844	219	64	169
Electric switch	C. J. Klein	509,539	Nov. 28	2626	635	65	1295
Electric switch	G. E. Linton	500,918	July 4	599	157	64	110
Electric switch	J. F. McElroy	499,363	June 13	1036	251	63	1586
Electric switch	J. H. McEvoy	502,983	Aug. 8	1268	310	64	813
Electric switch	L. Morse	502,825	Aug. 8	995	242	64	764
Electric switch	A. L. Rohrer	490,363	Jan. 24	2213	{ 576 577 }	{ 62	494
Electric switch	L. T. Stanley	501,450	July 11	1464	367	64	282
Electric switch	F. Stevens	506,563	Oct. 10	1319	330	65	265
Electric switch	A. Stromberg	493,369	Mar. 14	948	{ 243 244 }	{ 62	1560
Electric switch	E. Thomson	500,629	July 4	147	39	64	29
Electric switch	F. A. Thum	501,173	July 11	1028	260	64	202
Electric switch	E. P. Warner	503,180	Aug. 15	1582	389	64	885
Electric switch	G. W. Webb	494,610	Apr. 4	137	31, 32	63	29
Electric switch	A. Wright	496,808	May 2	670	177	63	738
Electric switch and current reverser. Combined in- dicating	A. B. and W. S. Strouger	492,850	Mar. 7	117	30	62	1381
Electric switch and door-lock. Combined	J. H. L. Holcombe	491,426	Feb. 7	596	150	62	862
Electric switch. Automatic	A. M. Coyle	492,786	Mar. 7	20	6	62	1363
Electric switching apparatus	A. R. Roe	502,104	July 25	2506	629	64	500
Electric switching apparatus	A. R. Roe	502,105	July 25	2509	630	64	501
Electric tool	G. H. Williams	508,262	Nov. 7	470	114	65	844
Electric transformer	E. Thomson	508,655	Nov. 14	1106	273	65	981
Electric transformer	J. J. Wood	511,574	Dec. 26	2978	726	65	2003
Electric-wire cleat	J. Pawolowski	503,384	Aug. 15	1916	475	64	945
Electric-wire covering	F. S. Randall	511,547	Dec. 26	2931	714	65	1994
Electric wires. Distributing-frame for	W. S. Ford and B. A. Lenfest	507,424	Oct. 24	2773	{ 679 680 }	{ 65	560
Electrical appliance	C. H. Folger	494,098	Mar. 21	2157	550	62	1807
Electrical circuit	C. E. Chinnock	497,120	May 9	1178	301	63	849
Electrical condenser	J. F. Kelly	508,887	Nov. 14	1448	358	65	1045
Electrical-conductor connector	G. L. Russell	490,755	Jan. 31	2851	731	62	631
Electrical-conductor support	J. C. Love	511,344	Dec. 26	2594	632	65	1932
Electrical conductors. Molding for	R. A. Fessenden	506,311	Oct. 10	882	217	65	179
Electrical conductors. Underground conduit for	J. F. Cummings	497,536	May 16	1866	471	63	986
Electrical conduit for buildings	J. J. Powers and R. Van Buren	503,873	Aug. 22	2678	671	64	1102
Electrical connecting device	J. Hutchinson	490,477	Jan. 24	2383	617	62	526
Electrical connection	W. I. Smith	505,561	Sept. 26	2102	533	64	1705
Electrical connections. Binding-post for	A. Kohl	503,427	Aug. 15	1973	490	64	954
Electrical connector	F. G. Curtis	510,898	Dec. 19	1842	454	65	1779
Electrical contact device	J. K. Pritchard	503,775	Aug. 22	2551	635	64	1077
Electrical contact-making device	W. F. Z. Desant	508,871	Nov. 14	1430	355	65	1042
Electrical controller	E. A. Sperry	509,776	Nov. 28	2997	{ 725 726 }	{ 65	1365
Electrical conversion and distribution. System of	W. Stanley, Jr	503,622	Aug. 22	2312	577	64	1031
Electrical-current switch	H. P. Ball	494,750	Apr. 4	355	90	63	70
Electrical currents. Apparatus for controlling the application of	R. Lundell	507,144	Oct. 24	2295	{ 564 565 }	{ 65	469
Electrical diaphragm	C. N. Waite	489,551	Jan. 10	887		62	201
Electrical-distribution system	E. Thomson	508,646	Nov. 14	1088	269	65	978
Electrical distribution. System of	T. A. Edison	509,517	Nov. 28	2590	626	65	1389

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Electrical distribution. System of.....	C. O. Mailloux and W. S. Barstow ..	506,921	Oct. 17	1910	{ 473 474	65	387
Electrical distribution. System of.....	W. Meissner.....	497,755	May 16	2207	{ 553 554	63	1048
Electrical distribution. System of.....	C. F. Scott.....	505,928	Oct. 3	196	50	65	39
Electrical distribution. System of.....	O. B. Shallenberger.....	503,621	Aug. 22	2310	576	64	1030
Electrical distribution. System of.....	W. Stanley, Jr., and J. F. Kelly.....	507,391	Oct. 24	2723	668	65	549
Electrical energy by natural force. Means for storing and supplying.....	F. G. Corning.....	499,780	June 20	1730	418	63	1720
Electrical energy. Method of and apparatus for the transmission of.....	R. M. Hunter.....	503,321	Aug. 15	1817	450	64	926
Electrical excitation of vacuum-tubes.....	H. T. Barnett.....	494,239	Mar. 28	2403	606	62	1867
Electrical fuse-link.....	M. C. Walls.....	497,844	May 23	2348	588	63	1088
Electrical heater.....	C. E. Jones.....	502,494	Aug. 1	415	98	64	643
Electrical heater.....	J. F. McElroy.....	500,228	June 27	2567	627	63	1879
Electrical indicator.....	H. J. Haight.....	492,011	Feb. 21	1521	{ 380 381	62	1083
Electrical machine. Bipolar.....	T. H. Hicks.....	491,106	Feb. 7	70	19	62	762
Electrical meter.....	G. Rennerfelt.....	494,225	Mar. 28	2380	601	62	1863
Electrical motor.....	A. Knoche.....	495,046	Apr. 11	810	204	63	170
Electrical reciprocating motor.....	H. S. McKay.....	503,213	Aug. 15	1632	{ 401 402	64	894
Electrical switch.....	G. Baehr.....	489,553	Jan. 10	838	232	62	201
Electrical switch.....	C. O. C. Billberg.....	506,092	Oct. 3	452	{ 118 119	65	88
Electrical switch.....	J. Des Brisay.....	498,880	June 6	235	55	63	1434
Electrical system of distribution.....	C. O. Mailloux and W. S. Barstow ..	506,920	Oct. 17	1902	473	65	385
Electrical testing apparatus.....	C. H. Rudd.....	504,751	Sept. 12	730	182	64	1421
Electrical testing apparatus.....	C. H. Rudd.....	504,753	Sept. 12	733	183	64	1422
Electrical transformer.....	W. P. Carstarphen, Jr.....	507,526	Oct. 31	2956	724	65	606
Electrical transformer.....	A. Ekstrom.....	508,688	Nov. 14	1147	283	65	990
Electrical transformer.....	E. Thomson.....	504,650	Nov. 14	1099	271	65	980
Electrical transformer or induction device.....	J. M. and M. Adams.....	506,577	Oct. 10	1341	336	65	269
Electrically-controlled ventilator.....	S. G. Brin's man.....	489,625	Jan. 10	989	258	62	221
Electricity. Coin-controlled machine for administering.....	W. R. Pope.....	492,486	Feb. 28	2277	{ 566 567	62	1249
Electricity. Generating.....	T. A. Edison.....	490,953	Jan. 31	3174	8' 2	62	695
Electricity. Ground generator of.....	M. Ermo.....	495,582	Apr. 18	1706	429	63	353
Electricity. Means for determining the presence and intensity of atmospheric.....	J. Opperman.....	506,066	Oct. 3	411	107	65	80
Electricity meters. Correcting.....	J. Oulton and J. Edmondson ..	496,746	May 2	566	152	63	721
Electro-dynamic machine.....	O. Dahl.....	499,099	June 6	603	145	63	1496
Electro-magnetic alarm.....	P. Rabbidge.....	509,680	Nov. 28	2846	{ 687 688	65	1338
Electro-magnetic brake.....	A. D. Ayres.....	492,773	Mar. 7	2	1	62	1359
Electro-magnetic engine. Rotary.....	H. P. White.....	511,570	Dec. 26	2971	724	65	2002
Electro-magnetic reciprocating motor.....	R. Threlfall.....	509,705	Nov. 28	2982	{ 697 698	65	1344
Electro-magnetic safety-coupling.....	E. Richter and C. Hoffmann ..	503,727	Aug. 22	2472	614	64	1061
Electro-motive device.....	R. Callender.....	498,763	June 6	16	4	63	1391
Electrode.....	F. M. Lyte.....	507,374	Oct. 24	2698	663	65	545
Electrode for arc lamps. Carbon.....	J. M. Lacombe.....	506,650	Oct. 10	1445	362	65	289
Electrode for firing explosives.....	J. N. and H. J. Harrison ..	502,965	Aug. 8	1232	303	64	807
Electrode for voltaic cells.....	E. B. Cutten.....	510,901	Dec. 19	1845	455	65	1779
Electrode for voltaic cells.....	E. B. Cutten.....	510,902	Dec. 19	1846	455	65	1780
Electrode. Secondary-battery.....	I. H. Bartholomew.....	493,007	Mar. 7	373	93	62	1432
Electrode. Secondary-battery.....	G. D. Coleman.....	495,107	Apr. 11	926	234	63	192
Electrode. Secondary-battery.....	W. W. Donaldson and R. Macrae ..	494,062	Mar. 21	2099	535	62	1796
Electrode. Secondary-battery.....	A. M. Michel.....	489,315	Jan. 3	509	139	62	110
Electrode. Secondary-battery.....	H. G. Osburn.....	490,753	Jan. 31	2847	730	62	631
Electrode. Storage-battery.....	G. W. Harris.....	489,186	Jan. 3	313	87	62	71
Electrodes. Adjusting the joints of carbon.....	E. B. Cutten.....	510,899	Dec. 19	1843	454	65	1779
Electrodes for primary or secondary batteries. Manufacture of.....	R. T. E. Hensel.....	496,517	May 2	199	63	655	
Electrodes. Manufacture of secondary-battery.....	R. M. Lloyd.....	491,684	Feb. 14	1015	257	62	968
Electrodes. Manufacturing.....	C. Pollak.....	505,125	Sept. 19	1352	64	1552	
Electrolier. Extension.....	A. Rivenburgh.....	508,343	Nov. 7	587	144	65	867
Electroliters. Combined switch and cut-out for.....	I. Goldkind, M. and L. Stirn ..	507,803	Oct. 31	3429	842	65	696
Electrolysis. Apparatus for depolarizing in.....	J. C. Richardson.....	501,628	July 18	1742	434	64	349
Electrolytic apparatus.....	T. Craney.....	496,664	May 9	766	{ 203 204	63	776
Electrolytic apparatus.....	T. Craney.....	496,865	May 9	768	204	63	776
Electrolytic apparatus.....	T. Craney.....	498,768	June 6	25	6	63	1393
Electrolytic apparatus.....	T. Craney.....	498,770	June 6	28	7	63	1393
Electrolytic apparatus.....	T. Craney.....	507,886	Oct. 31	3558	876	65	719
Electrolytic apparatus.....	G. O. Rennerfelt.....	495,600	Apr. 18	1734	436	63	357
Electrolytic apparatus.....	J. C. Richardson.....	508,341	Nov. 7	427	104	65	838
Electrolytic bath.....	S. H. Emmens.....	501,996	July 25	2330	584	64	469
Electrolytic cell.....	T. Craney.....	498,771	June 6	29	7	63	1393
Electrolytic cell.....	T. Craney.....	504,774	Sept. 12	771	194	64	1428
Electrolytic diaphragm.....	A. Breuer.....	504,703	Sept. 12	645	64	1404	
Electrolytical processes. Diaphragm used in.....	A. Breuer.....	508,084	Nov. 7	179	65	791	
Electrolyzing apparatus.....	A. J. O. Chalandre.....	511,682	Dec. 26	3152	771	65	2034
Electrolyzing solutions. Method of and apparatus for.....	E. Hermite and A. Dubosc.....	501,783	July 18	1999	494	64	394
Electroplating aluminium and its alloys.....	G. Wegner and P. Gührs.....	496,176	Apr. 25	2621	63	534	
Electroplating aluminium.....	G. Wegner.....	490,841	Jan. 31	2979	62	658	
Electroplating apparatus.....	S. C. Catlin.....	496,597	May 2	318	87	63	677
Electroplating apparatus.....	A. R. Reams.....	497,129	May 9	1188	304	63	851
Electrotype.....	W. T. Barnum.....	489,704	Jan. 10	1104	285	62	245
Elevated carrier.....	J. Temperley.....	504,257	Aug. 29	3318	829	64	1239
Elevated carrier.....	E. H. Underhill.....	507,767	Oct. 31	3360	823	65	682
Elevating mechanism. Hydraulic.....	T. F. Rowland.....	493,301	Mar. 14	843	215	62	1539

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et.	Vol.	Page.
Elevator:							
See Automatic elevator.	Ore-elevator.						
Chain elevator.	Passenger and freight elevator.						
Electric elevator.	Pneumatic elevator.						
Grain-elevator.	Sucker-rod elevator.						
Hay-elevator.	Tobacco-elevator.						
Hod-elevator.	Water-elevator.						
Hydraulic elevator.							
Liquid-elevator.							
Elevator	W. F. Austin	503,781	Aug. 22	2558	637	64	1078
Elevator	C. W. Baldwin	499,496	June 13	1264	301	63	1626
Elevator	N. Beckwith	499,700	June 20	1587	382	63	1696
Elevator	N. Beckwith	502,270	Aug. 1	7	3	64	568
Elevator	J. H. Belser	489,359	Jan. 3	575	155	62	123
Elevator	J. P. Buckley	511,679	Dec. 26	3146	769	65	2033
Elevator	D. E. Crosby	503,787	Aug. 22	2565	638	64	1080
Elevator	J. A. Dean	511,726	Dec. 26	3222	790	65	2047
Elevator	J. A. Dean	511,727	Dec. 26	3225	791	65	2047
Elevator	J. Earich	497,711	May 16	2136	534	63	1035
Elevator	H. Eichbaum	495,971	June 6	396	93	63	1461
Elevator	C. W. Fowler	511,417	Dec. 26	2733	661	65	1957
Elevator	T. W. Heermans	497,520	May 16	1840	464	63	981
Elevator	F. E. Herdman, (Reissue)	11,327	Apr. 25	2984	744	63	603
Elevator	F. E. Herdman	506,911	Oct. 17	1868	471	65	382
Elevator	F. E. Herdman	507,617	Oct. 31	3124	764	65	638
Elevator	F. E. Herdman	510,913	Dec. 19	1865	458	65	1783
Elevator	F. E. Herdman	510,914	Dec. 19	1868	459	65	1784
Elevator	F. E. Herdman	510,915	Dec. 19	1871	459	65	1785
Elevator	M. Kallenbach	501,568	July 18	1644	411	64	332
Elevator	W. H. Kern	495,554	Apr. 18	1658	417	63	344
Elevator	A. Koeberlein	497,922	May 23	2480	619	63	1111
Elevator	A. Larsen	495,813	Apr. 18	2073	523	63	415
Elevator	M. M. Moore	500,344	June 27	2670	653	63	1897
Elevator	W. B. Morris	511,447	Dec. 26	2783	673	65	1965
Elevator	O. R. Olsen	495,598	Apr. 18	1731	436	63	356
Elevator	S. B. Opdyke, Jr.	496,666	May 2	438	118	63	698
Elevator	R. W. Parmenter	507,837	Oct. 31	3487	857	65	705
Elevator	A. Pifre	500,241	June 27	2500	611	63	1867
Elevator	R. C. Smith	490,370	Jan. 24	2223	579	62	496
Elevator	T. J. Thorp	495,234	Apr. 11	1148	287	63	231
Elevator	W. Veenschoten	494,658	Apr. 4	206	52	63	42
Elevator	S. B. Williams	511,718	Dec. 26	3211	787	65	2044
Elevator and carrier. Combined	C. M. Bates	491,511	Feb. 14	746	189	62	912
Elevator and conveyer	L. A. Park	506,540	Oct. 10	1287	322	65	258
Elevator attachment	R. Sutherland	489,240	Jan. 3	398	110	62	89
Elevator-belts. Means for driving	D. A. Robinson	511,212	Dec. 19	2362	577	65	1877
Elevator-brake	E. C. Heydenreich	504,161	Aug. 29	3155	788	64	1208
Elevator brake mechanism	T. W. Eaton	490,275	Jan. 24	2066	540	62	463
Elevator-bucket	T. Long	504,355	Sept. 5	62	17	64	1282
Elevator-carrier	O. O. Jones	497,796	May 23	2273	571	63	1075
Elevator-controller	C. B. Johnson	496,569	May 2	281	75	63	670
Elevator controller. Electric	J. P. B. Fiske	508,691	Nov. 14	1155	285	65	991
Elevator controlling device	H. B. Gale	510,638	Dec. 12	1354	332	65	1678
Elevator controlling device	C. E. Moore	502,372	Aug. 1	204	49	64	603
Elevator controlling device	A. and F. E. Turner	493,607	Mar. 14	1346	342	62	1636
Elevator controlling mechanism	T. W. Eaton	506,510	Nov. 14	867	214	65	934
Elevator controlling mechanism	T. Hill	497,719	May 16	2150	537	63	1037
Elevator device. Safety	H. H. Day	493,760	Mar. 21	1599	406	62	1702
Elevator-door	R. T. Crane	504,864	Sept. 12	917	237	64	1457
Elevator-door-actuating mechanism	E. B. Taylor	504,096	Aug. 29	3049	763	64	1189
Elevator-door opening or closing device	E. M. T. Boddam	491,832	Feb. 14	1241	310	62	1012
Elevator-doors. Means for operating	E. M. Benson	496,039	Apr. 25	2414	610	63	495
Elevator-doors. Means for operating	L. Freas	503,345	Aug. 15	1856	459	64	933
Elevator-framework	T. F. Sanford	498,576	May 30	3542	877	63	1314
Elevator-gate	G. Lagerquist and A. G. Nelson	500,586	July 4	74	21	64	15
Elevator-gate	W. H. Traphagen	504,407	Sept. 5	154	40.41	64	1299
Elevator-gate. Automatic	P. J. Schreiber	491,601	Feb. 14	895	225	62	942
Elevator-gate-operating attachment	A. P. Gould	510,475	Dec. 12	1050	251	65	1623
Elevator-gate-operating device	T. W. Graham	499,357	June 13	1028	248	63	1584
Elevator-gate-operating device	A. P. Gould	510,476	Dec. 12	1051	252	65	1623
Elevator-gate-operating device	E. F. Shaw and J. N. Lorio	502,936	Aug. 8	1183	292	64	798
Elevator-guard	O. L. Davis	502,955	Aug. 8	1212	298	64	803
Elevator-guard	A. Elliott	490,785	Jan. 31	2900	745	62	641
Elevator-guard	A. Elliott	492,350	Feb. 21	2047	510	62	1190
Elevator guide-sheave	N. P. Otis	507,157	Oct. 24	2319	569	65	474
Elevator hoisting apparatus	I. B. Coleman	505,592	Sept. 26	2160	546	64	1716
Elevator-hoisting mechanism	C. E. Albro	502,600	Aug. 1	590	141	64	674
Elevator hoisting mechanism	A. P. Webb	495,078	Apr. 11	859	220	63	179
Elevator-indicator	N. Hiss	489,605	Jan. 3	44	12.13	62	12
Elevator-indicator	J. H. McGill	497,431	May 16	1696	428	63	956
Elevator-indicator	A. L. Meyer	499,390	June 13	1079	262	63	1593

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Elevator indicator mechanism	E. Wyde	496,986	May 9	967	253	63	811
Elevator-lock. Automatic	S. J. Parker	501,658	July 18	1792	446	64	358
Elevator lock-stop	J. R. Hopper	497,321	May 16	1523	383	63	925
Elevator or conveyer	M. M. Shellabarger	495,685	Apr. 18	1870	469	63	379
Elevator-rope clamp	C. K. Decherd	507,888	Oct. 31	3560	877	65	720
Elevator rope-drive	D. A. Robinson	511,213	Dec. 19	2363	577	65	1877
Elevator safety appliance	W. Winkless	490,219	Jan. 17	1900	514	62	431
Elevator safety attachment	C. B. Labatt	503,486	Aug. 15	2070	516	64	972
Elevator safety attachment	R. J. Morrison	494,933	Apr. 4	637	163	63	123
Elevator safety-catch	W. A. Finney	505,289	Sept. 19	1611	418	64	1600
Elevator safety-clutch	C. E. Albro	501,396	July 11	1390	348	64	266
Elevator safety device	H. H. Day	493,759	Mar. 21	1598	406	62	1701
Elevator safety device	A. Eck	498,161	May 23	2836	710	63	1175
Elevator safety device	N. V. Fitts	500,876	July 4	546	141 142	64	99
Elevator safety device	W. H. Hultgren	493,724	Mar. 21	1537	391 392	62	1689
Elevator safety device	W. P. Kidder	495,094	Apr. 11	894	226 227	63	187
Elevator safety device	T. Settle	497,433	May 16	1700	429	63	957
Elevator safety device	F. H. Shurtz and H. G. Swan	504,029	Sept. 5	507	130 131	64	1365
Elevator safety device	P. C. Zimmermann	496,179	Apr. 25	2623	661	63	534
Elevator safety-gate	A. T. Brown	510,770	Dec. 12	1582	394	65	1720
Elevator safety-gate	P. E. Cryder	493,229	Mar. 7	710	182	62	1498
Elevator-shaft	G. Vassar, Jr.	503,392	Aug. 15	1927	478	64	947
Elevator-shafts. Device for protecting	J. D. Higgins	497,447	May 16	1721	434 435	63	960
Elevator-shafts. Safety device for	A. D. Caywood	493,423	Mar. 14	1016	262	62	1574
Elevator switch. Electric	W. Hochhausen	506,367	Oct. 10	983	244 245	65	198
Elevator-wells. Device for operating gates to	C. F. De Arden	494,126	Mar. 28	2220	565	62	1234
Elevator-wells. Device for operating gates to	C. F. De Arden	506,163	Oct. 3	575	149	65	110
Elevators. Automatic slack-cable stop for	W. H. Hultgren	494,810	Apr. 4	460	114	63	89
Elevators. Cable fastening apparatus for hydraulic	W. H. Hultgren	498,434	May 30	3304	824	63	1275
Elevators. Controlling device for electric	C. E. Moore	496,382	Apr. 25	2973	742	63	601
Elevators. Electric signaling apparatus for	C. G. Armstrong	499,411	June 13	1125	270 271	63	1601
Elevators. Electrical indicator for	E. E. Peirce	502,315	Aug. 1	99	23, 24	64	584
Elevators. Regulating-switch for electric	H. A. Allen	509,279	Nov. 21	2138	513 514	65	1191
Elevators. Regulating-switch for electric	A. B. See and W. L. Tyler	500,274	June 27	2547	622	63	1875
Elevators. Safety device for platform	J. Wallenstein	490,328	Jan. 24	2152	562	62	481
Elevators. Variable lifting device for	H. R. Koch	501,840	July 18	2077	512	64	407
Ellipsograph	H. R. Corkhill, Jr.	492,142	Feb. 21	1724	430	62	1123
Elliptic spring	E. Cliff	496,723	May 2	523	139	63	714
Embalming. Antiseptic fluid for	M. Huncke	498,350	May 30	3181		63	1249
Embossing and printing press	J. Y. Johnston	504,680	Sept. 5	599	152 153 154	64	1383
Embossing and punching machine	C. P. Higgins	503,963	Aug. 29	2841	710 711	64	1150
Embossing-machine	R. S. Anderson	502,342	Aug. 1	154	55, 56	64	594
Embossing-machine	D. J. Lattimore	490,312	Jan. 31	3110	798	62	683
Embroidering-machine	G. Baum	498,925	June 6	316	74	63	1448
Embroidering-machine	E. Buss and A. Saurer	503,309	Aug. 15	1788	442 443 444 445 446 447	64	921
Embroidering-machine	R. Cornely	503,229	Aug. 15	1660	408	64	899
Embroidering-machine	E. and R. Cornely	493,374	Mar. 14	954	246	62	1562
Embroidering-machine	E. and R. Cornely	500,251	June 27	2512	614	63	1270
Embroidering machine	E. and R. Cornely	501,704	July 18	1870	465 466	64	371
Embroidering machine	E. and R. Cornely	504,332	Sept. 5	33	10	64	1277
Embroidering-machine	F. von Martini	494,744	Apr. 4	345	87	63	68
Embroidering-machine fabric-holder	J. Kellenberger	502,463	Aug. 1	356	86	64	632
Embroidering-machine fabric-holding frame	J. Graf	490,111	Jan. 17	1779	463	62	396
Embroidering-machine fabric-holding frame	H. Hochrentener	503,320	Aug. 15	1816	450	64	926
Embroidering-machines. Fabric-holding frame for	A. Hardegger	511,522	Dec. 26	2889	703 704	65	1987
Emery or corundum wheel. Safety	W. S. Shipe	508,773	Nov. 14	1272	316	65	1013
Emery wheel	J. R. and A. M. Carpenter	500,561	July 4	40	12	64	9
Emery-wheel and support	C. L. Hyde	507,223	Oct. 24	2439	601	65	495
Emery-wheel dresser	W. W. Brisben	491,466	Feb. 7	670	168	62	876
Emery-wheels and supports therefor. Construction of	C. L. Hyde	489,148	Jan. 3	256	71	62	59
Emery wheels. Composition for producing artificial	J. Dutrey	510,874	Dec. 12	1803		65	1760
Emery-wheels. Construction of grinding	A. Johnston	504,388	Sept. 5	122		64	1293
Emery-wheels. Tool for dressing	W. P. Alger	498,220	May 30	2949	735	63	1209
Emery-wheels. Tool for dressing	G. W. Kamerer	511,083	Dec. 19	2153	530	65	1837
Enamel. Carriage or buggy top	Z. T. Fowler	504,339	Sept. 5	43		64	1279
Enameling-furnace	G. F. Kreischer	492,405	Feb. 23	2139	534	62	1221
Enameling metal ware	H. Claus	506,390	Oct. 10	1029	256	65	208
Enameling sheet-metal ware	V. Dubois and W. C. Stewart	498,207	May 23	2925		63	1190
End-gate	C. A. Anderson	490,333	Jan. 24	2162	564	62	483
End-gate	M. J. Lovett	506,519	Oct. 10	1258	315	65	253
End-gate	W. K. Wagner	491,617	Feb. 14	919	231	62	948
End-gate and scoop-board. Combined	W. H. Clark	502,067	July 25	2448	615	64	490
End-gate and wagon-jack. Combined	H. M. Crrippen	501,330	July 11	1269	318	64	243
End-gate fastening	F. A. Havens	502,095	July 25	2493	627	64	498
End-gate lock	J. T. L. Morris	489,386	Jan. 3	619	167	62	133

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End-gate rods. Manufacturing.....	G. B. Freeman.....	503,367	Aug. 15	1895	469	64	940
End-gate. Wagon.....	N. Broadwell.....	499,511	June 13	1302	306	63	1632
End-gate. Wagon.....	W. A. Crawford.....	505,566	Sept. 26	2113	535	64	1708
End-gate. Wagon.....	G. C. Flagg.....	504,448	Sept. 5	218	58	64	1311
End-gate. Wagon.....	J. A. Isaacson.....	507,620	Oct. 31	3130	766	65	639
End-gate. Wagon.....	H. H. Perkins.....	496,793	May 2	639	171	63	733
End-gate. Wagon.....	J. S. and H. L. Phillips.....	499,579	June 13	1402	335	63	1649
End-gate. Wagon.....	N. Shell.....	500,038	June 20	2141	519	63	1792
End-gate. Wagon.....	G. S. Sneer.....	489,721	Jan. 10	1131	292	62	249
End-gate. Wagon.....	G. W. Wright.....	489,137	Jan. 3	235	65	62	54
Engine:							
See Air-engine. Hydrocarbon-engine.							
Beating-engine. Locomotive-engine.							
Blowing-engine. Multi-cylinder engine.							
Carding-engine. Oscillating engine.							
Compound engine. Petroleum or liquid-hy-							
Dental engine. drocarbon engine.							
Direct-acting en- Pressure-engine.							
gine. Pulping-engine.							
Direct-acting and Pump-engine.							
compound engine. Pumping engine.							
Electric engine. Quadruplex engine.							
Electro-magnetic Rag-engine.							
engine. Reciprocating engine.							
Expansion-engine. Reversing-engine.							
Explosive engine. Road-engine.							
Fire-engine. Rotary engine.							
Gas-engine. Rotary steam-engine.							
Gas and air engine. Rotating-cylinder engine.							
Gas-motor engine. Rotating steam-engine.							
Gas or carbureted. Steam-engine.							
air engine. Steam and air engine.							
Gas or oil motor en- Steam or pneumatic en-							
gine. gine.							
Gas or petroleum en- Steering-engine.							
gine. Toy steam-engine.							
Gas or similar motor Traction-engine.							
engine. Vacuum-engine.							
Gas or vapor engine. Wind-engine.							
Hydraulic engine.							
Engine.....	J. H. Eickershoff.....	501,224	July 11	1101	2-0	64	253
Engine.....	E. Kehlberger and L. Fouque.....	510,480	Dec. 12	1055	253	65	1624
Engine.....	J. Knapper and S. B. Marton.....	490,662	Jan. 31	2704	695	62	604
Engine.....	H. C. Miller.....	503,154	Aug. 15	1538	378	64	876
Engine attachment. Gas-	M. M. Barrett and J. F. Daly.....	510,879	Dec. 19	1812	448	65	1774
Engine attachment. Steam-	F. T. Guiher.....	510,131	Dec. 5	490	112	65	1502
Engine boiler. Locomotive or other	E. U. Gibbs.....	502,117	July 25	2529	634	64	503
Engine connection. Steam-	C. F. Littlejohn.....	490,852	Jan. 31	2994	{ 766 767 }	62	661
Engine cut-off. Steam-	A. J. Bates.....	505,153	Sept. 19	1395	358	64	1559
Engine cut-off. Steam-	F. A. Miller.....	497,332	May 16	1539	388	63	928
Engine exhaust. Steam-	J. W. Cloud.....	505,190	Sept. 19	1451	373	64	1569
Engine-foundations. Building	P. M. Bruner.....	501,914	July 25	2215	{ 552 553 }	64	447
Engine gear. Portable-	F. Burgroff.....	505,814	Oct. 3	20	5	65	7
Engine indicators. Attachment for steam-	W. Houghtaling.....	494,482	Mar. 28	2779	697	62	1936
Engine link-motion	N. Foust.....	497,648	May 16	2037	508	63	1017
Engine operated by the explosion of combustible mix- tures.	W. Hornsby, R. Edwards, and W. E. Gibbon.....	504,807	Sept. 12	824	209	64	1438
Engine operated by the explosion of mixtures of gas or hydrocarbon vapor and air.	H. A. Stuart.....	502,837	Aug. 8	1012	247	64	767
Engine recording-indicator. Electro-mechanical } steam-	R. G. Collins.....	495,148	Apr. 11	1014	{ 253 254 }	63	206
Engine regulator. Steam-	F. W. Mount.....	498,672	May 30	3707	916	63	1343
Engine reversing-gear.	J. W. Mellling.....	489,130	Jan. 3	226	61	62	52
Engine reversing-gear.	T. F. Whittington and W. A. Fish- ering.....	500,985	July 4	711	187	64	129
Engine-reversing mechanism.....	A. J. Schindler.....	510,094	Dec. 5	426	95	65	1490
Engine safety-stop	W. H. Towle.....	498,330	May 30	3140	783	63	1243
Engine steering apparatus. Traction-	C. O. Heggem.....	489,865	Jan. 10	1337	349	62	293
Engine steering device. Road-	R. Fullerton.....	496,053	Apr. 25	2445	{ 616 617 }	63	500
Engine steering-gear. Traction-	S. B. Hart.....	505,523	Sept. 26	2014	515	64	1688
Engine steering mechanism. Traction-	J. H. Stevenson.....	504,894	Sept. 12	961	248	64	1465
Engine-stopping apparatus.....	C. A. Hatch.....	506,229	Oct. 10	751	{ 186 187 }	65	153
Engine stopping apparatus.....	F. D. Taylor.....	490,373	Jan. 24	2228	580	62	497
Engine tender. Traction-	A. T. Finke.....	509,886	Dec. 5	68	17	65	1423
Engines. Automatic cut-off for.....	J. W. Sager.....	506,943	Oct. 17	1942	481	65	393
Engines. Automatic safety-stop for.....	A. J. Bates.....	508,671	Nov. 14	1125	278	65	985
Engines. Automatic throttle for.....	S. V. Rawlings.....	501,959	July 25	2277	{ 569 570 }	64	458
Engines. Auxiliary cut-off for.....	J. H. Tennyson.....	506,565	Oct. 10	1323	331	65	266
Engines. Combustion-chamber for petroleum or hy- drocarbon	J. Richardson and W. Norris.....	500,674	July 4	231	61	64	44
Engines. Driving connection for compound.....	H. D. Dunbar.....	502,956	Aug. 8	1215	299	64	804
Engines. Electric igniting device for gas.....	F. E. Tremper.....	503,016	Aug. 8	1309	320	64	821
Engines. Electrical igniter for gas or hydrocarbon	P. A. N. Winand.....	507,515	Oct. 24	2931	719	65	588
Engines. Electrical igniter for gas or hydrocarbon	P. A. N. Winand.....	507,516	Oct. 24	2932	{ 719 720 }	65	588
Engines. Fire-lighting attachment for steam-	W. J. Halliwell and T. Donohue.....	496,156	Apr. 25	2594	653	63	529
Engines. Igniting apparatus for gas-	G. E. Hoyt.....	508,618	Nov. 14	1043	258	65	968
Engines. Means for connecting stationary machines to portable	J. Hullah.....	496,568	May 2	280	75	63	670
Engines. Means for operating.....	G. and H. Honig.....	510,394	Dec. 5	915	219	65	1584

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Engines. Means for starting gas or oil motor.	J. Fielding	505,760	Sept. 26	2444	615	64	1768
Engines. Method of and apparatus for operating aqua-ammonia	C. L. Horack	493,722	Mar. 21	1527	391	62	1637
Engines. Oil-supplying device for hydrocarbon.	J. Richardson and W. Norris	500,673	July 4	230	60.61	64	44
Engines or boilers. Grease-arrester for steam.	J. F. Traver	499,059	June 6	551	130	63	1487
Engines. Power-measuring instrument for steam.	W. T. Howard	501,654	July 18	1781	444 445	64	356
Engines. Pressure-regulator for pumping.	E. Austin	503,068	Aug. 8	1382	341	64	835
Engines. Rock-arm for horizontal.	E. J. Armstrong	500,840	July 4	489	127	64	89
Engines. Safety-reservoir and compensator for supplying liquid hydrocarbon to gas.	W. W. Grant	511,694	Dec. 26	3171	775	65	2037
Engines. Starting appliance for compound.	T. W. Heintzelman and C. T. Noyes	498,650	May 30	3674	908	63	1337
Engines. Starting appliance for compound.	H. J. Small and C. T. Noyes	503,390	Aug. 15	1922	477 478	64	946
Engines. Starting-gear for compound.	C. A. Ball	511,186	Dec. 19	2322	568 569	65	1869
Engines. Steadying device for portable.	E. C. Emde	489,795	Jan. 10	1244	326	62	273
Engines. Steam distribution in multiple-expansion.	F. M. Rites	502,140	July 25	2559	641 642	64	512
Engines. Steam distribution in triple-expansion.	F. M. Rites	502,501	Aug. 1	425	101 102	64	647
Engines. Steering-gear for traction.	G. W. Kramer	502,230	July 25	2712	684 685	64	541
Engines. Steering-gear for traction.	G. W. Kramer	503,146	Aug. 15	1525	375	64	874
Engines. Steering-gear for traction.	G. W. Kramer	503,147	Aug. 15	1526	375	64	874
Engines. Trunnion-bearing for oscillating.	C. E. Healy	511,203	Dec. 19	2948	574	65	1874
Engineer's instructor.	R. J. Schwab, C. A. Sercomb, and J. K. Tremain.	508,247	Nov. 7	437	106	65	839
Engraving-chuck.	W. S. Eaton and E. A. Fargo	508,606	Nov. 14	1031	254	65	965
Engraving-machine.	C. C. Bruckner	507,610	Oct. 31	3111	760 761	65	636
Engraving-machine.	A. M. English	510,905	Dec. 19	1851	456	65	1781
Engraving-machine.	F. Hirsch and C. Thiede	508,942	Nov. 21	1581	387 388	65	1084
Engraving or sinking dies, matrices, or other objects. Machine for	L. F. Campi	500,317	June 27	2626	642 643	63	1889
Ensilage-machine.	J. O. Atkinson	500,181	June 27	2409	586 587	63	1851
Envelope.	D. I. Barnett	496,385	Apr. 25	2977	743	63	602
Envelope.	J. M. Cutter	500,996	July 4	726	190 191	64	132
Envelope.	R. S. McCallen and M. M. Ross	505,718	Sept. 26	2374	600	64	1755
Envelope.	M. Scougale	506,555	Oct. 10	1309	327	65	262
Envelope.	A. L. Sewell	494,170	Mar. 28	2287	580	62	1845
Envelope.	A. E. Spear	491,928	Feb. 14	1395	348	62	1043
Envelope.	W. Weaver	491,030	Jan. 31	3307	843	62	723
Envelope.	J. T. Webber	493,847	Mar. 21	1734	441	62	1738
Envelope and letter-sheet. Combined.	N. W. Webb	503,628	Aug. 22	2322	579	64	1032
Envelope-cutter.	D. W. Swift	500,304	June 27	2602	636	63	1884
Envelope-dispensing machine.	A. C. Monfort	489,683	Jan. 10	1069	278	62	238
Envelope-fastener. Metallic.	J. A. Shetty	490,814	Jan. 31	2942	755	62	650
Envelope-fastening.	G. A. Harris	510,787	Dec. 12	1603	399	65	1725
Envelope-feeding mechanism.	J. W. Hughes and C. R. Taylor	495,414	Apr. 11	1429	359	63	282
Envelope. Letter.	W. McDonnell	499,563	June 13	1379	329	63	1646
Envelope-machine.	R. S. Anderson	497,484	May 16	1779	448 449	63	970
Envelope-machine.	J. Ball	491,935	Feb. 14	1405	350 351	62	1045
Envelope-machine.	R. O. Brigham	511,676	Dec. 26	3138	767 768	65	2032
Envelope-machine.	E. Ermold and W. Hollis	510,415	Dec. 12	946	228	65	1604
Envelope-machine attachment.	R. O. Brigham	511,675	Dec. 26	3136	767	65	2031
Envelope-machines. Gumming mechanism for.	A. A. Rheuban	504,136	Aug. 29	3113	779	64	1201
Envelope. Mailing.	J. T. Clark	504,560	Sept. 5	413	105	64	1347
Envelope-opener.	I. W. Heysinger	504,352	Sept. 5	58	16	64	1282
Envelope-opener.	W. J. Puckett. (Reissue).	11,332	May 9	1467	370	63	899
Envelope-opener.	J. Ropes	497,133	May 9	1194	305	63	852
Envelope. Package.	M. Hess	502,966	Aug. 8	1233	303	64	807
Envelope. Safety.	J. J. Gleason	502,560	Aug. 1	523	125	64	663
Envelope. Safety.	M. Ruanx	496,170	Apr. 25	2613	658	63	532
Envelope. "Sample-bag"	J. H. Heisser	505,791	Sept. 26	2489	628	64	1778
Equalizer. Four-horse	M. Jacobson	496,414	May 2	37	11	63	625
Equalizer. Three-horse	J. C. Rice	503,163	Aug. 15	1558	383	64	880
Eraser.	G. Freund	506,994	Oct. 17	2018	499	65	407
Eraser.	I. W. Heysinger	509,899	Dec. 5	94	22	65	1427
Eraser. Blackboard.	J. Haggerty	508,704	Nov. 14	1175	290	65	994
Eraser. Blackboard.	W. J. Weaver	503,020	Aug. 8	1313	321	64	821
Eraser-case.	W. F. Torrey	505,733	Sept. 26	2397	606	64	1759
Eraser-holder.	W. M. Marshall	501,893	July 18	2172	538	64	423
Eraser. Ink.	C. A. Jackson and F. I. Hammond	506,693	Oct. 17	1518	381	65	314
Eraser. Pocket.	E. Lustnauer	501,570	July 18	1646	412	64	332
Eraser. Rubber.	A. S. Hobart and A. W. Eldredge	501,421	July 11	1424	357	64	273
Ether-motor.	P. de Susini	509,406	Nov. 28	2385	578	65	1248
Ether-vapor motor.	P. de Susini	508,447	Nov. 14	761	188	65	914
Evaporating apparatus.	W. Golding	489,147	Jan. 3	254	70	62	59
Evaporating apparatus.	S. M. Lillie	498,938	June 6	332	78	63	1451
Evaporating apparatus.	H. G. Morris	489,260	Jan. 3	434	130	62	96
Evaporating apparatus. Fruit.	E. W. McGowen	508,040	Nov. 7	90	26	65	775
Evaporating cane-juice. Process of and apparatus for.	J. A. McGill	509,749	Nov. 28	2953	715	65	1357
Evaporating liquids.	S. M. Lillie	491,659	Feb. 14	977	246	62	959
Evaporating-pan.	H. W. Hecock	500,233	June 27	2489	608	63	1805
Evaporating-pan.	J. Lexa and J. Herold	509,918	Dec. 5	121	27.28	65	1432
Evaporating-pan.	F. M. Robertson	503,498	Aug. 15	2084	520 521	64	975
Evaporating-pan.	E. R. Shaw	501,848	July 18	2091	516	64	409

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Evaporating-pan.....	A. E. Warner.....	506,752	Oct. 17	1625	408	65	334
Evaporating pan. Sugar.....	C. C. Alfred.....	489,622	Jan. 10	987	258	62	220
Evaporating-pan transfer.....	L. O. McLane.....	490,858	Jan. 31	3002	770	62	663
Evaporator: See Fruit-evaporator.							
Evaporator.....	J. Keith.....	490,967	Jan. 31	3195	816	62	E99
Excavating-machine.....	W. M. Gross.....	505,460	Sept. 26	1889	487	64	1665
Excavating-machine.....	F. W. Volthering and C. Bernhardt	502,151	July 25	2584	650	64	516
Excavating or dredging machine.....	J. Heaston and E. C. Sooy.....	495,111	Apr. 11	931	{ 235 236 }	63	193
Excavating shafts.....	D. N. Long.....	500,017	June 20	2108	510	63	1786
Excavating wells, &c. Apparatus for.....	G. A. Miller.....	494,877	Apr. 4	565	142	63	109
Excavator.....	H. P. Bennett.....	501,400	July 11	1397	{ 349 350 }	64	267
Excavator.....	M. C. Meigs.....	491,577	Feb. 14	847	{ 214 215 }	62	933
Excavator.....	M. E. Pugh.....	498,364	May 30	3204	797	63	1253
Excavator.....	E. Ruud.....	502,469	Aug. 1	368	88	64	634
Excavator.....	F. H. Schulte.....	508,437	Nov. 14	748	{ 184 185 }	65	911
Excavator and carrier. Wheeled.....	M. E. Cook.....	489,707	Jan. 10	1108	2-6	62	245
Excavator and scraper.....	B. F. Smith.....	497,389	May 16	1625	{ 410 411 }	63	943
Excavator. Hydraulic.....	A. Fairchild.....	495,791	Apr. 18	2041	517	63	410
Excelsior-cutting machine.....	J. R. Bate, S. H. Shadbolt, G. R. and C. B. Houghton.	495,239	Apr. 11	1158	290	63	233
Excelsior-knife.....	H. C. Cloyd.....	495,879	Apr. 18	2182	548	63	435
Excelsior-machine.....	H. C. Cloyd.....	505,752	Sept. 26	2424	612	64	1764
Excelsior-machine.....	B. Kane.....	499,168	June 6	716	170	63	1514
Exerciser. Chest.....	C. Denison.....	497,774	May 23	2248	564	63	1071
Exercising and strength-testing machine.....	L. R. Schaeffer.....	493,561	Mar. 14	1264	324	62	1620
Exercising apparatus.....	C. K. Pickles.....	511,251	Dec. 19	2424	590	65	1888
Exercising apparatus. Wrist and finger.....	R. Barclay.....	505,745	Sept. 26	2414	610	64	1762
Exercising-machine.....	W. J. O. Bryon, Jr.....	499,205	June 13	775	184	63	1540
Exhaust-head.....	G. W. Christoph.....	493,908	Mar. 21	1826	465	62	1745
Exhibit or file cabinet.....	H. W. Prentiss.....	506,073	Oct. 3	424	111	65	83
Exhibiting apparatus.....	D. W. Tower.....	511,104	Dec. 19	2186	537	65	1844
Exhibiting apparatus. Coin-operated.....	A. Bossomaier.....	489,285	Jan. 3	467	{ 129 130 }	62	102
Exhibiting device.....	E. B. Lunbeck and C. P. Cummings.	511,088	Dec. 19	2160	532	65	1839
Exhibiting machine. Card.....	W. H. Pitt and G. Sittmann.....	489,262	Jan. 3	436	121	62	96
Exhibition structure.....	G. M. Wheeler.....	506,291	Oct. 10	856	211	65	175
Exhibitor and depository. Shade.....	J. Daehler.....	510,960	Dec. 19	1957	479	65	1801
Exhibitor. Bedstead.....	A. K. Erdman.....	498,972	June 6	398	93	63	1462
Exhibitor. Curtain.....	A. Lindstrom.....	490,572	Jan. 24	2526	650	62	555
Expanding block.....	A. d'Yochet.....	497,854	May 23	2363	592	63	1091
Expandible bit.....	J. P. Lavigne.....	509,667	Nov. 28	2832	684	65	1335
Expansion engine. Multiple.....	C. C. Worthington.....	507,196	Oct. 24	2343	590	65	486
Expansion engine. Quadruple.....	J. Marshall.....	503,056	Aug. 8	1464	337	64	E32
Expansion engine. Triple.....	J. Marshall.....	509,752	Nov. 28	2958	716	65	1358
Expansion-joint.....	J. Lister.....	502,733	Aug. 8	837	203	64	734
Expansive bit.....	L. S. Hayden.....	500,498	June 27	2881	711	63	1936
Explosive compounds. Preparing.....	B. Lepsius.....	492,089	Feb. 21	1639	62	62	1106
Explosive engine.....	F. E. Tremper.....	495,281	Apr. 11	1229	{ 307 308 }	63	245
Explosive powder and making same.....	C. E. Munroe.....	489,684	Jan. 10	1070	560	62	238
Explosives. Apparatus for producing smokeless.....	F. G. du Pont.....	503,584	Aug. 22	2235	561	64	1018
Explosives. Making smokeless.....	F. G. du Pont.....	503,587	Aug. 22	2241	{ 561 562 }	64	1019
Explosives. Making smokeless.....	F. G. and P. S. du Pont.....	503,583	Aug. 22	2231	560	64	1017
Explosives. Making smokeless.....	F. G. and P. S. du Pont.....	503,585	Aug. 22	2236	561	64	1018
Explosives. Vacuum drying apparatus for.....	E. Passburg.....	497,683	May 16	2092	{ 522 523 }	63	1026
Extension-table.....	E. F. Baum.....	507,401	Oct. 24	2736	671	65	552
Extension-table.....	W. Blankner.....	498,230	May 30	2965	739	63	1211
Extension-table.....	F. M. Brightman.....	506,902	Oct. 17	1875	467	65	380
Extension-table.....	F. P. Cobham.....	500,533	June 27	2950	{ 724 725 }	63	1947
Extension-table.....	J. Couch.....	495,723	Apr. 18	1941	488	63	391
Extension-table.....	J. Couch.....	506,161	Oct. 3	571	148	65	110
Extension-table.....	J. A. Glanton.....	489,529	Jan. 10	859	229	62	195
Extension-table.....	J. S. Graaff and I. M. Harbaugh.....	492,284	Feb. 21	1942	4-5	62	1170
Extension-table.....	W. L. H. Hall.....	509,894	Dec. 5	80	20	65	1425
Extension-table.....	R. Mainardi.....	508,628	Nov. 14	1061	263	65	972
Extension-table.....	J. Pogodzinski.....	510,362	Dec. 5	849	505	65	1571
Extension-table.....	S. S. Singer.....	497,080	May 9	1109	285	63	837
Extension-table.....	A. R. Stebbins.....	500,440	June 27	2812	693	63	1922
Extension-table.....	W. C. Steers.....	498,318	May 30	3122	778	63	1240
Extension-table.....	W. D. Stryker.....	499,480	June 13	1236	295	63	1621
Extension-table.....	W. H. Wendeatt.....	490,936	Jan. 31	3141	806	62	690
Extension-table.....	F. Wolter.....	496,588	May 2	306	82, 83	63	675
Extracting apparatus.....	C. W. Preston.....	494,647	Apr. 4	188	47	63	39
Extraction apparatus.....	S. W. Cochran.....	505,816	Oct. 3	22	6	65	7
Extractor: See Bottle-stopper ex- tractor. Bung or tenon ex- tractor. Butter-extractor. Cork-extractor. Cream and butter extractor. Honey-extractor.	Lemon-juice extractor. Nail-extractor. Pen-extractor. Spike-extractor. Staple-extractor. Stump-extractor. Tack-extractor. Wedge-extractor.						
Extracts from the redwood-tree. Making.....	A. Taylor.....	509,703	Nov. 28	2877	65	1344	

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Extracts. Process of and apparatus for making	M. Heftler and G. Benard	503,237	Aug. 15	1670	{ 410 411 }	64	900
Extracts. Process of and apparatus for making	J. E. McCarty	491,370	Feb. 7	516	132	62	846
Eye-former	W. E. L. Rodgers	499,802	June 20	1769	423	63	1727
Eye shade	S. G. Soules and H. E. Stowe	490,513	Jan. 24	2443	630	62	533
Eye-testing device	B. I. Price	505,000	Sept. 12	1143	293	64	1500
Eyes. Apparatus for electrically treating the	W. A. Price	490,678	Jan. 31	2734	704	62	609
Eyeglass-case	R. B. Swift	497,734	May 16	2167	542	63	1041
Eyeglass-frame	J. J. Bausch	489,358	Jan. 3	574	155	62	123
Eyeglass-frame	W. H. Cowles	497,773	May 23	2247	563	63	1071
Eyeglass-frame	E. L. McDowell	511,638	Dec. 26	3086	754	65	2022
Eyeglass-guard	G. Bausch. (Reissue)	11,389	Nov. 14	1532	370	65	1057
Eyeglass-guard. Adjustable	R. H. Biegel and D. C. Phillips	511,261	Dec. 19	2444	596	65	1892
Eyeglass-hook	W. W. Hayden	493,865	Mar. 21	1763	449	62	1733
Eyeglass or spectacle frame	J. H. E. De Celles	506,164	Oct. 3	577	149	65	111
Eyeglasses	J. H. E. De Celles and G. W. Wells	492,622	Feb. 28	2498	619	62	1295
Eyeglasses	J. H. E. De Celles and G. W. Wells	499,320	June 13	944	228	63	1569
Eyeglasses	S. Eastman	511,293	Dec. 19	2505	610	65	1903
Eyeglasses	S. Eastman	511,598	Dec. 26	3023	738	65	2010
Eyeglasses	W. H. Eccleston	502,879	Aug. 8	1075	265	64	779
Eyeglasses	C. M. Haynes	507,434	Oct. 24	2794	654	65	563
Eyeglasses	A. J. Landry	490,291	Jan. 24	2091	545	62	469
Eyeglasses	A. J. Landry	493,169	Mar. 7	620	156	62	1480
Eyeglasses	A. J. Landry	499,554	June 13	1362	323	63	1643
Eyeglasses	A. J. Landry	506,823	Oct. 17	1747	440	65	357
Eyeglasses	J. L. Levy	495,224	Apr. 11	1126	281	63	227
Eyeglasses	S. Richard, Jr., and W. N. Blanchard	492,234	Feb. 21	1873	468	62	1154
Eyeglasses	F. G. Schmidt	499,756	June 20	1697	406	63	1714
Eyeglasses	R. Straubel, Jr.	489,996	Jan. 17	1584	414	62	355
Eyelet	A. Mathison	501,288	July 11	1197	303	64	233
Eyelet-setting. Anvil for	J. W. Beaumont	494,542	Apr. 4	6	1	63	3
Eyeteing-machine	E. B. Stimpson	502,327	Aug. 1	128	29	64	588
Eyeteing-machine	E. Woodward and C. Hatch, Jr.	501,754	July 18	1956	{ 484 485 }	64	386
Eyelid-lifter	H. K. Lamb	497,052	May 9	1060	272	63	828
Fabric: See Buoyant fabric. Pile fabric. Elastic woven fabric.							
Fabric	J. F. Palmer	493,220	Mar. 7	691	177	62	1494
Fabric or paper cutter	G. A. Burbank	493,351	Mar. 14	914	234	62	1553
Fabric trimming and sewing machine	S. Borton and C. H. Willcox	498,616	May 30	3608	{ 893 894 895 }	63	1326
Fabric-turfing implement	A. F. Pugh	490,792	Jan. 31	2911	748	62	643
Fabric-turfing machine	M. Cameron	492,780	Mar. 7	10	3, 4	62	1361
Fabrics. Apparatus for steaming, aging, and drying	W. Marher and D. P. Smith	504,602	Sept. 5	473	121	64	1358
Fabrics. Finishing	F. A. Landgraf	494,759	Apr. 4	366		63	73
Fabrics for gloves or the like. Making warp.	S. Spooner	500,165	June 27	2381	578	63	1846
Fabrics. Machine for pressing and finishing textile.	J. Miller	504,228	Aug. 29	3269	{ 816 817 818 }	64	1230
Fabrics. Machine for stretching or removing creases from woven	G. Tilstone	504,001	Aug. 29	2903	{ 727 728 729 }	64	1161
Fabrics. Method of and mechanism for uniting	S. Borton	498,617	May 30	3614	895	63	1327
Fabrics with oil. Machine for flooding	P. Campbell	497,763	May 23	2232	559	63	1068
Face-plate jaw	J. N. Skinner	508,533	Nov. 14	916	225	65	943
Face-protector	J. Bolgiano	494,775	Apr. 4	397	98	63	78
Face-protector	C. Gumeson	505,653	Sept. 26	2263	573	64	1736
Fan	F. J. Agabeg	489,913	Jan. 17	1433	377	62	326
Fan	J. Arthur	507,253	Oct. 24	2485	612	65	503
Fan	S. H. Baer	490,532	Jan. 24	2476	638	62	544
Fan	S. H. Baer	509,835	Nov. 28	3096	747	65	1385
Fan	T. F. Davis	491,407	Feb. 7	575	144	62	858
Fan	G. W. Grimes	499,421	June 13	1147	275	63	1605
Fan	J. H. Irving	492,684	Feb. 28	2590	640	62	1312
Fan	E. Ross	509,249	Nov. 21	2094	504	65	1182
Fan	H. Schener	494,032	Mar. 21	2049	523	62	1787
Fan	W. H. Youngs	495,619	Apr. 18	1764	445	63	362
Fan. Air distributing	A. M. Mitchell	506,059	Oct. 3	401	105	65	78
Fan and motor therefor	G. A. Sneckner and C. E. Roth	497,139	May 9	1202	307	63	853
Fan attachment	G. W. Grimes	500,499	June 27	2879	708	63	1934
Fan. Automatic	S. Gardner	508,299	Nov. 7	519	126	65	854
Fan. Ceiling	F. H. Beers	492,523	Feb. 28	2335	{ 579 580 }	62	1261
Fan. Electric	E. H. Bennett, Jr.	510,466	Dec. 12	1038	248	65	1621
Fan. Electric rotary	J. F. Denison	498,462	May 30	3351	835	63	1282
Fan. Exhaust	J. E. Green	499,673	June 13	1542	371	63	1674
Fan. Exhaust	T. B. Hyde	489,159	Jan. 3	267	74	62	62
Fan. Exhaust	R. Leslie	505,902	Oct. 3	162	42	65	32
Fan. Fly	W. B. Fowler	491,476	Feb. 7	682	172	62	879
Fan. Fly	J. W. Kirkman	491,287	Feb. 7	363	91	62	818
Fan. Fly	D. J. Rogers	506,549	Oct. 10	1300	325	65	260
Fan-motor	C. P. Eliason	506,481	Oct. 10	1202	298	65	241
Fan-motor	W. S. Hill	508,710	Nov. 14	1183	292	65	996
Fan or blower. Exhaust	C. E. Clark	501,407	July 11	1408	353	64	270
Fan or blower. Rotating	F. P. Smith	509,143	Nov. 21	1909	467	65	1148
Fan or blowing apparatus	P. Mortier	507,445	Oct. 24	2808	687	65	566
Fan. Railway	W. M. Robison and W. Magoffin	495,206	Apr. 11	1101	274	63	222
Fan. Railway-car	W. J. Dougherty	510,681	Dec. 12	1432	{ 353 354 }	65	1692
Fan. Revolving	I. D. Boyer	491,006	Jan. 31	3256	832	62	711
Fan. Revolving hand	H. C. Durgin	493,915	Mar. 21	1845	470	62	1748
Fan. Rotary	J. H. Jones	500,005	June 20	2088	506	63	1783
Fan. Rotary	R. Lundell	511,442	Dec. 26	2775	675	65	1964
Fan. Rotary	J. M. Seymour	495,525	Apr. 18	1611	402	63	336

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Fan. Rotary fly.....	M. V. Fitz Water.....	492,596	Feb. 28	2452	610	62	1286
Fan. Vehicle.....	M. H. Trippe.....	491,454	Feb. 7	652	163	62	872
Fans, &c. Driving mechanism for.....	J. J. Harrity, Jr.....	498,389	May 30	3236	805	63	1260
Fans. System of.....	W. F. Healy.....	498,547	May 30	3502	865	63	1308
Fanning-mill.....	T. M. Bales.....	499,952	June 20	2007	487	63	1769
Fanning-mill.....	T. J. Hatfield.....	500,496	June 27	2288	710	63	1936
Fare and time recorder for vehicles.....	W. Norren.....	510,814	Dec. 12	1647	410	65	1733
Fare holder. Car.....	G. J. Fiedler and A. C. Prohl.....	504,026	Aug. 29	2940	735	64	1168
Fare indicator and register.....	F. Erhardt.....	509,799	Nov. 28	3041	735	65	1375
Fare-receiver.....	T. J. King.....	511,703	Dec. 26	3181	778	65	2039
Fare-register.....	F. P. Boyle, J. H. Dundon, and J. E. Boyle.....	491,007	Jan. 31	3258	832	62	711
Fare-register.....	A. H. Dollard.....	506,629	Oct. 10	1413	354	65	283
Fare-register.....	S. C. Houghton.....	496,688	May 2	470	126	63	705
Fare-register.....	C. S. Lewis.....	504,731	Sept. 12	682	174	64	1411
Fare-register.....	C. L. Logan.....	499,746	June 20	1667	401	63	1709
Fare-register. Street-car.....	D. J. Daly.....	506,945	Oct. 17	1780	448	65	363
Fare-registers. Operating device for.....	C. Snyder.....	506,188	Oct. 3	638	163	65	123
Farm-gate.....	R. G. Ellsworth.....	489,469	Jan. 10	759	201	62	175
Farm-gate.....	T. and J. Hohulin.....	509,374	Nov. 28	2311	559	65	1235
Farm-gate.....	J. L. Hoover.....	489,533	Jan. 10	864	226	62	196
Farm-gate.....	D. W. Jewett.....	493,728	Mar. 21	1545	394	62	1691
Farm-gate.....	W. A. Jones.....	494,987	Apr. 4	716	182	63	137
Farm-gate.....	J. M. Keith.....	498,124	May 23	2788	697	63	1166
Farm-gate.....	W. Kennedy.....	503,049	Aug. 8	1355	335	64	831
Farm-gate.....	F. S. and C. E. Meyers.....	497,384	May 16	1620	409	63	943
Farm-gate.....	A. M. Murray.....	503,289	Aug. 15	1758	434	64	916
Farm-gate.....	J. M. Richardson.....	492,698	Feb. 28	2610	646	62	1317
Farm-gate.....	S. S. Sherman.....	505,332	Sept. 19	1677	432	64	1611
Farm-gate.....	J. Wadleigh.....	506,228	Oct. 10	853	210	65	174
Farm-roller.....	H. S. Crediebaugh.....	496,349	Apr. 25	2910	727	63	588
Fastener.....	N. G. Franklin.....	498,846	June 6	173	43	63	1423
Fastener.....	J. Samson.....	495,710	Apr. 18	1917	482	63	3-7
Fastener. Metallic.....	G. W. McGill.....	498,138	May 23	2806	702	63	1169
Fastening.....	J. R. Latham and F. E. Williams.....	508,027	Nov. 7	69	20	65	771
Fastening device.....	J. M. Crews.....	492,193	Feb. 21	1805	450	62	1141
Fastening device.....	M. Frisen.....	493,377	Mar. 14	957	246	62	1562
Fastening device.....	E. D. Pentz.....	497,102	May 9	1143	293	63	843
Fastening device.....	A. B. Schofield.....	490,403	Jan. 24	2268	589	62	504
Fastening device.....	T. Westernman.....	495,537	Apr. 18	1635	410	63	340
Fastening devices. Manufacturing.....	W. H. Berrigan, Jr.....	506,202	Oct. 10	690	174	65	142
Fatty matters. Purifying.....	E. Watel.....	509,589	Nov. 28	2702	653	65	1310
Faucet.....	R. Hagen.....	498,787	June 6	57	13	63	1399
Faucet.....	W. F. Harris.....	503,477	Aug. 15	2059	513	64	969
Faucet.....	C. A. Hitchcock.....	505,105	Sept. 19	1321	341	64	1547
Faucet.....	A. P. Howes.....	493,774	Mar. 21	1617	412	62	1705
Faucet.....	F. M. Mott.....	503,666	Aug. 22	2377	593	64	1043
Faucet.....	H. Reuter.....	511,360	Dec. 26	2623	638	65	1938
Faucet.....	O. Seely.....	496,011	Apr. 25	2372	600	63	487
Faucet.....	H. E. Thomas.....	506,611	Oct. 10	1385	347	65	272
Faucet and vent bung and bushing.....	D. Beebe.....	495,719	Apr. 18	1932	485	63	390
Faucet attachment.....	R. Hagen.....	498,788	June 6	58	13	63	1399
Faucet attachment. Beer.....	T. H. Mehrling.....	498,357	May 30	3191	794	63	1251
Faucet attachment, bung, and bush. Combined.....	D. Beebe.....	495,718	Apr. 18	1930	485	63	3-9
Faucet. Beer.....	C. Guenther.....	499,537	June 13	1336	317	63	1639
Faucet. Filter.....	E. O. Wilson.....	505,340	Sept. 19	1688	435	64	1614
Faucet for soda-water draft apparatus.....	A. D. Puffer, Jr.....	489,325	Jan. 3	522	142	62	113
Faucet-handle.....	T. Lieb.....	494,577	Apr. 4	79	19	63	17
Faucet. Measuring.....	E. Haas.....	508,014	Nov. 7	54	16	65	768
Faucet. Measuring.....	J. A. Hess.....	506,502	Oct. 10	1232	306	65	247
Faucet. Oil-can.....	G. W. Arper.....	497,398	May 16	1640	415	63	946
Faucet. Oil-can.....	G. W. Arper.....	497,399	May 16	1641	415	63	947
Faucet. Oil-can.....	A. H. and T. A. Schlueter.....	509,769	Nov. 28	2984	722	65	1363
Faucets and their keg connections. Apparatus for cleaning liquor.....	J. F. Bollmann.....	501,645	July 18	1767	440	64	383
Feather fur. Treating.....	B. Tausk.....	505,141	Sept. 19	1376	.....	64	1556
Feather-splitting machine.....	F. H. Beers.....	490,468	Jan. 24	2369	613	62	523
Feed apparatus.....	M. S. Burdick.....	497,703	May 16	2126	530	63	1033
Feed apparatus. Automatic.....	G. de Laval.....	503,972	Aug. 29	2852	716	64	1153
Feed-apron.....	G. O. Wickers.....	500,521	June 27	2938	721	63	1945
Feed-bag.....	E. D. Bean.....	495,215	Apr. 11	1115	279	63	225
Feed-bag.....	E. Klahn.....	506,239	Oct. 10	773	191	65	158
Feed-bag.....	D. N. Stock.....	495,278	Apr. 11	1225	306	63	244
Feed-box.....	I. L. Martin.....	493,832	Mar. 21	1711	436	62	1723
Feed-box.....	G. J. Schlosser.....	490,045	Jan. 17	1675	435	62	374
Feed-box.....	H. Snyder.....	496,068	Apr. 25	2465	623	63	504
Feed-cutter.....	J. Butler.....	503,716	Aug. 22	2458	611	64	1058
Feed mechanism.....	W. H. Honiss.....	501,603	July 18	1698	423	64	342
Feed-motion.....	E. J. McClellan.....	502,131	July 25	2547	639	64	510
Feed-rack.....	O. F. Marshal, Jr.....	501,522	July 18	1574	396	64	317
Feed-regulator.....	C. S. Edmonds.....	494,984	Apr. 4	713	181	63	136
Feed-regulator.....	C. S. Edmonds.....	506,773	Oct. 17	1662	417	65	341
Feed-regulator. Automatic.....	K. Dougan.....	504,125	Aug. 29	3094	775	64	1197
Feed-regulator, band-cutter, and spreader. Combined.....	W. Howard.....	501,511	July 18	1557	391	64	314
Feed-roll for opening, picking, and carding machines.....	A. B. Hanscom.....	499,423	June 13	1149	276	63	1605
Feed-roll. Sectional.....	R. M. Gleason.....	501,004	July 4	739	194	64	134
Feed-roller.....	A. M. Vaught.....	492,072	Feb. 21	1606	399	62	1099
Feed-trough.....	G. W. Dunks.....	495,666	Apr. 18	1843	461	63	375
Feed-trough.....	B. S. Higgins.....	489,808	Jan. 10	1263	331	62	277
Feed-trough.....	T. Lewis.....	489,589	Jan. 10	943	245	62	211
Feed-trough.....	M. V. B. Morse.....	493,040	Mar. 7	422	106	62	1442

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Feed-trough	P. Reinhart	499,249	June 13	830	197	63	1549
Feed-trough	J. E. Wenger	494,236	Mar. 28	2397	605	62	1866
Feed-water apparatus	A. Catchpole	496,040	Apr. 25	2415	611	63	495
Feed-water apparatus	W. V. Walker	491,825	Feb. 14	1232	308	62	1010
Feed-water. Device for purifying	J. J. Hoppes and E. C. Gwyn	503,209	Aug. 15	1628	399	64	893
Feed-water heater	W. H. Burk	500,377	June 27	2716	667	63	1905
Feed-water heater	G. H. Conklin	493,981	Mar. 21	1967	502	62	1770
Feed-water heater	A. Miller	492,411	Feb. 28	2148	537	62	1223
Feed-water heater	A. Normand	499,567	June 13	1394	331	63	1646
Feed-water heater and condenser	J. P. Stone	499,946	June 20	1996	485	63	1767
Feed-water heater and purifier	B. F. Field and E. P. Clark	502,035	July 25	2398	603 604	64	511
Feed-water heater and purifier	F. Goodfellow	491,547	Feb. 14	796	202	62	922
Feed-water heater and purifier	F. F. Landis	508,174	Nov. 7	318	79	65	817
Feed-water heater and purifier	R. McDougall	494,302	Mar. 28	2497	630	62	1885
Feed-water heater and purifier	F. C. Perew	492,928	Mar. 7	249	63	62	1408
Feed-water heater. Furnace-mouth	C. W. McDaniel	495,428	Apr. 11	1453	366 367	63	287
Feed-water heater. Steam-boiler	T. C. Best	503,521	Aug. 15	2118	531 532	64	981
Feed-water heaters. Tube-scraper for	G. H. Burpee	502,223	July 25	2701	681	64	539
Feed-water purifier	F. J. Henderson	494,143	Mar. 28	2248	573	62	1839
Feed-water purifier and heater	L. V. Lewis	493,406	Mar. 14	993	256	62	1570
Feed-water-purifier attachment	E. R. Stilwell	510,300	Dec. 5	767	186	65	1555
Feed-water-purifying apparatus	S. G. Cabell	495,242	Apr. 11	1168	292	63	235
Feed-water-purifying apparatus. Boiler-	J. T. C. Knight	510,272	Dec. 5	725	175	65	1547
Feed-water regulator	E. M. Carr	495,302	Apr. 11	1262	315	63	251
Feed-water regulator	C. H. Gersting	500,571	July 4	53	15, 16	64	11
Feed-water regulator	W. Gladstone	504,574	Sept. 5	433	110	64	1350
Feed-water regulator	A. E. Harms	501,834	July 18	2070	511	64	406
Feed-water system for steam-engines	C. C. Worthington	506,805	Oct. 17	1712	431	65	351
Feed-water-utilizing device	O. Schleicher	510,615	Dec. 12	1318	321	65	1671
Feeder. Electric time stock-	H. S. Page and L. Spear	497,203	May 9	1229	328 329	63	869
Feeder. Time stock-	J. H. Carpenter	499,789	Jan. 10	1237	324	62	271
Feeder. Time stock-	D. McQueen	493,219	Mar. 7	690	177	62	1494
Feeder. Time stock-	J. H. Weller	505,180	Sept. 19	1436	370	64	1566
Feeding animals. Receptacle for	N. J. Felix	491,702	Feb. 14	1044	263	62	974
Feeding-cup	L. W. Bacon, Jr.	497,940	May 23	2508	625	63	1116
Feeding device. Automatic	L. Johnstone	507,910	Oct. 31	3596	887 888	65	726
Feeding house. Hog-	P. E. Erickson	493,355	Mar. 14	917	236	62	1553
Felly attachment. Wheel-	E. I. Fisk	508,927	Nov. 21	1557	381	65	1080
Felly-boring and spoke-tenoning machine	G. W. McAlister	491,582	Feb. 14	852	216	62	934
Felly. Wheel-	W. W. Stall	509,259	Nov. 21	2109	508	65	1186
Felly. Wheel-	W. W. Stall	509,261	Nov. 21	2112	508	65	1186
Felted woolen net for undergarments	F. J. H. Clement	494,669	Apr. 4	222	55, 56	63	45
Felting-machine	J. W. Millet	491,901	Feb. 14	1354	336 337	62	1034
Fence	J. A. E. Anderson	502,343	Aug. 1	159	37	64	595
Fence	L. P. Biggers	510,767	Dec. 12	1573	392	65	1719
Fence	N. Bowsman	505,434	Sept. 26	1853	477	64	1658
Fence	G. J. Cline	490,946	Jan. 31	3163	810	62	693
Fence	W. Commeans	492,784	Mar. 7	17	5	62	1362
Fence	C. Crabbs	492,901	Mar. 7	205	50	62	1399
Fence	J. E. Dusang	504,570	Sept. 5	428	108 109	64	1349
Fence	D. D. Frisbie	508,297	Nov. 7	517	125	65	854
Fence	J. S. Hamilton	501,341	July 11	1299	324	64	250
Fence	H. Hansbarger	505,357	Sept. 19	1717	443	64	1619
Fence	W. J. Johnston	499,462	June 13	1213	289	63	1617
Fence	J. E. Kline	491,180	Feb. 7	198	51	62	785
Fence	G. M. and H. R. Lamb	496,087	Apr. 25	244	629	63	509
Fence	W. N. Lane	508,889	Nov. 14	1450	359	65	1045
Fence	N. McAdams	511,309	Dec. 19	2527	615	65	1906
Fence	J. B. McClure	497,410	May 16	1660	419	63	950
Fence	J. F. Ogletree	490,162	Jan. 17	1864	486	62	413
Fence	I. P. Osborn	500,032	June 20	2131	517	63	1790
Fence	J. T. Patton	500,033	June 20	2132	517	63	1790
Fence	F. P. Rosback and H. F. Band	492,876	Mar. 7	167	40	62	1391
Fence	F. P. Rosback and H. F. Band	511,063	Dec. 19	2109	521	65	1828
Fence	W. P. Sharp	493,527	Mar. 14	1200	306	62	1606
Fence	J. C. Simmons	492,115	Feb. 21	1677	418	62	1113
Fence	G. N. Small	506,559	Oct. 10	1316	329	65	264
Fence	C. H. Van Wagoner	507,697	Oct. 31	3254	716	65	662
Fence	C. Walling and W. T. Metcalf	495,076	Apr. 11	856	219	63	179
Fence	P. W. Weidmann	497,996	May 23	2592	648	63	1131
Fence	C. C. Wheeler	493,458	Mar. 14	1085	278	62	1586
Fence	J. E. Whitacre	503,631	Aug. 22	2326	580	64	1033
Fence	E. G. Williams	508,359	Nov. 7	620	152	65	873
Fence and means for securing tension thereon. Wire	P. Mast	508,957	Nov. 21	1605	394	65	1089
Fence and stay	D. Bryan	502,345	Aug. 1	161	37	64	596
Fence and tightener. Wire	C. H. Brunk	508,465	Nov. 14	793	196	65	919
Fence-building device	W. S. Coulter	499,154	Jan. 3	261	72	62	61
Fence-building machine	B. O. Johnson	500,004	June 20	2086	505	63	1783
Fence. Farm-	R. B. and J. Duncan	504,025	Aug. 29	2939	735	64	1167
Fence. Flood-	J. J. Campbell	492,136	Feb. 21	1709	425	62	1121
Fence. Flood-	F. B. Greer	504,346	Sept. 5	51	14	64	1280
Fence. Flood-	G. W. Ramsburg	492,232	Feb. 21	1871	467	62	1154
Fence. Folding	W. Purling	492,614	Feb. 28	2486	617	62	1292
Fence gate. Wire-	J. M. Bolton	507,779	Oct. 31	3357	829	65	687
Fence gate. Wire-	J. Patrick	496,465	May 2	143	40	63	645
Fence. Hedge-	B. R. Kirkpatrick	509,812	Nov. 28	3063	739	65	1379
Fence. Hedge-	F. J. Troxell	502,058	July 25	2435	613	64	487

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Fence-joint	J. T. Ward	502,840	Aug. 8	1017	248	64	768
Fence lock and stay. Wire	G. S. Bartholomew	501,240	July 11	1123	285	64	219
Fence-machine	A. A. Cushman and J. N. Parcell	505,876	Oct. 3	116	29	65	23
Fence-machine	I. M. Warner	504,642	Sept. 5	525	135	64	1369
Fence-machine. Hand	M. F. Connett, Jr.	491,770	Feb. 14	1152	288	62	994
Fence-machine. Hand	J. H. Pivonka	508,836	Nov. 14	1368	338	65	1030
Fence-machine. Picket-wiring	M. F. Connett	494,537	Mar. 28	2883	723	62	1955
Fence-machine reel	H. D. Robinson	496,283	Apr. 25	2789	697	63	565
Fence-machine. Slat-and-wire	G. Beeler	489,139	Jan. 3	238	66	62	55
Fence-machine. Slat-and-wire	N. F. Stanton	504,371	Sept. 5	94	24	64	1278
Fence-machine. Slat-and-wire	B. A. Welds	501,636	July 18	1756	437	64	406
Fence-machine. Wire	H. Brown	505,812	Oct. 3	13	4	65	5
Fence-machine. Wire	J. W. Dwiggins	494,983	Apr. 4	711	181	63	136
Fence-machine. Wire	J. and C. Lane	492,214	Feb. 21	1839	460	62	1148
Fence-machine. Wire	J. B. McKnight and J. L. Garland	494,589	Apr. 4	103	24	63	22
Fence-machine. Wire	J. A. Mitchell	504,991	Sept. 12	1131	290	64	1497
Fence-machine. Wire	W. N. Parrish	511,059	Dec. 19	2104	520	65	1827
Fence-machine. Wire	P. Trick	495,533	Apr. 18	1627	409	63	339
Fence-machine. Wire	W. D. Whitney	505,890	Oct. 3	144	37, 38	65	28
Fence-machine. Wire	A. B. Woodard	508,074	Nov. 7	151	43, 44	65	766
Fence-machine. Wire-and-picket	J. W. Martin	506,826	Oct. 17	1751	440	65	357
Fence-machine. Wire-and-picket	G. R. Reniff and G. W. Tucker	498,306	May 30	3105	773	63	1236
Fence-machines. Electric welder for wire	J. D. Curtis	495,626	Apr. 18	1777	447	63	364
Fence. Metal	W. Warner	491,826	Feb. 14	1233	308	62	1011
Fence. Portable	H. Knece	500,397	June 27	2746	676	63	1911
Fence-post	S. P. Babcock	500,183	June 27	2412	587	63	1851
Fence-post	H. J. Banta	489,116	Jan. 3	208	55	62	48
Fence-post	W. M. Black	504,658	Sept. 5	549	140	64	1374
Fence-post	H. Brown	495,471	Apr. 18	1534	384	63	322
Fence-post	H. Brown	505,811	Oct. 3	12	3	65	5
Fence-post	H. B. Camp	505,156	Sept. 19	1400	359	64	1560
Fence-post	G. J. Goodwin and J. Polly	497,872	May 23	2404	599	63	1098
Fence-post	J. B. Gowdy	500,883	July 4	554	144	64	101
Fence-post	A. C. Harrison	502,623	Aug. 1	627	150	64	682
Fence-post	R. C. Haynes	496,360	Apr. 25	2934	733	63	593
Fence-post	J. E. Hodson	492,088	Feb. 21	1638	407	62	1106
Fence-post	W. H. Hunt and C. O. Morris	500,392	June 27	2741	674	63	1910
Fence-post	R. W. Johnson	498,796	June 6	74	18	63	1402
Fence-post	W. C. Kilner	510,030	Dec. 5	324	72	65	1470
Fence-post	J. D. Paldi	505,367	Sept. 19	1737	450	64	1622
Fence-post	D. and S. Port and C. V. Baird	505,672	Sept. 26	2296	582	64	1741
Fence-post	W. H. Ringle	489,986	Jan. 17	1571	411	62	353
Fence-post	B. F. Thomas	501,747	July 18	1940	480	64	383
Fence-post	C. H. Van Wagoner	500,635	July 4	159	41	64	32
Fence-post	C. D. Wright	510,625	Dec. 12	1334	327	65	1674
Fence-post driver	L. H. Ketcham	500,138	June 27	2335	564	63	1838
Fence-post driver	H. Volbach	504,762	Sept. 12	746	186	64	1424
Fence-post-driving machine	E. Mohr	495,747	Apr. 18	1973	498	63	398
Fence-posts. Device for applying wires to	E. F. Pittman	510,933	Dec. 19	1906	466	65	1791
Fence-posts, poles, &c. Attachment-holder device for	E. S. Bradford	507,966	Oct. 31	3688	916	65	743
Fence-railings. Plugging-bench for making metallic	T. Henshaw	506,431	Oct. 10	1109	275	65	224
Fence ratchet. Wire	J. Stauffer	499,260	June 13	846	203	63	1551
Fence stay. Wire	J. H. Brower	505,810	Oct. 3	11	3	65	5
Fence stay. Wire	W. Van Horn	505,146	Sept. 19	1385	355	64	1557
Fence strands. Implement for tightening wire	E. G. Rogers	507,454	Oct. 24	2820	690	65	569
Fence-strip	J. D. Curtis	494,551	Apr. 4	25	6	63	7
Fence tension device. Wire	P. Hack	490,073	Jan. 17	1717	448	62	382
Fence. Wire	A. B. Boggs	508,082	Nov. 7	166	47	65	789
Fence. Wire	J. and J. S. Click	508,087	Nov. 7	183	49	65	792
Fence. Wire	A. E. Cody	504,709	Sept. 12	652	165	64	1405
Fence. Wire	G. M. Depew	495,029	Apr. 11	75	199	63	165
Fence. Wire	J. A. Grove	509,731	Nov. 28	2927	708	65	1352
Fence. Wire	H. Haynes	510,257	Dec. 5	700	169	65	1542
Fence. Wire	I. K. Hollinger	502,076	July 25	2462	619	64	493
Fence. Wire	A. M. Kuhns	502,977	Aug. 8	1257	308	64	811
Fence. Wire	G. Leiberger	497,523	May 16	1845	465	63	982
Fence. Wire	E. H. McCreedy	491,440	Feb. 7	624	156	62	867
Fence. Wire	H. D. Miller	510,040	Dec. 5	337	75	65	1473
Fence. Wire	O. C. and P. B. Moreland	509,755	Nov. 28	2963	717	65	1359
Fence. Wire	W. A. Norris	511,449	Dec. 26	2788	674	65	1967
Fence. Wire	M. J. Page	498,296	May 30	3090	770	63	1234
Fence. Wire	J. L. Riter	506,256	Oct. 10	797	197	65	163
Fence. Wire	J. L. Riter	506,257	Oct. 10	797	197	65	163
Fence. Wire	J. L. Riter	506,258	Oct. 10	798	197	65	163
Fence. Wire	J. L. Riter	506,259	Oct. 10	799	198	65	161
Fence. Wire	J. L. Riter	511,458	Dec. 26	2799	677	65	1969
Fence. Wire	D. Rogers	509,102	Nov. 21	1846	452	65	1136
Fence. Wire	J. M. Shamp	507,599	Oct. 31	3094	755	65	631
Fence. Wire	M. M. Shellabarger	501,216	July 11	1087	276	64	214
Fence. Wire	M. M. Shellabarger	506,378	Oct. 10	1015	253	65	205
Fence. Wire	P. J. and P. W. Sommer	503,219	Aug. 15	1646	404	64	896
Fence. Wire	W. Tibbals	504,057	Aug. 29	2985	746	64	1176
Fence. Wire	E. A. Vance	505,781	Sept. 26	2475	624	64	1775
Fence-wire. Machine for stretching and removing	W. M. Barger	495,873	Apr. 18	2173	546	63	433
Fence-wire ratchet	J. B. Morris	509,580	Nov. 28	2690	651	65	1308
Fence-wire reel	S. Moore	491,849	Feb. 14	1273	315	62	1018
Fence-wire reel	W. J. and J. M. Opper	511,542	Dec. 26	2924	712	65	1993
Fence-wire-reel carrier	C. S. Howard	495,156	Apr. 11	1029	256	63	208
Fence-wire stay	D. H. Royer	509,493	Nov. 28	2554	617	65	1282
Fence-wire strands. Implement for tightening	J. Whittaker	492,617	Feb. 25	2489	617	62	1293
Fence-wire stretcher	F. Durr	492,278	Feb. 21	1936	483	62	1168

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Fence-wire tension device.	O. S. and G. S. Pike	504,051	Aug. 29	2976	744	64	1174
Fence-wires. Means for securing.	C. H. Van Wagoner	511,378	Dec. 26	2664	646	65	1946
Fences. Apparatus for taking up the slack of wire.	D. W. Housley	509,034	Nov. 21	1718	425	65	1112
Fences. Apparatus for wiring wood.	J. L. Butler	492,323	Feb. 21	2001	498	62	1182
Fences. Machine for attaching cross-wires in wire.	H. A. King and A. J. Wright	490,600	Jan. 24	2572	663	62	563
Fences. Machine for tying cross-wires in wire.	J. R. Kelly	490,442	Jan. 24	2321	602 603	62	513
Fences. Machine for tying cross-wires in wire.	J. R. and P. P. Kelly	506,638	Oct. 10	1424	357	65	286
Fences. Machine for weaving cross-wires in.	H. Carter	498,459	May 30	3347	834	63	1281
Fencing. Barbed.	T. V. Allis	501,129	July 11	956	244	64	189
Fencing. Barbed-wire.	A. Delifs	490,187	Jan. 17	1902	495	62	420
Fencing-machine.	J. A. Barbrey	490,261	Jan. 24	2032	532	62	457
Fencing. Machine for making wire.	P., J., and P. W. Sommer	490,775	Jan. 31	2878	739 740	62	637
Fencing. Machine for making wire-and-slat.	H. Ellar	509,725	Nov. 28	2916	705	65	1350
Fencing machine. Slat-and-wire.	J. B. and J. E. Solt	499,353	June 13	1021	246 247	63	1583
Fencing machine. Wire.	J. S. and H. Phillips.	510,704	Dec. 12	1464	362	65	1698
Fencing machine. Wire-and-picket.	H. J. Gebhardt	503,207	Aug. 15	1621	398 399	64	892
Fencing. Making barbed.	T. V. Allis	505,693	Sept. 26	2336	592	64	1749
Fencing. Making barbed.	T. V. Allis	507,198	Oct. 24	2398	591	65	487
Fencing. Making barbed.	E. Jordan	505,708	Sept. 26	2359	596	64	1753
Fencing. Making barbed.	E. Jordan	507,227	Oct. 24	2442	602	65	495
Fencing. Making barbed.	J. H. Templin	507,182	Oct. 24	2366	584	65	482
Fencing. Making barbed.	J. H. Templin	507,183	Oct. 24	2367	584	65	483
Fencing. Making barbed.	J. H. Templin	507,184	Oct. 24	2369	585	65	483
Fencing. Making barbed.	J. H. Templin	507,185	Oct. 24	2770	585	65	483
Fencing. Making barbed.	J. H. Templin	507,186	Oct. 24	2371	585	65	483
Fencing. Making metallic.	T. V. Allis	507,197	Oct. 24	2395	590	65	487
Fencing. Metallic.	I. L. Ellwood	502,512	Aug. 1	445	107	64	648
Fencing strand and making same. Wire.	A. B. Woodard	509,343	Nov. 21	2253	545	65	1213
Fencing-tool.	G. W. Burns	506,155	Oct. 3	563	146	65	109
Fencing-wire.	T. Guillaume	496,974	May 9	945	248	63	807
Fencing-wire. Implement for tightening and splicing.	E. G. Sessions and L. B. Embrey	510,299	Dec. 5	765	186	65	1554
Fender.							
See Car-fender.	Plow-fender.						
Car safety-fender.	Wheel-fender.						
Gin-saw fender.							
Fender.	J. P. Rowan	503,331	Aug. 15	1837	455	64	930
Fender attachment.	J. T. T. Kisinger, Jr.	503,242	Aug. 15	1678	412	64	902
Ferroferric and ferric oxides. Apparatus for producing.	A. Crossley and J. W. Jones.	491,055	Feb. 7	36	9,10	62	755
Ferrule.	W. H. Gaskill	497,274	May 9	1408	356	63	889
Ferrule.	F. Latulip. (Reissue).	11,357	Aug. 8	1472	361	64	851
Ferrule. Interlocking-joint.	J. B. Thurston	505,579	Sept. 26	2135	541	64	1712
Ferrule. Plumber's.	C. A. Cotter	494,413	Mar. 28	2681	673	62	1919
Ferrule. Umbrella.	F. S. Chase	510,159	Dec. 5	535	123	65	1511
Fertilizer.	M. A. Goloseieff	500,100	June 20	2234		63	1808
Fertilizer and making same. Nitrogenous.	C. J. Greenstreet	508,220	Nov. 7	397		65	832
Fertilizer-distributor.	R. Galloway	496,560	May 2	267	71	63	668
Fertilizer-distributor.	W. Johnson	497,182	May 9	1266	321	63	864
Fertilizer-distributor.	T. H. Lake and R. W. Dickson	489,313	Jan. 3	507	139	62	110
Fertilizer-distributor.	F. W. Ohlinger	507,923	Oct. 31	3620	894	65	730
Fertilizer distributor and cotton-planter.	J. Blue	507,985	Nov. 7	13	4	65	761
Fertilizer-distributor and grain-drill.	L. I. and J. M. Bodenhamer	500,557	July 4	33	11	64	8
Fertilizer-distributing attachment for land-rollers.	H. J. Coe	510,408	Dec. 12	936	225	65	1602
Fertilizer from tank-water. Making.	O. T. Joslin	489,010	Jan. 3	50		62	13
Fertilizer from tank-water. Making.	O. T. Joslin	495,042	Apr. 11	805		63	169
Fertilizer from tank-water. Making.	O. T. Joslin	495,043	Apr. 11	806		63	169
Fertilizer or insecticide distributor.	D. J. Manning	491,318	Feb. 7	429	111	62	829
Fertilizer pulverizer and distributor.	A. W. McConnell	509,933	Dec. 5	147	34	65	1437
Fiber-cleaning machine.	W. A. Keene	509,314	Nov. 21	2202	532	65	1204
Fiber from fibrous plants. Machine for extracting.	J. J. Weicher	506,866	Oct. 17	1809	454	65	367
Fiber. Machine for cleaning vegetable.	T. Villamor	492,173	Feb. 21	1772	442	62	1134
Fiber-separating machine.	S. B. Allison	493,852	Mar. 21	1741	443 444	62	1729
Fibers. Apparatus for distributing oil, &c., upon.	F. Spivey and C. Halmshaw	499,603	June 13	1436	344	63	1656
Fibers. Apparatus for treating vegetable.	C. Wetherwax	501,124	July 11	952	243	64	188
Fibers. Machine for feeding textile.	A. H. Morton	506,713	Oct. 17	1556	390	65	321
Fibers. Machine for hackling and preparing.	T. B. Allen	504,648	Sept. 5	535	137	64	1371
Fibers. Manufacture of colored tops or slivers from combed animal.	E. Maertens	507,232	Oct. 24	2453	604	65	498
Fibers. Process of and apparatus for treating textile.	E. Maertens	509,351	Nov. 21	2262	547 548 549 550	65	1215
Fibers. Softening vegetable.	W. H. L. Jones and G. C. Warr	507,225	Oct. 24	2441		65	495
Fibers. Softening vegetable.	W. H. L. Jones and G. C. Warr	507,501	Oct. 24	2901		65	583
Fibrous material. Machine for opening and cleaning.	M. T. Wadlin	494,500	Mar. 28	2815	706	62	1944
Fibrous material. Machine for treating.	B. Adriance and G. E. Armstrong	499,409	June 13	1121	269 270	63	1600
Fibrous materials. Apparatus for imparting variable motion to the traverse-rods in machines for preparing and spinning.	W. H. Cook and J. Harrison	500,113	June 27	2360	556	63	1824
Fibrous materials. Machinery for spreading and drawing.	J. Good	497,237	May 9	1343	342	63	879
Fibrous materials for preserving same. Treating.	J. D. Cheever	504,199	Aug. 29	3225		64	1222
Fibrous plants, &c. Apparatus for treating.	W. T. Forbes	510,168	Dec. 5	545	126 127	65	1513
Fibrous substances. Evening mechanism for machines for opening, carding, and drawing.	H. A. Davis	495,609	Apr. 18	1745	440	63	559
Field-roller.	J. S. Weekman	503,629	Aug. 22	2323	579	64	1033
Fifth-wheel.	T. L. Bosart	503,643	Aug. 22	2342	585	64	1036
Fifth-wheel.	M. J. Delaney	507,422	Oct. 24	2771	679	65	559

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Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fifth-wheel	F. W. Miller	499,791	June 20	1746	422	63	1723
Fifth-wheel	W. A. Paterson	490,452	Jan. 24	2338	423	62	517
Fifth-wheel	D. A. Plecker	495,833	Apr. 18	2107	530	63	422
Fifth-wheel	H. Snowman	507,602	Oct. 31	3099	757	65	633
Fifth-wheel	G. B. St. John	503,177	Aug. 15	1578	388	64	884
Fifth-wheel	H. C. Swan	503,917	Aug. 22	2748	689	64	1116
Fifth-wheel	C. R. Turner	505,616	Sept. 26	2192	554	64	1723
Fifth-wheel	S. Van Slyke	501,549	July 18	1622	406	64	328
Fifth-wheel	E. V. Wagner and S. H. Penquite	504,640	Sept. 5	523	135	64	1369
Fifth-wheel	J. S. Young	493,324	Mar. 14	82	225	62	1546
Fifth-wheel coupling. Vehicle	J. J. Fetzter	492,719	Feb. 28	2642	654	62	1324
Fifth-wheel. Spring-vehicle	A. Schubert	506,376	Oct. 10	1010	251	65	204
File	J. W. Hine	504,782	Sept. 12	783	198	64	1430
File	O. Huff	507,071	Oct. 17	2143	531	65	429
File	J. F. Wilmot	496,214	Apr. 25	2683	673	63	545
File and manufacture of same. Clamp	A. Dom	491,011	Jan. 31	3263	833	62	712
File. Bill	C. H. Kilmer	493,433	Mar. 14	1037	267	62	1578
File. Bill	A. Quortrup	491,905	Feb. 14	1359	338	62	1035
File cabinet. Letter	B. Brower	490,099	Jan. 17	1759	459	62	391
File-case	R. L. Brown	498,926	June 6	317	74, 75	63	1448
File case and drawer	C. Kiel	498,012	May 23	2620	654	63	1136
File-case binder	A. Dom	498,744	May 30	3853	949	63	1369
File-cases. Flexible cover for	P. J. Pauly, Jr	500,419	June 27	2778	684	63	1916
File-cases. Temporary binder for	A. Dom	491,473	Feb. 7	679	171	62	878
File-cutting machine	F. W. Lowe	506,053	Oct. 3	389	102	65	76
File-cutting machine	G. Schmidt	509,949	Dec. 5	168	39, 40	65	1441
File-fastening	H. Goldman	507,899	Oct. 31	3579	882	65	722
File for letters, bills, accounts, &c	A. H. Swank	501,745	July 18	1938	479	64	383
File for pointing lead-pencils, &c	E. J. Koester	511,338	Dec. 26	2583	629	65	1930
File gage and clamp	J. Storm	492,065	Feb. 21	1597	397	62	1097
File-holder	J. C. Keefe	507,223	Oct. 24	2444	602	65	496
File-holder	A. W. Taylor	494,498	Mar. 28	2814	705	62	1943
File-holder. Automatic	R. Thomson	497,993	May 23	2589	648	63	1131
File-holder. Index	J. L. Norman	489,686	Jan. 10	1072	279	62	239
File holder or drawer	D. A. Alden	499,001	June 6	454	106	63	1470
File. Letter	V. Astier	493,960	Mar. 21	1935	493	62	1764
File. Letter	J. Lochmann	510,350	Dec. 5	835	201	65	1568
File. Letter	E. H. Stafford and F. Field	503,915	Aug. 22	2746	688	64	1115
File. Letter	A. Tengwall	491,266	Feb. 7	324	82	62	811
File. Letter	O. F. Tiffany and W. L. Brewer	509,972	Dec. 5	210	49	65	1449
File. Letter or bill	W. O. Gottwals	493,024	Mar. 7	400	100	62	1437
File. Letter or bill	W. Lumley	499,433	June 13	1166	279	63	1608
File. Newspaper	W. S. Edwards	489,074	Jan. 3	139	39	62	34
File. Newspaper	A. Hecht and W. R. Fechner	489,901	Jan. 10	1406	364	62	304
File or index. Continuous	A. J. Rudolph	499,443	June 13	1183	282	63	1611
File. Paper	W. H. Albee	500,837	July 4	485	127	64	88
File. Paper	C. H. Besly	490,707	Jan. 31	2773	712	62	618
File. Paper	A. J. Delp	498,349	May 30	3181	792	63	1249
File. Paper	A. Dom	506,191	Oct. 3	643	164	65	124
File. Paper	C. H. Farmer	497,538	May 16	1868	471	63	986
File. Paper	G. W. Mills	490,155	Jan. 17	1853	483	62	411
File. Paper	T. Waring	501,751	July 18	1946	482	64	384
File. Pattern	R. J. Ewig	498,541	May 30	3488	863	63	1305
Filing-cabinet	R. Miller	498,283	May 30	3052	759	63	1227
Fillet	T. C. Belding	508,399	Nov. 14	698	171	65	901
Filling-indicator	N. Johnson	509,170	Nov. 21	1949	476	65	1156
Filling-machine. Power	J. J. Chavasse	501,055	July 11	821	214	64	165
Film-cutter	A. Delug	504,062	Aug. 29	2991	747	64	1177
Film measuring and cutting device	F. J. Harrison	492,354	Feb. 21	2053	512	62	1192
Films. Treating	E. W. Foxlee	495,458	Apr. 11	1503		63	295
Filter	E. Adam and M. O. Rehfuess	510,756	Dec. 12	1555	388	65	1716
Filter	J. H. Bellamy	494,837	Apr. 4	506	127	63	98
Filter	J. E. Bright	506,304	Oct. 10	873	215	65	178
Filter	F. A. Bunnell	492,134	Feb. 21	1707	425	62	1120
Filter	E. F. Burch	506,666	Oct. 17	1477	371	65	307
Filter	W. E. Caddell	502,030	July 25	2389	601	64	479
Filter	C. C. Froelich, W. Lorey, and H. Guenther	498,544	May 30	3492	864	63	1306
Filter	J. E. Hill	492,161	Feb. 21	1757	438	62	1131
Filter	E. P. Hunt	504,434	Sept. 5	200	51	64	1308
Filter	O. H. and I. H. Jewell	509,126	Nov. 21	1886	461	65	1143
Filter	E. M. Knight	494,426	Mar. 28	2697	677	62	1922
Filter	E. M. Knight	498,276	May 30	3045	757	63	1236
Filter	J. Kraker	498,747	Jan. 10	1175	306	62	258
Filter	M. Kraker	509,740	Nov. 28	2940	711	65	1354
Filter	M. Kraker	509,741	Nov. 28	2942	712	65	1355
Filter	K. V. R. Lansingh	496,614	May 2	348	67	63	683
Filter	H. Lieberich	491,574	Feb. 14	843	213	62	932
Filter	B. Medina-Santurio	509,441	Nov. 28	2460	592	65	1264
Filter	J. M. Morgan	489,084	Jan. 3	152	42	62	37
Filter	S. L. Morrison	497,807	May 23	2286	575	63	1078
Filter	J. M. Skinner	508,440	Nov. 14	753	186	65	912
Filter	T. G. Sortor	497,354	May 16	1578	397	63	934
Filter	A. D. Strong	498,586	May 30	3554	882	63	1317
Filter	H. H. Teeter	497,991	May 23	2587	647	63	1130
Filter	F. K. Way	497,481	May 16	1774	447	63	969
Filter	A. Werner	490,520	Jan. 24	2456	633	62	541
Filter	A. Williams	499,815	June 20	1788	434	63	1730
Filter and cooler	F. E. Cady	500,737	July 4	329	88	64	62
Filter. Artificial-stone	J. F. Fischer and O. Peters	509,887	Dec. 5	69	17	65	1423

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Filter. Bag.....	T. O. Easton, A. Watt, and J. Buchanan, Jr.	502,511	Aug. 1	442	{ 106 107 }	64	648
Filter. Cistern.....	J. H. Pittman	506,723	Oct. 17	1577	395	65	325
Filter. Fresh-water.....	R. R. and C. B. Darling	499,284	June 13	889	215	63	1559
Filter. Liquid.....	J. Ellis	507,893	Oct. 31	3568	878	65	721
Filter. Non-pressure.....	F. K. Way	499,268	June 13	859	206	63	1553
Filter. Oil.....	A. C. Darragh	493,073	Mar. 7	465	117	62	1451
Filter. Oil.....	F. A. Nusbaum	493,644	Mar. 21	1406	{ 356 357 }	62	1663
Filter. Pressure.....	C. C. Burke	499,515	June 13	1306	307	63	1633
Filter. Pressure water.....	L. W. Mozingo	492,501	Feb. 28	2307	572	62	1255
Filter. Self-cleansing.....	O. André	502,690	Aug. 1	754	182	64	704
Filter. Water.....	W. B. Benham	498,967	June 6	383	91	63	1459
Filter. Water.....	O. Eastman	509,596	Nov. 28	2712	656	65	1312
Filter. Water.....	W. R. Hanks	503,597	Aug. 22	2262	566	64	1022
Filter. Water.....	A. H. Kohlmeier	510,348	Dec. 5	833	201	65	1568
Filter. Water.....	C. K. Lamb	511,149	Dec. 19	2264	555	65	1859
Filter. Water.....	B. Martin	493,633	Mar. 21	1388	352	62	1660
Filter. Water.....	J. E. Welling	489,354	Jan. 3	569	154	62	132
Filter. Water.....	J. B. and J. F. Ziegler	510,666	Dec. 12	1408	{ 346 347 }	65	1688
Filters. Collecting-tube for.....	G. H. Moore	493,937	Mar. 21	1880	479	62	1755
Filters. Collecting-tube for.....	G. H. Moore	493,938	Mar. 21	1883	{ 479 480 }	62	1756
Filtering and cooling water. Means for.....	J. M. Bruce	500,528	June 27	2944	723	63	1947
Filtering and sterilizing apparatus.....	J. H. Eickershoff	507,264	Oct. 24	2505	617	65	507
Filtering apparatus.....	S. M. Malhiot	506,127	Oct. 3	512	133	65	100
Filtering apparatus for beer or wine.....	J. Hornung	499,833	June 20	1824	{ 443 444 }	63	1736
Filtering apparatus. Water.....	D. A. Rankine	502,583	Aug. 1	560	134	64	669
Filtering or purifying apparatus.....	C. Michel	507,024	Oct. 17	2066	510	65	417
Finger-moistener.....	H. T. Marshall	500,339	June 27	2660	652	63	1895
Finger or toe nail cutter.....	E. T. Mason	504,601	Sept. 5	472	121	64	1358
Finger-protector.....	T. Armat	490,733	Jan. 31	2811	721	62	625
Finger-ring.....	M. E. Oppenheimer	499,928	June 20	1975	480	63	1763
Finger-ring. Convertible.....	L. Gumbart	498,648	May 30	3670	908	63	1337
Finger-tips. Device for reducing distorted.....	F. B. Dante	500,656	June 20	2171	528	63	1797
Fire-alarm.....	C. E. Egan	496,869	May 9	777	206	63	777
Fire-alarm.....	D. Hewitt	500,329	June 27	2646	647	63	1893
Fire-alarm.....	A. Krastin	505,634	Oct. 3	50	13	65	12
Fire-alarm.....	L. L. Maxfield and J. H. Darlington	505,987	Oct. 3	293	75	65	57
Fire-alarm.....	W. J. Schweiger	489,237	Jan. 3	394	109	62	88
Fire-alarm and individual electric call.....	J. Young	503,187	Aug. 15	1592	203	64	735
Fire-alarm apparatus.....	S. W. Ludlow	502,734	Aug. 8	838	472	64	942
Fire-alarm. Automatic.....	F. H. Bolte	506,096	Oct. 3	459	120	65	90
Fire-alarm. Automatic.....	J. Havard	501,653	July 18	1781	444	64	356
Fire-alarm box.....	J. G. Kraetz	503,376	Aug. 15	1906	391	64	887
Fire-alarm. Electric.....	C. Bernhardt	501,905	July 18	2189	544	64	426
Fire-alarm. Electric.....	M. C. Cantrell	510,115	Dec. 5	462	104	65	1497
Fire-alarm signal-box.....	J. M. Gardiner	509,573	Nov. 28	2681	649	65	1306
Fire-alarm system.....	H. T. Downs	505,819	Oct. 3	28	8	65	8
Fire-alarm system.....	J. Sachs	498,448	May 30	3327	628	63	1277
Fire-alarm system. Automatic.....	G. W. Brown	506,582	Oct. 10	1349	{ 338 339 }	65	271
Fire-alarm systems. Electric signal for.....	J. Sachs	502,207	July 25	2673	675	64	534
Fire-alarm telegraph.....	C. H. Rudd	511,462	Dec. 26	2803	678	65	1970
Fire-alarm-telegraph repeater.....	T. F. Gaynor	509,216	Nov. 21	2024	{ 491 492 }	65	1171
Fire-alarm telegraphs. Non-interference-signal-box mechanism for.....	T. F. Gaynor	509,219	Nov. 21	2045	494	65	1174
Fire-alarm-whistle valve.....	G. W. Brown	489,215	Jan. 3	359	{ 100 101 }	62	81
Fire and burglar alarm.....	R. I. Levin	508,954	Nov. 21	1601	392	65	1088
Fire and stable alarm and horse-releaser. Electric.....	A. R. Holmes	507,322	Oct. 24	2610	642	65	527
Fire and water proof fabrics. Making.....	H. A. Claasen	496,599	May 2	322		63	678
Fire apparatus.....	M. A. Pauly	490,496	Jan. 24	2420	625	62	534
Firearm.....	H. A. Briggs and C. W. Hopkins	429,366	Jan. 3	588	158	62	126
Firearm.....	D. Conner	493,352	Mar. 14	915	235	62	1553
Firearm. Breech-loading.....	G. H. Garrison	509,727	Nov. 28	2918	706	65	1350
Firearm. Breech-loading.....	J. M. Browning	511,677	Dec. 26	3143	769	65	2032
Firearm. Breech-loading.....	M. Bye and E. G. Parry	490,065	Jan. 17	1705	445	62	379
Firearm. Breech-loading.....	W. Mason	511,631	Dec. 26	3077	752	65	2020
Firearm. Breech-loading.....	W. Mason	511,633	Dec. 26	3080	752	65	2020
Firearm. Breech-loading.....	C. M. Wollam	498,043	May 23	2608	{ 667 668 }	63	1144
Firearm. Magazine.....	J. M. Browning	499,005	June 6	462	108	63	1472
Firearm. Magazine.....	J. M. Browning	499,007	June 6	468	{ 109 110 111 }	63	1473
Firearm. Magazine.....	J. M. and M. S. Browning	492,459	Feb. 28	2324	{ 556 557 }	62	1239
Firearm. Magazine.....	A. W. Savage	491,138	Feb. 7	115	31, 32	62	771
Firearm magazine-case.....	J. P. Lee	506,323	Oct. 10	917	227	65	187
Firearm-rack.....	J. A. Meadows	505,320	Sept. 19	1662	429	64	1609
Firearm recoil-check.....	J. W. Tredway and J. Wirth	490,129	Jan. 17	1815	474	62	404
Firearm safety-catch.....	C. W. Hopkins and J. Boland	505,569	Sept. 26	2119	536	64	1709
Firearm shot-spreader.....	J. N. Hall	497,874	May 23	2406	600	63	1099
Firearm-sight.....	E. G. Latta	507,278	Oct. 24	2527	{ 623 624 }	65	510
Firearms. Breech-bolt for.....	K. Krnka	495,741	Apr. 18	1964	495	63	396
Firearms. Magazine-catch for magazine.....	J. M. and M. S. Browning	499,006	June 6	465	109	63	1472
Firearms. Straight-pull breech-bolt for.....	O. H. J. Krag and E. Jørgensen	502,727	Aug. 8	831	201	64	733
Fire-back.....	J. G. Sheldon	505,237	Sept. 19	1519	397	64	1582
Fire-box.....	F. V. Knass	501,885	July 18	2159	536	64	421
Fire-bridge for railway-crossings.....	J. H. Scott	505,488	Sept. 26	1930	497	64	1674
Fire-bucket.....	W. Neracher	490,717	Jan. 31	2790	716	62	621

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Fire-bucket.....	G. H. Smardon.....	504,070	Aug. 29	3002	750	64	1179
Fire communicator or display device.....	G. T. Ware.....	492,595	Feb. 28	2450	609	62	1286
Fire-cracker.....	C. Nelson.....	511,644	Dec. 26	3093	755	65	2023
Fire-engine. Chemical.....	A. Bruegger.....	500,189	June 27	2419	589	63	1852
Fire-engine. Chemical.....	A. Bruegger.....	500,190	June 27	2421	590	63	1853
Fire-engine. Chemical.....	C. T. Holloway.....	493,028	Mar. 7	406	101	62	1438
Fire-engine harness.....	T. Murphy.....	505,410	Sept. 19	1805	466	64	1636
Fire-engines. Cut-off for steam.....	C. E. Bensel.....	504,654	Sept. 5	543	139	64	1373
Fire-engines. System of conductors for electric.....	J. Sachs.....	497,552	May 16	1889	476	63	990
Fire-escape.....	L. Amidjah.....	499,915	Jan. 17	1435	377	62	326
Fire-escape.....	D. J. Arnold.....	490,222	Jan. 17	1965	515	62	432
Fire-escape.....	I. H. Athey.....	492,180	Feb. 21	1784	446	62	1137
Fire-escape.....	D. Beck and R. W. Levitt.....	493,574	Mar. 14	1288	329	62	1625
Fire-escape.....	N. Bouvier.....	495,955	Apr. 25	2290	577	63	471
Fire-escape.....	W. E. Bradley.....	494,407	Mar. 28	2673	670	62	1917
Fire-escape.....	J. W. L. Brown.....	492,955	Mar. 7	291	74	62	1416
Fire-escape.....	R. N. Bruce.....	489,368	Jan. 3	590	159	62	127
Fire-escape.....	P. A. Burgess.....	491,405	Feb. 7	572	144	62	857
Fire-escape.....	J. Capaccioli.....	506,903	Oct. 17	1876	467	65	320
Fire-escape.....	C. Caplis.....	496,509	May 2	185	51	63	653
Fire-escape.....	H. J. Clark.....	503,365	Aug. 15	1892	469	64	940
Fire-escape.....	J. R. Coker.....	489,463	Jan. 10	751	199	62	173
Fire-escape.....	J. P. Coons.....	501,990	July 25	2322	580	64	467
Fire-escape.....	E. A. Couch.....	508,684	Nov. 14	1142	281	65	989
Fire-escape.....	H. Coyle.....	510,383	Dec. 5	885	213	65	1578
Fire-escape.....	R. G. Dalphin.....	501,767	July 18	1981	490	64	390
Fire-escape.....	C. Dobbs.....	499,523	June 13	1315	310	63	1634
Fire-escape.....	L. A. H. Engelke.....	504,868	Sept. 12	922	238	64	1458
Fire-escape.....	F. J. Fairchild.....	502,070	July 25	2452	616	64	491
Fire-escape.....	V. H. Felt.....	493,490	Mar. 14	1134	290	62	1595
Fire-escape.....	C. M. Fowler.....	505,706	Sept. 26	2357	595	64	1753
Fire-escape.....	J. L. Gregory.....	504,576	Sept. 5	436	111	64	1351
Fire-escape.....	N. H. Herzberg.....	501,343	July 11	1302	325	64	250
Fire-escape.....	C. B. Johnson.....	490,355	Jan. 24	2200	573	62	491
Fire-escape.....	J. R. Jones.....	503,322	Aug. 15	1819	450	64	926
Fire-escape.....	S. Kaye.....	489,483	Jan. 10	776	205	62	179
Fire-escape.....	J. M. Kirker.....	506,238	Oct. 10	771	190	65	158
Fire-escape.....	M. Koloseus.....	508,226	Nov. 7	404	98	65	833
Fire-escape.....	G. Lowenstein.....	500,018	June 20	2109	511	63	1786
Fire-escape.....	J. Martin.....	495,503	Apr. 18	1581	392	63	331
Fire-escape.....	J. Martin.....	495,504	Apr. 18	1582	398	63	331
Fire-escape.....	T. W. B. Murray and T. G. Scott.....	493,556	Mar. 14	1256	322	62	1618
Fire-escape.....	J. D. Niehaus.....	500,030	June 20	2129	516	63	1790
Fire-escape.....	C. E. Sansoucy.....	507,455	Oct. 24	2822	690	65	569
Fire-escape.....	A. Scheid.....	496,958	May 9	924	242	63	804
Fire-escape.....	H. J. Schuldt.....	511,218	Dec. 19	2371	579	65	1879
Fire-escape.....	A. R. Shannon.....	509,106	Nov. 21	1851	453	65	1137
Fire-escape.....	J. F. Shaw.....	511,714	Dec. 26	3205	785	65	2043
Fire-escape.....	S. D. Silver.....	501,373	July 11	1355	338	64	260
Fire-escape.....	H. E. Steegmann.....	495,437	Apr. 11	1470	370	63	229
Fire-escape.....	C. A. Sturtevant.....	493,391	Mar. 14	976	251	62	1566
Fire-escape.....	T. J. Venema.....	498,997	June 6	446	105	63	1469
Fire-escape.....	I. Walgren and F. Haglund.....	496,923	May 9	878	230	63	796
Fire-escape.....	P. Zahringer and H. Bucksey.....	497,619	May 16	1992	498	63	1008
Fire-escape. Automatic.....	C. D. Chisholm.....	496,997	May 9	982	254	63	814
Fire-escape. Combined ventilator and step-ladder.....	R. Hughes.....	505,465	Sept. 26	1898	489	64	1667
Fire escape or ladder.....	S. R. King.....	511,438	Dec. 26	2769	669	65	1963
Fire-escape. Portable.....	J. Jewell.....	503,971	Aug. 29	2852	715	64	1152
Fire-escape. Portable.....	J. Murphy and F. M. Rankin.....	499,562	June 13	1378	328	63	1645
Fire-escape. Portable folding.....	W. H. Millett.....	499,792	June 20	1748	423	63	1723
Fire-escape. Portable friction.....	O. E. Matts.....	506,707	Oct. 17	1544	386	65	319
Fire-escape securing attachment.....	A. J. Rich.....	490,362	Jan. 24	2212	576	62	494
Fire-escape tower.....	O. Nielsen.....	499,329	June 13	963	232	63	1572
Fire-escapes. Projectile for.....	J. Martin.....	495,505	Apr. 13	1584	398	63	331
Fire-extinguisher.....	W. Gee.....	502,186	July 25	2638	665	64	527
Fire-extinguisher.....	M. J. Holland.....	497,180	May 9	1264	321	63	864
Fire-extinguisher.....	O. A. Stempel.....	489,767	Jan. 10	1206	317	62	265
Fire-extinguisher.....	O. A. Stempel.....	511,469	Dec. 26	2-15	681	65	1973
Fire-extinguisher and alarm. Automatic.....	E. Livingston.....	504,926	Sept. 12	1017	262	64	1476
Fire-extinguisher. Automatic.....	J. D. Brown.....	490,821	Jan. 31	2941	757	62	652
Fire-extinguisher. Automatic.....	W. H. Stratton.....	489,342	Jan. 3	553	150	62	119
Fire extinguisher. Bucket-and-tank.....	A. G. Leonard.....	498,937	June 6	330	77.8	63	1450
Fire-extinguisher for cotton-gins.....	E. Northcraft.....	498,683	May 30	3733	922	63	1347
Fire-extinguisher for railway-car heaters and lights.....	J. F. Cowdery.....	496,682	May 2	462	124	63	703
Fire-extinguisher nozzle.....	D. Curell.....	504,564	Sept. 5	420	106	64	1348
Fire-extinguishers. Valve for automatic dry-pipe.....	W. H. Stratton.....	429,341	Jan. 3	552	150	62	118
Fire-extinguishing attachment for elevator-shafts or stairways.....	C. C. Dugger.....	495,402	Apr. 11	1412	355	63	279
Fire-extinguishing sprinkler. Automatic.....	J. H. Lynde.....	506,704	Oct. 17	1540	385	65	319
Fire-extinguishing sprinkler. Automatic.....	E. L. Slocum.....	494,604	Apr. 4	122	29	63	26
Fire-guard and soot-catcher.....	F. W. Stockton.....	506,279	Oct. 10	841	207	65	171
Fire-hose coupling.....	O. R. Sackett and J. Pfetsch.....	508,844	Nov. 14	13-0	342	65	1033
Fire-hose nozzle. Spraying device for.....	J. Steele.....	492,119	Feb. 21	1683	420	62	1115
Fire-hose spanner.....	W. D. Miller.....	506,326	Oct. 10	920	228	65	187
Fire-kindler.....	A. Johnson.....	491,355	Feb. 7	496	127	62	842

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Fire-kindler.	H. L. Johnson	511,433	Dec. 26	2759	666	65	1961
Fire-kindling composition	P. S. Grindle	505,311	Sept. 19	1651		64	1607
Fire-lighter	P. Peschong	502,136	July 25	2554	640	64	511
Fire-lighter. Automatic.	J. L. Cutler	500,995	July 4	724	190	64	132
Fire-mat	B. L. Fletcher	504,156	Aug. 29	3146	786	61	1207
Fire or burglar alarm	E. La France	489,312	Jan. 3	505	139	62	110
Fireplace	W. R. Dawson	495,786	Apr. 18	2036	515	63	409
Fireplace	W. Spinner	507,390	Oct. 24	2720	668	65	549
Fireplace and cooking-range for cheese-making, &c. Combined	G. Mayer	496,524	May 2	208	55	63	656
Fireplace-frame	H. G. Dawson	500,687	July 4	248	67	64	47
Fireplace heater and furnace. Combined	E. S. Rogers	506,796	Oct. 17	1696	426	65	347
Fireproofing composition	F. S. Culver	495,149	Apr. 11	1018		63	207
Fireproofing composition	F. S. Culver	495,166	Apr. 11	1044		63	211
Fireproofing composition for wall-coverings.	F. S. Culver	493,152	Mar. 7	591	148	62	1475
Fireproof construction	M. H. Crittenden and F. V. Emery	508,501	Nov. 14	855	211	65	932
Fireproof construction	M. H. Crittenden and F. V. Emery	508,502	Nov. 14	855	211	65	932
Fireproof construction	M. H. Crittenden and F. V. Emery	508,503	Nov. 14	856	211	65	932
Fireproof construction	W. Orr	504,537	Sept. 5	375	94	64	1340
Fireproofing compound	L. Schüler	502,867	Aug. 8	1057		64	776
Fire-screen	G. H. Jessup	489,482	Jan. 10	775	204	62	178
Fire signaling or alarm mechanism	L. J. Tirard	504,002	Aug. 29	2906	729	64	1162
Fire-sprinkler. Automatic	C. W. Kersteter	498,661	May 30	3691	912	63	1340
Fireworks. Device for displaying.	E. Hebenstreit	489,444	Jan. 3	711	190	62	152
Fires draw, &c. Device for making	C. B. Stuart	500,628	July 4	145	38	64	29
Fires. Method of and apparatus for extinguishing	J. G. Lorrain	501,519	July 18	1571	395	64	317
Fires. Method of and apparatus for extinguishing	H. P. Weidig	504,898	Sept. 12	970	249	64	1467
Firing apparatus for use with coal-dust.	C. Wegener	511,004	Dec. 19	2030	501	65	1813
Fish-hook.	C. L. D'Ivernois	497,962	May 23	2540	634	63	1121
Fish-hook.	D. Lehmann	503,864	Aug. 22	2667	668	64	1100
Fish-hook disgorging	F. T. Verhaeren	478,094	May 23	2743	685	63	1158
Fish-net sinker	J. S. Coey	508,681	Nov. 14	1139	281	65	988
Fish-plate	J. H. Davis and A. Dick	499,874	June 20	1895	460	63	1749
Fish-scoop	W. H. Penny and W. A. Biggerstaff	505,295	Sept. 19	1628	421	64	1603
Fish-tilt. Floating	F. Stiner	510,205	Dec. 5	608	143	65	1525
Fish-trap.	J. R. Crawford	503,197	Aug. 15	1607	395	64	890
Fish-trap.	W. H. Tinsley	492,123	Feb. 21	1689	421	62	1116
Fishing-basket.	W. Greaves	506,909	Oct. 17	1887	470	65	382
Fishing-hooks. Machine for manufacturing.	C. W. Hanebeck	501,906	July 18	2193	545	64	427
Fishing-line guide	A. F. Boardman	506,093	Oct. 3	451	119	65	89
Fishing-reel.	A. F. Boardman	506,094	Oct. 3	455	119	65	89
Fishing-reel.	L. S. Cole	505,216	Sept. 19	1491	389	64	1577
Fishing-reel.	H. H. Heskett	496,654	May 2	422	113	63	695
Fishing-reel.	E. B. Porter	497,341	May 16	1555	391	63	930
Fishing-reel.	J. Singer	491,955	Feb. 14	1433	357	62	1050
Fishing-rod	A. Cable	499,779	June 20	1730	418	63	1720
Fishing rod and reel	G. H. Newell	493,827	Apr. 18	2095	527	63	419
Fishing-rod winch-fitting	O. S. Ruddock	506,607	Oct. 10	1380	346	65	277
Fishway	J. W. Fryling	507,535	Oct. 31	2971	728	65	609
Flange-wrench.	J. W. Kellam	499,742	June 20	1662	400	63	1708
Flange-wrench. Adjustable.	J. W. Kellam. (Reissue).	11,304	Dec. 5	916	219	65	1585
Flanging-machine	F. Hart	498,433	May 30	3302	824	63	1272
Flash-light apparatus	A. F. Mallick	501,800	July 13	2030	500	64	393
Flash-light burner	S. M. Williams	504,956	Sept. 12	1063	272	64	1485
Flash-light burner	S. M. Williams	505,014	Sept. 12	1162	298	64	1503
Flash-light burners. Combined charger, reflector, and smoke-arrester for	S. M. Williams	504,955	Sept. 12	1060	272	64	1484
Flask.							
See Dental flask.							
Foundry-flask.	Molder's flask. Molding-flask.						
Flask	H. J. Graf	510,172	Dec. 5	552	128	65	1514
Flask-holder. Metallic	J. W. Rhodes	498,406	May 30	3258	812	63	1265
Flasks, bottles, &c. Fitting for	T. C. Hudson	4 8,934	June 6	327	77	63	1450
Flat-iron	F. J. Jenkins	510,025	Dec. 5	315	70	65	1469
Flat-iron heater	W. F. and M. A. White	497,364	May 16	1590	402	63	937
Flat-iron heater. Electric	S. B. Jenkins	497,792	May 23	2269	570	63	1075
Flat-iron holder	C. C. Moritz and S. D. Greenwood	495,354	Apr. 11	1337	335	63	265
Flat-iron holder	A. Willoughby	497,365	May 16	1591	402	63	937
Flax and hemp brake. Portable	J. T. Smith	494,176	Mar. 28	2298	582	62	1848
Flax cleaning and reducing machine	J. T. Smith	511,221	Dec. 19	2376	580	65	1879
Flax-dressing machine	C. H. Norton	502,010	July 25	2349	588	64	472
Flax, &c. Machine for breaking and scutching	A. Morison	511,352	Dec. 26	2610	634	65	1935
Flax, &c. Machine for breaking, scutching, and decorticating	G. E. Donisthorpe and T. Burrows	504,204	Aug. 29	3232	805	64	1223
Flax or hemp brake	J. T. Smith	494,174	Mar. 28	2294	581	62	1846
Flax or hemp fiber. Finishing-machine for	J. T. Smith	494,175	Mar. 28	2296	581	62	1847
Flax-straw. Cleaner and reducer for crude	J. T. Smith	505,069	Sept. 12	1260	323	64	1521
Flier. Presser	J. Newton	494,890	Apr. 4	567	143	63	110
Flood-gate	J. H. Caraway	505,390	Sept. 19	1773	459	64	1630
Flood-gate	A. Dean	511,516	Dec. 26	28-2	701	65	1985
Flood-gate	H. H. Eatherton	500,870	July 4	534	138	64	97
Flood-gate. Self-hoisting	H. A. Corliass	490,137	Jan. 17	1827	477	62	406
Floor	O. Hetzer	491,647	Feb. 14	960	241	62	956
Floor	E. Molloy	506,521	Oct. 10	1261	315	65	253
Floor	G. W. Williams	498,344	May 30	3176	791	63	1248
Floor-clamp	A. J. Greeley	492,010	Feb. 21	1519	379	62	1082

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Floor-clamp	M. Lutgen	493,506	Mar. 14	1161	296	62	1599
Floor-clamp	G. O. Woolcocks	495,446	Apr. 11	1484	373	63	292
Floor-cleaner	G. W. F. Ruffing	496,619	May 2	356	97	63	684
Floor-cloth. Machine for the manufacture of	W. J. Beard	508,463	Nov. 14	786	193 194 195	65	919
Floor. Fireproof	T. A. Lee. (Reissue)	11,356	Aug. 8	1467	360	64	850
Floor. Fireproof	C. F. Terney	493,568	Mar. 14	1274	326	62	1622
Floor or ceiling. Fireproof	E. Homan	505,659	Sept. 26	2270	576	64	1738
Floor or ceiling set	J. M. Anthony	489,405	Jan. 3	641	174	62	138
Floor or roof. Fireproof	N. Poulson	493,839	Mar. 21	1718	438 439	62	1724
Floor-plate	W. J. Baldwin	490,094	Jan. 17	1752	457	62	390
Floor, roof, &c	T. A. Lee	500,208	June 27	2451	597 598	63	1858
Floors, ceilings, arches, &c. Construction of	P. J. L. De Rache	506,478	Oct. 10	1197	297	65	241
Floors. Hanger for laying fireproof	H. Graham	495,672	Apr. 18	1852	464	63	376
Flooring, &c. Device for adjusting	P. D. Mitchell	506,327	Oct. 10	921	228	65	187
Flooring or ceiling jack	W. M. Holiman	503,764	Aug. 22	2535	630	64	1074
Flooring. Wood-tile	A. Salvatico	503,876	Aug. 22	2682	672	64	1102
Floral figure	A. T. Cefrey	489,218	Jan. 3	366	102	62	83
Flour-bin	C. Tangenberg	498,526	May 30	3458	857	63	1300
Flour bin and sieve	G. C. Sherman	508,439	Nov. 14	751	185	65	912
Flour bin and sieve	G. C. Sherman	510,996	Dec. 19	2021	499	65	1811
Flour bin and sifter	A. K. Gibson	504,342	Sept. 5	47	13	64	1279
Flour bin and sifter	J. A. McClellan	493,640	Mar. 21	1400	355	62	1662
Flour bin and sifter	M. S. Sager	499,252	June 13	834	198	63	1550
Flour bin and sifter. Combined	M. F. Brown	498,232	May 30	2967	740	63	1212
Flour bin and sifter. Combined	A. Wolff	509,276	Nov. 21	2131	512	65	1190
Flour-chest	A. Mayer	509,479	Nov. 28	2536	612	65	1278
Flour-bolt	M. W. Clark	492,270	Feb. 21	1925	480	62	1166
Flour-bolt	M. W. Clark	492,347	Feb. 21	2042	508 509	62	1189
Flour-bolt	M. W. Clark	492,914	Mar. 7	230	57, 58	62	1404
Flour-bolt	W. D. Gray	492,795	Mar. 7	37	9	62	1366
Flour compounds	W. F. Putnam	492,969	Mar. 7	312		62	1421
Flour, meal, &c., bin	E. Alpaugh	489,552	Jan. 10	887	232	62	201
Flower and making same. Artificial	M. E. A. Souchet	490,170	Jan. 17	1874	488	62	415
Flower frame. Artificial	E. Diemer	490,642	Jan. 31	2667	687	62	597
Flower-holder	A. Snow, Jr.	496,013	Apr. 25	2374	601	63	487
Flower-pot	C. H. Schurig and C. Prüfer	491,786	Feb. 14	1177	294 295	62	998
Flower-pot and stand	A. A. Holt and J. P. Kooy	495,808	Apr. 18	2067	522	63	414
Flower-pot machine	S. W. Clark	511,587	Dec. 26	2996	730	65	2006
Flower-pot support	J. H. Smith	496,173	Apr. 25	2618	659	63	533
Flower-pot supporting device	W. D. Gridley	492,919	Mar. 7	238	60	62	1405
Flower-stand	L. G. Beers	494,730	Apr. 4	322	81, 82	63	64
Flowers. Artificial stem for cut	H. H. Francis	501,134	July 11	963	246	64	190
Flowers. Machine for shaping artificial	B. Rion and H. Dupont	496,899	May 9	835	221	63	788
Flue and chimney cleaner	W. H. Bliss	500,467	June 27	2246	701	63	1928
Flue-base and thimble. Combined	J. H. Watt	496,626	May 2	370	100	63	687
Flue-cap	W. F. La Follett	494,815	Apr. 4	470	118	63	91
Flue-cleaner	P. A. Burgess	491,404	Feb. 7	571	143	62	857
Flue-cleaner	J. R. Wilson	491,791	Feb. 14	1182	296	62	999
Flue cleaner. Boiler	C. S. Dean	507,421	Oct. 24	2769	678	65	559
Flue cleaner. Boiler	C. E. Poor, C. E. Messenger, and A. Dallas	493,290	Mar. 14	820	210	62	1536
Flue cleaner. Electric rotary	F. Gardner	506,380	Nov. 7	659	191	65	880
Flue-cutter	J. Cumming and J. H. Magee, Jr.	501,269	July 11	1169	267	64	227
Flue-cutter	E. W. Pratt	505,328	Sept. 19	1672	431	64	1611
Flue, drain, or pipe cleaning device	W. Dundon	492,393	Feb. 28	2117	528	62	1217
Flue expander. Boiler	L. Biddle	500,466	June 27	2845	700	63	1928
Flue for buildings	A. Zerban	495,648	Apr. 18	1816	455	63	370
Flue or chimney lining	Y. W. Smith	494,036	Mar. 21	2055	525	62	1788
Flue-scraper	E. E. Davey	493,235	Mar. 7	723	185	62	1501
Flue-scraper	W. J. Hamel	507,812	Oct. 31	3443	845	65	698
Flue-stop	J. A. Hadley	509,307	Nov. 21	2188	526	65	1202
Flue-stopper	E. H. Adams	503,823	Aug. 22	2613	653	64	1089
Flue-stopper	503,388	503,388	Aug. 15	1920	476	64	945
Flue-thimble	C. H. Scholle	497,374	May 16	1606	405	63	940
Flue-thimble	D. Hay	503,818	Aug. 22	2606	651	64	1088
Flues. Construction of	J. H. Watt	506,108	Oct. 3	479	124	65	94
Fluid-compressor	J. Rebsamen	500,720	July 4	306	82	64	57
Fluid-distribution apparatus	J. McNaughton	495,904	Apr. 18	2214	558	63	442
Fluid-heater	W. B. Page and B. Hausheer	499,850	June 20	1850	450	63	1741
Fluid-meter	W. G. Kent and H. S. Price	491,245	Feb. 7	296	74, 75	62	805
Fluid-meter. Rotating	A. J. Fuller	489,124	Jan. 3	320	59	62	51
Fluid-meters. Actuating mechanism for	F. W. Skinner	498,314	May 30	3116	777	63	1239
Fluid-mixer	J. J. H. Cokeley	501,182	July 11	1039	263	64	204
Fluid-motor. Rotary	E. E. Bardsley	509,644	Nov. 28	2788	671	65	1327
Flume-screen	F. Correll	495,023	Apr. 11	774	197 198	63	164
Flush and supply for closet tanks. Adjustable combination	C. Ottershagen	510,649	Dec. 12	1379	337	65	1683
Flush-tank	J. T. McDonough, T. and J. Michel	493,281	Mar. 14	806	207	62	1533
Flush-tank and manhole. Combined	E. S. Hyde	500,000	June 20	2080	504	63	1782
Flush-tank apparatus	S. W. Lewis	496,572	May 2	284	76	63	671
Flush-tank for closets	P. Falkinburg	495,611	Apr. 18	1751	441	63	360
Flushing device. Closet	H. J. Gilcher	506,221	Oct. 10	724	181	65	148
Flushing-tank	L. M. Krouse	492,027	Feb. 21	1550	386	62	1088
Flushing-tank	J. H. Savill	501,368	July 11	1348	336	64	259
Flushing-tank for closets	J. Michel, J. T. McDonough, and W. L. Bowers	507,149	Oct. 24	2308	567	65	472
Flute. Rub.	B. Carpigiani	493,066	Mar. 7	458	115	62	1450
Flux for use in refining iron or steel for casting. Metallic	R. L. Sentinella	506,799	Oct. 17	1703		65	349

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fly-book. Angler's	A. E. Zangenberg	502,427	Aug. 1	300	72	64	620
Fly-catcher	G. D. Horton	491,427	Feb. 7	599	151	62	862
Fly-frame	M. Campbell	511,725	Dec. 26	3219	789 790 777	65	2046
Fly-frame	W. P. Canning	505,436	Sept. 26	1855	477 478	64	1659
Fly-paper holder	J. G. Dodd	511,689	Dec. 26	3165	773	65	2036
Fly-paper holder	J. H. Smith	491,860	Feb. 14	1288	319	62	1021
Fly-paper. Machine for manufacturing	J. H. Smith and M. D. Knowlton	491,861	Feb. 14	1290	319 320	62	1022
Fly-paper. Sticky	O. and W. Thum	510,727	Dec. 12	1500	371	65	1705
Fly-screen	W. P. Hellings	492,014	Feb. 21	1531	382	62	1084
Fly-switcher for horses	C. Hayner	492,287	Feb. 21	1945	486	62	1170
Fly-trap	A. N. Bender and J. J. Schoenecker	511,108	Dec. 19	2191	539	65	1845
Fly-trap	I. J. Edge	499,722	June 20	1624	392	63	1703
Fly-trap	J. S. Morton	507,630	Oct. 31	3145	769	65	642
Fly-trap	J. Moskowitz	501,686	July 18	1837	457	64	421
Fly-trap	T. A. Teate	502,056	July 25	2433	612	64	487
Fly-wheel. Belt	A. H. Emery	496,556	May 2	262	70	63	667
Flying-machine	E. B. Sowers	504,631	Sept. 5	510	132	64	1366
Fodder-cutter	W. F. Ziegler	498,202	May 23	2917	726	63	1188
Fog-signal	G. H. Williams and L. W. Palmer	497,153	May 9	1226	312	63	857
Fog-signal striker	W. R. Close	497,534	May 16	1864	470	63	986
Foil. Manufacture of metal	E. Schröder	509,951	Dec. 5	173		65	1442
Folding apparatus. Sheet	S. G. Goss	495,482	Apr. 18	1548	389	63	324
Folding box	A. R. Hibson	511,078	Dec. 19	2138	528	65	1834
Folding bracket	J. B. Kenison and M. F. Burk	511,626	Dec. 26	3067	750	65	2018
Folding chair	J. A. Criss	502,175	July 25	2625	662	64	525
Folding chair	G. F. Hanson	509,735	Nov. 28	2933	710	65	1353
Folding chair	G. I. Haswell	509,432	Nov. 28	2442	588	65	1261
Folding chair	C. Kehr	491,214	Feb. 7	251	62, 63	62	795
Folding chair	C. Kehr	491,215	Feb. 7	253	63	62	796
Folding chair	C. Kehr	491,216	Feb. 7	254	63	62	796
Folding chair	W. J. Moreland	505,321	Sept. 19	1664	429	64	1609
Folding chair	G. H. Tuttle	510,735	Dec. 12	1514	374 375	65	1708
Folding chair	J. Walton	510,659	Dec. 12	1398	344	65	1686
Folding chair	W. A. Wright	504,855	Sept. 12	903	233	64	1455
Folding chair. Coin-freed	J. O. Tonkin	500,763	July 4	399	105 106	64	74
Folding gate	E. Pickett	508,750	Nov. 14	1238	308	65	1007
Folding gate	W. R. Pitt	494,823	Apr. 4	480	121	63	92
Folding gate	W. R. Pitt	494,824	Apr. 4	481	121 122	63	93
Folding gate	A. F. Spencer	509,550	Nov. 28	2658	643 644	65	1301
Folding hollow body	E. W. Roberts	490,680	Jan. 31	2736	705	62	610
Folding-machine	L. C. Crowell	510,527	Dec. 12	1128	273 274	65	1638
Folding-machine	W. Scott	506,448	Oct. 10	1134	282 283	65	229
Folding mechanism	L. C. Crowell	492,760	Feb. 28	2705	672 673	62	1336
Folding mechanism	L. C. Crowell	505,817	Oct. 3	23	7	65	7
Folding mechanism	E. P. Sheldon	505,855	Oct. 3	77	19, 20	65	17
Folding seat for schools, theaters, &c	W. Shriner	493,452	Mar. 14	1072	276	62	1584
Folding stand, &c.	G. W. Voeltzkow	509,005	Nov. 21	1676	413	65	1104
Folding table	E. F. Bassett	510,232	Dec. 5	663	157	65	1535
Folding table	G. A. Bowen	506,622	Oct. 10	1403	352	65	281
Folding table	J. and H. A. Carl	493,479	Mar. 14	1117	286	62	1591
Folding table	S. S. Case	489,369	Jan. 3	591	159	62	127
Folding table	C. C. Hastings	510,858	Dec. 12	1772	435	65	1754
Folding table	W. J. Maddox	502,929	Aug. 8	1170	288 289	64	796
Folding table	N. Schumacher	499,599	June 13	1431	343	63	1655
Folding table	S. Smyth	490,320	Jan. 24	2140	558	62	479
Folding table	H. A. Stevens	491,760	Feb. 14	1131	285	62	991
Folding tub	J. Mariani	510,356	Dec. 5	842	203	65	1570
Food. Machine for the preparation of cereals for	H. D. Perky and W. H. Ford	502,378	Aug. 1	215	51	64	605
Food-rest	J. W. Paterson	502,752	Aug. 8	865	211	64	740
Food-warmer	C. A. Penniston	497,600	May 16	1965	492	63	1003
Food-warmer. Electrical	W. E. Ulmer	492,247	Feb. 21	1889	472	62	1158
Food-warmer, &c. Portable	A. A. Whipple	490,091	Jan. 17	1747	455	62	389
Forceps	M. McAlley	509,671	Nov. 28	2836	685	65	1336
Forge	F. W. Althen	490,732	Jan. 31	2810	721	62	625
Forge. Electric	G. D. Burton	496,593	May 2	314	84, 85	63	676
Forge. Electric	G. D. Burton and E. E. Angell	496,594	May 2	315	85	63	677
Forge. Electric	G. D. Burton and E. E. Angell	496,775	May 2	611	163	63	728
Forge. Portable bellows	F. Myers	510,700	Dec. 12	1457	360	65	1697
Forge-tray	R. S. Burnett	503,194	Aug. 15	1604	394	64	899
Forging and bending die	G. S. Strong	505,541	Sept. 26	2049	523	64	1694
Forging and compacting ingots. Machine for	R. J. Gatling	496,873	May 9	790	208 209	63	780
Forging and shaping press. Metal	B. F. and F. T. Peacock	505,955	Oct. 3	235	62, 63	65	46
Forging and shaping small articles of metal. Apparatus for	J. J. B. E. Genez	507,800	Oct. 31	3418	839 840	65	693
Forging apparatus. Hammer	J. Dyson, Jr.	507,892	Oct. 31	3565	878	65	720
Forging die	G. S. Strong	505,540	Sept. 26	2048	522	64	1694
Forging. Fire-box for	J. T. Ace	506,576	Oct. 10	1339	336	65	269
Forging machine. Bolt	G. H. Webb	506,836	Oct. 17	1763	444	65	360
Forging-machine. Steam	W. A. Pearson	503,354	Aug. 15	1867	462 463	64	936
Fork							
See Hay-fork.	Tedder-fork.						
Fork	H. P. Hull	500,207	June 27	2450	597	63	1858

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Fork	W. Schrader	509,103	Nov. 21	1847	452	65	1136
Fork-guard	F. C. Feicker	489,414	Jan. 3	651	176	62	140
Fork-guard	F. C. Feicker	430,430	Jan. 24	2306	599	62	511
Form. Bosom-	H. E. and A. M. Matthews	503,057	Aug. 8	1366	337	64	832
Form. Bust-	P. Bettingen	492,263	Feb. 21	1913	477	62	1164
Form. Bust-	N. Schell	505,133	Sept. 19	1367	350	64	1554
Form. Clothes-	R. H. Wade	503,815	Aug. 22	2603	650	64	1087
Fortune-teller	J. Carey	503,784	Aug. 22	2562	638	64	1079
Fortune-telling machine. Electric coin-controlled	A. Waldman	507,768	Oct. 31	3362	824	65	622
Foundation for light-houses and other heavy structures in deep water.	G. Blanchard	502,845	Aug. 8	1024	250 251	64	769
Foundry-flask	P. B. McGregor	503,290	Aug. 15	1759	434	64	917
Fountain:							
See Carbonated-liquid fountain.	Luminous fountain.						
Fountain	G. Trouvé	490,378	Jan. 24	2235	581 582	62	498
Fracture apparatus	J. T. Berghoff	505,382	Sept. 19	1761	456 457	64	1628
Fracture apparatus	J. F. Rowley	491,271	Feb. 7	331	84	62	812
Frame:							
See Awning-frame.	Fireplace-frame.						
Bicycle-frame.	Harrow-frame.						
Car floor-frame.	Reel-carrying frame.						
Chair-frame.	Spinning-frame.						
Display-frame.	Spinning and doubling frame.						
Drying-frame.							
Eyeglass-frame.							
Frame	H. Schnessler	496,703	May 2	493	132	63	709
Freezing apparatus. Wine-	A. Wadhams	496,922	May 9	878	230	63	795
Freight-carrier	A. T. Kelliher	507,137	Oct. 24	2284	560 561	65	468
Freight or parcel carrier	H. C. Forney	505,705	Sept. 26	2354	595	64	1752
Friction-brake	J. F. Byers	499,207	June 13	779	185	63	1540
Friezer-machine hand-guard	M. Henry	498,263	May 30	3021	753	63	1222
Fringe-halls to the border of textile fabrics. Machine for attaching	R. A. Swoboda	508,645	Nov. 14	1087	269	65	978
Fringe or trimming holder	J. M. Schlesinger	503,752	Aug. 22	2518	625	64	1071
Fringes. Machine for making and knotting	B. Arnold	504,315	Sept. 5	4	2	64	1272
Fringes. Machine for making and knotting	B. Arnold	504,316	Sept. 5	7	2, 3	64	1272
Fringes, &c. Machine for making and knotting	B. Arnold	505,934	Oct. 3	202	51, 52	65	40
Fringes. Making	B. Arnold	505,935	Oct. 3	205	52	65	40
Frog. Double-incline wrecking-	P. T. Mooney	507,829	Oct. 31	3473	854	65	703
Frog foot-guard	D. D. Zweig	510,226	Dec. 5	652	154	65	1533
Frog. Wrecking-	W. C. Bourdette	491,005	Jan. 31	3254	831 832	62	711
Front rod for double slips	A. H. Johnson	509,128	Nov. 21	1891	462	65	1144
Froth and liquid separator	A. Werner	490,521	Jan. 24	2457	633	62	541
Fruit-bleacher	C. J. Wheeler	493,570	Mar. 14	1278	327	62	1622
Fruit-box	A. H. Meech	493,779	Mar. 21	1627	414	62	1707
Fruit-box	A. H. Meech	495,421	Apr. 11	1438	363	63	284
Fruit-case	J. T. Cornforth	496,817	May 2	6-3	180	63	740
Fruit-case	J. T. Cornforth	496,818	May 2	6-4	181	63	741
Fruit-clipper	F. E. Wood	509,990	Dec. 5	250	59	65	1456
Fruit-drier	A. H. Carson	503,899	Aug. 22	2720	683	64	1110
Fruit-drier	A. M. Chappell	511,504	Dec. 26	2866	694	65	19-2
Fruit-drier	C. E. Chrisman	497,308	May 16	1503	379	63	921
Fruit-drier	J. H. Monteith	508,113	Nov. 7	222	57	65	799
Fruit-drier	M. J. Richmond	507,846	Oct. 31	3504	862	65	709
Fruit-evaporator	C. Sebastian	506,377	Oct. 10	1012	252 253	65	205
Fruit-evaporator	C. W. Soverhill	506,651	Oct. 10	1447	363	65	290
Fruit-evaporator. Portable	A. Sperl and J. Gecmen	489,168	Jan. 3	280	78	62	64
Fruit-gatherer	M. Alexander	508,905	Nov. 21	1523	371	65	1073
Fruit-gatherer	S. E. Ball	492,952	Mar. 7	283	72	62	1414
Fruit-gatherer	A. R. McLean	492,824	Mar. 7	82	19	62	1374
Fruit-gatherer	L. Olmsted	493,287	Mar. 14	816	209	62	1535
Fruit-gatherer	T. B. Reagan	504,245	Aug. 29	3301	824	64	1235
Fruit-gatherer	W. P. Wadsworth	509,007	Nov. 21	1678	414	65	1104
Fruit-gatherer and pruning implement	S. Chambers	498,620	May 30	3623	897	63	1328
Fruit-gatherer's coat	R. D. Maund	494,875	Apr. 4	563	141	63	109
Fruit-holder	W. Nicholson	505,323	Sept. 19	1686	430	64	1610
Fruit-jar and cover	R. B. Calcutt	495,299	Apr. 11	1258	314	63	251
Fruit or vegetable cutter	J. D. Miller	497,675	May 16	2076	518	63	1024
Fruit or vegetable drier	H. N. Schultz	505,610	Sept. 26	2186	533	64	1722
Fruit or vegetable stand	J. J. Farrell	494,850	Apr. 4	525	132	63	102
Fruit or vegetable sorting machine	F. B. Pease	497,599	May 16	1964	492	63	1003
Fruit-picker	G. E. Hawes	497,573	May 16	1922	483	63	995
Fruit-picker	A. C. Hedden	498,715	May 30	3795	936	63	1357
Fruit-picker	J. R. Jones	510,917	Dec. 19	1876	460	65	1785
Fruit-picker	C. and C. L. Lee, Jr.	505,556	Sept. 26	2095	532	64	1704
Fruit-picker	I. W. Lord	496,520	May 2	202	54	63	655
Fruit-picker	A. W. Ohman	497,202	May 9	1288	328	63	869
Fruit-picker	J. Swanburg	501,032	July 4	781	204 205	64	143
Fruit-picker and pruning implement. Combined	J. H. Griswold	491,269	Feb. 7	329	83	62	811
Fruit-picking apparatus	E. D. Stodder and O. Eastman	510,055	Dec. 5	363	81	65	1475
Fruit pitter	J. L. Hall and F. H. Chase	496,734	May 2	548	147	63	718
Fruit-pitter	E. W. Weare	495,860	Apr. 18	2149	540	63	430
Fruit-pitting machine	W. A. Doble	497,752	May 16	2198	550	63	1047
Fruit-pitting machine	R. P. Scott	501,608	July 18	1709	426	64	343
Fruit-press	S. R. Thompson	494,396	Mar. 28	2657	667	62	1914
Fruit-press	C. Wegmann	504,545	Sept. 5	390	99	64	1342
Fruit stemmer and grader	G. H. Holt	506,042	Oct. 3	372	98, 99	65	73
Fruit-stoning machine	J. S. Briggs	490,265	Jan. 24	2048	536	62	459

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Invention.	Name.	No	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fruit-stoning machine	P. Maisonneuve	505,206	Sept. 19	1479	385	64	1570
Fruit washing and cleaning apparatus	D. E. Barton	508,860	Nov. 14	1412	{ 350 351	65	1039
Fruit-washing machine	S. C. Warner	496,023	Apr. 25	2390	{ 604 605	63	490
Frying-pan, &c	C. Spahmer	498,195	May 23	2911	724	63	1187
Frying-pan	S. R. Wilnot	489,173	Jan. 3	288	80	62	66
Fuel	C. Cronin and G. Edwards	498,629	May 30	3634	155	63	1330
Fuel. Apparatus for making artificial	H. S. Albrecht	510,228	Dec. 5	655	{ 156 157	65	1534
Fuel. Artificial	M. Nirdlinger	500,934	July 4	620	61	11	11
Fuel atomizing and burning apparatus. Fluid	B. Roberts	501,164	July 11	1015	257	64	199
Fuel-blocks. Manufacture of	G. Spiecker	507,246	Oct. 24	2473	65	501	
Fuel burner. Fluid	F. W. Flanner	508,130	Nov. 7	248	63	65	804
Fuel burner. Fluid	N. J. Skaggs	492,440	Feb. 28	2191	{ 547 548	62	1232
Fuel burner. Pulverized	F. H. Hawkins	510,788	Dec. 12	1604	400	65	1725
Fuel. Composition of matter for saving	H. Carter	497,627	May 16	2068	63	1011	
Fuel-economizer	G. C. Hawkins	498,211	May 23	2930	729	63	1190
Fuel-economizer	L. J. Hirt	507,906	Oct. 31	3591	886	65	735
Fuel feeder. Pulverized	H. S. Grigsby	494,375	Mar. 28	2623	658	62	1908
Fuel-feeding device	V. S. Miracle	496,944	May 9	906	238	63	801
Fuel for lighting or heating. Apparatus for using liquid	H. Galopin	509,076	Nov. 21	1790	{ 440 441 442	65	1126
Fuel. Machinery for the manufacture of artificial	W. B. Westlake	489,136	Jan. 3	233	63, 64	62	54
Fuel. Method of and apparatus for consumption of	J. Y. Smith	503,501	Aug. 15	2089	522	64	976
Fuel. Press for preparing block	S. O. Holmes	506,193	Oct. 3	646	{ 164 165	65	125
Fume-arrester	F. Swiontkowsky	509,336	Nov. 21	2244	542	65	1211
Fumes. Apparatus for condensing	F. Mueller	492,225	Feb. 21	1860	465	62	1152
Fumes. Condensing chamber for lead	H. F. Brown and L. De Camp	489,144	Jan. 3	248	69	62	57
Fumigating apparatus	J. M. Miller	510,079	Dec. 5	401	88	65	1485
Fumigating apparatus	S. R. Olliphant and T. A. Clayton	490,981	Jan. 31	3217	{ 821 822	62	704
Fumigation	E. Watson	499,407	June 13	1118	63	1600	
Fumigator	E. G. Dickinson and A. C. Sasser	499,877	June 20	1900	461	63	1750
Fumigator	J. R. McKelvey	501,528	July 18	1581	398	64	319
Funnel	C. W. Fox	502,881	Aug. 8	1077	266	64	779
Funnel	E. N. Gaudron	493,993	Mar. 21	1987	507	62	1775
Funnel	E. N. Gaudron	493,994	Mar. 21	1989	507	62	1776
Funnel	A. Gersdorff	491,421	Feb. 7	590	148	62	861
Funnel	T. W. Johnson	489,585	Jan. 10	937	243	62	210
Funnel	H. Strater	509,966	Dec. 5	197	46	65	1447
Funnel	W. D. Thompson	500,517	June 27	2934	720	63	1944
Funnel	G. H. Wright	500,453	June 27	2829	696	63	1925
Funnel and coffee percolator and strainer. Combination	G. E. Dudley	496,510	May 2	186	51	63	653
Funnel and strainer. Combined	W. J. Kayser	495,635	Apr. 18	1791	450	63	366
Funnel for cans. Indicator	H. B. Watson	494,403	Mar. 28	2667	669	62	1916
Funnel. Measuring	L. J. Widness	489,620	Jan. 10	985	257	62	220
Fur. Carrotting	H. F. Dietz	498,510	June 6	289	63	1443	
Fur-dressing machine	B. Dunkerley	506,192	Oct. 3	644	164	65	124
Fur from pelts. Machine for cutting	E. Sr. E. and E. Beesley, Jr.	495,470	Apr. 18	1532	384	63	321
Fur-plucking machine	I. Dresdner	493,017	Mar. 7	392	98	62	1436
Fur scarfs. Head for	M. Cohen	498,928	June 6	319	75	63	1449
Fur skins. Machine for dehairing	C. Moser and C. Schirmer	490,976	Jan. 31	3208	{ 819 820	62	702
Fur trimmings. Artificial claw for	A. and J. Jacobson	500,002	June 20	2084	505	63	1782
Furnace							
See Air-heating furnace.	Heating-furnace.						
Air-warming furnace.	Hot-air furnace.						
Boiler-furnace.	Hot-water furnace.						
Annealing-furnace.	Hydrocarbon-furnace.						
Automatic furnace.	Hydrocarbon incinerat-						
Bagasse-furnace.	ing furnace.						
Blast-furnace.	Hydrocarbon or gas fur-						
Boiler-furnace.	nace.						
Boiler gas-produc-	Kiln-furnace.						
ing furnace.	Metallurgical furnace.						
Brick-kiln furnace.	Ore-roasting furnace.						
Cremating-furnace.	Ore-roasting and calcin-						
Dental furnace.	ing furnace.						
Desulphurizing-fur-	Plumber's portable fur-						
nace.	nace.						
Downdraft-furnace.	Portable furnace.						
Drying-furnace.	Pottery-kiln furnace.						
Enameling-furnace.	Puddling-furnace.						
Garbage-furnace.	Regenerative furnace.						
Garbage-burning	Roasting-furnace.						
furnace.	Salt-furnace.						
Gas-furnace.	Smelting-furnace.						
Gas-making furnace.	Smelting and refining						
Glass-furnace.	furnace.						
Glass-annealing fur-	Smoke consuming fur-						
nace.	nace.						
Glass-melting fur-	Steel-melting furnace.						
nace.	Tobacco-curing furnace.						
Glass or other fur-	Ultramarine-furnace.						
nace.	Vitrification-furnace.						
Glass-tank furnace.	Welding-furnace.						
Glory-hole furnace.							
Furnace	A. Anderson	507,095	Oct. 24	2192	542	65	450
Furnace	J. B. Archer	492,653	Feb. 28	2550	631	62	1304

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Invention.	Name	No	Date.	Monthly volume.		Official Gazette.	
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Furnace.....	W. L. Braddock.....	511,194	Dec. 19	2335	571	65	1871
Furnace.....	E. B. Coxé.....	499,716	June 20	1612	390	63	1701
Furnace.....	E. B. Coxé.....	510,572	Dec. 12	1244	301	65	1658
Furnace.....	E. B. Coxé.....	510,574	Dec. 12	1247	302		
Furnace.....	E. B. Coxé.....	510,577	Dec. 12	1252	303	65	1659
Furnace.....	E. B. Coxé.....	510,581	Dec. 12	1257	305	65	1660
Furnace.....	E. B. Coxé.....	510,584	Dec. 12	1263	307	65	1661
Furnace.....	E. B. Coxé.....	510,587	Dec. 12	1268	308	65	1661
Furnace.....	E. B. Coxé.....	510,588	Dec. 12	1269	309	65	1662
Furnace.....	J. Davies.....	503,407	Aug. 15	1943	483	64	949
Furnace.....	E. Fales.....	505,452	Sept. 26	1879	484	64	1663
Furnace.....	G. F. Gallagher.....	493,923	Mar. 21	1855	472	62	1750
Furnace.....	J. L. Giroux.....	499,188	June 6	746	177		
Furnace.....	W. Guthrie.....	508,013	Nov. 7	54	16	65	768
Furnace.....	S. P. Hutchinson.....	492,020	Feb. 21	1537	383	62	1085
Furnace.....	J. T. Jenkins.....	500,905	July 4	581	151	64	106
Furnace.....	M. W. Keene.....	491,115	Feb. 7	83	23		
Furnace.....	H. B. A. Keiser and C. M. Schwab.....	508,024	Nov. 7	66	19	65	770
Furnace.....	W. Kneen.....	505,661	Sept. 26	2275	577	64	1738
Furnace.....	W. McClave.....	496,384	Apr. 25	2975	742	63	601
Furnace.....	G. T. Moe.....	489,490	Jan. 10	793	209		
Furnace.....	I. J. and R. Monger.....	489,319	Jan. 3	513	140	62	111
Furnace.....	F. H. Richards.....	510,548	Dec. 12	1198	288	65	1650
Furnace.....	F. H. Richards.....	510,549	Dec. 12	1200	289		
Furnace.....	F. H. Richards.....	510,550	Dec. 12	1201	289	65	1650
Furnace.....	F. H. Richards.....	510,551	Dec. 12	1203	290		
Furnace.....	F. H. Richards.....	510,552	Dec. 12	1205	290	65	1651
Furnace.....	F. H. Richards.....	510,553	Dec. 12	1206	291		
Furnace.....	F. H. Richards.....	510,554	Dec. 12	1209	292	65	1652
Furnace.....	F. H. Richards.....	510,555	Dec. 12	1210	293	65	1652
Furnace.....	F. H. Richards.....	510,556	Dec. 12	1212	293	65	1652
Furnace.....	J. J. Richardson.....	489,758	Jan. 10	1192	312		
Furnace.....	J. J. Richardson.....	501,695	July 18	1852	460	64	368
Furnace.....	J. Roberts.....	490,774	Jan. 31	2877	739	62	637
Furnace.....	G. R. Scates.....	502,208	July 25	2678	675	64	535
Furnace.....	I. D. Smead.....	501,109	July 11	927	238		
Furnace.....	C. Streufert.....	492,066	Feb. 21	1598	397	62	1097
Furnace.....	W. Swindell.....	501,236	July 11	1116	283	64	218
Furnace.....	W. Swindell.....	504,118	Aug. 29	3084	772		
Furnace.....	W. and J. C. Swindell.....	490,028	Jan. 17	1742	453	62	388
Furnace.....	J. K. Thompson.....	505,143	Sept. 19	1378	353		
Furnace.....	J. W. Wilkinson.....	496,806	May 2	666	176	63	737
Furnace-boiler for heating houses, &c.....	G. A. Kiley.....	496,613	May 2	347	95	63	682
Furnace-door.....	E. W. Harris.....	510,786	Dec. 12	1601	399	65	1725
Furnace-door.....	C. W. Reneau.....	503,875	Aug. 22	2681	672	64	1102
Furnace-door-operating apparatus.....	O. H. Clark.....	498,507	May 30	3428	850	63	1295
Furnace-fire-bar.....	A. Kulbrock.....	508,950	Nov. 21	1597	391		
Furnace-floor.....	E. B. Coxé.....	510,571	Dec. 12	1242	301	65	1657
Furnace-floor plate.....	E. B. Coxé.....	510,576	Dec. 12	1251	303	65	1659
Furnace-floor plate.....	E. B. Coxé.....	510,580	Dec. 12	1256	304	65	1660
Furnace for burning coal-screenings.....	F. L. Bartlett.....	493,854	Mar. 21	1745	444	62	1730
Furnace for burning garbage, &c.....	W. McClave.....	490,582	Jan. 24	2538	653	62	557
Furnace for fusing porcelain, &c.....	W. M. Sharp.....	499,476	June 13	1231	293		
Furnace for heating chain-link blanks, &c., for welding.....	P. H. Standish.....	502,593	Aug. 1	574	138	64	671
Furnace for heating chain-links.....	P. H. Standish.....	502,594	Aug. 1	577	139	64	672
Furnace for heating steel ingots.....	W. E. Koch.....	489,017	Jan. 3	59	17	62	15
Furnace for roasting, calcining, and oxidizing metals and their compounds.....	H. Frascé.....	492,551	Feb. 28	2384	591	62	1273
Furnace for roasting dust of copper and other ores.....	C. Vattier.....	511,476	Dec. 26	2825	683		
Furnace for the treatment of refractory ores.....	C. J. Fauvel.....	493,076	Mar. 7	468	118	62	1452
Furnace for welding, &c.....	R. J. and C. J. Buck.....	508,926	Aug. 22	2760	692	64	1118
Furnace fuel-feeder.....	M. Fricke.....	497,469	May 16	1753	442	63	965
Furnace fuel-feeding device.....	J. W. Wetmore.....	501,979	July 25	2304	576	64	463
Furnace gas-burner.....	J. S. Rogers.....	496,445	May 2	90	26	63	633
Furnace-grate.....	C. P. Bliss.....	504,195	Aug. 29	3220	802	64	1231
Furnace-grate.....	B. Loomis.....	503,211	Aug. 15	1631	400	64	894
Furnace-grate.....	A. Wilkinson.....	494,831	Apr. 4	493	124	63	95
Furnace-grate-bar.....	W. H. Heeson.....	499,732	June 20	1644	396	63	1706
Furnace-grate blast-pipe.....	E. J. Gordon.....	491,549	Feb. 14	800	203	62	923
Furnace-grate. Shaking and dumping.....	J. Evans.....	496,194	Apr. 25	2647	665	63	539
Furnace or stove.....	J. H. Scholding.....	493,947	Mar. 21	1900	484	62	1759
Furnace plant.....	E. B. Coxé.....	510,589	Dec. 12	1271	309	65	1662
Furnace-regulator.....	G. E. Dixon.....	498,535	May 30	3476	861	63	1304
Furnace-tap.....	E. P. Mathewson.....	501,351	July 11	1315	328	64	252
Furnace-tap.....	E. P. Mathewson.....	511,090	Dec. 19	2161	532	65	1839
Furnace. Traveling-grate.....	E. B. Coxé.....	510,565	Dec. 12	1234	297		
Furnace. Traveling-grate.....	E. B. Coxé.....	510,566	Dec. 12	1226	297	65	1654
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Furnace. Traveling-grate.....	E. B. Coxo.....	510,568	Dec. 12	1232	{ 298 299	{ 65	1655
Furnace. Traveling-grate.....	E. B. Coxo.....	510,569	Dec. 12	1234	{ 299 300	{ 65	1656
Furnace. Traveling-grate.....	E. B. Coxo.....	510,575	Dec. 12	1249	303	65	1658
Furnace water-back.....	J. Tittle.....	495,072	Apr. 11	851	218	63	178
Furnace with air, steam, and hydrocarbon fuel feeding attachments.	W. McClave.....	497,194	May 9	1278	325	63	867
Furnaces. Air-heating device for.....	R. Potter.....	492,428	Feb. 28	2170	{ 542 543	{ 62	1228
Furnaces. Apparatus for charging and discharging annealing.	J. M. Chatfield.....	491,768	Feb. 14	1148	288	62	994
Furnaces. Apparatus for feeding fuel to steam-generator.	J. T., and J. Vicars, Jr.....	510,737	Dec. 12	1518	{ 375 376	{ 65	1709
Furnaces. Apparatus for moistening the air in hot-air	J. A. Jeffery.....	492,296	Feb. 21	1959	489	62	1173
Furnaces. Automatic stock-indicator for blast.	S. McClure and C. F. Phillips.....	498,676	May 30	3721	919	63	1345
Furnaces. Coupling device for trays for annealing.	J. M. Chatfield.....	492,190	Feb. 21	1798	448	62	1140
Furnaces. Feeding air to.....	C. Phelps.....	507,037	Oct. 17	2094	518	65	421
Furnaces. Fire-door for downdraft.....	G. W. Galbraith and J. Taylor.....	498,258	May 30	3013	751	63	1221
Furnaces. Flooring for blast.....	M. W. Iles.....	501,188	July 11	1048	265	64	206
Furnaces. Gas-burner for boiler.....	C. T. Sloan.....	500,724	July 4	312	84	64	58
Furnaces. Gas-valve for blast.....	W. Rotthoff.....	504,622	Sept. 5	498	128	64	1363
Furnaces. Means for regulating the blast in ore-roasting	R. Pearce.....	506,129	Oct. 3	516	134	65	100
Furnaces. Water-back for straw-burning.....	C. Nye.....	498,686	May 30	3738	923	63	1348
Furnaces. Water-heating attachment for hot-air.....	J. E. White.....	498,944	June 6	345	82	63	1452
Furnaces with metal. Apparatus for charging.....	J. Buchanan, Jr.....	505,348	Sept. 19	1697	{ 437 438	{ 64	1616
Furniture. Adjustable support for school.....	T. R. Roulstone.....	508,557	Nov. 14	951	233	65	950
Furniture-base.....	W. D. Snyder.....	503,993	Aug. 29	2893	{ 723 724	{ 64	1159
Furniture-base.....	W. D. Snyder.....	503,994	Aug. 29	2895	724	64	1159
Furniture base or support.....	M. Samuels.....	506,553	Oct. 10	1307	326	65	262
Furniture clamp or press.....	C. H. Scales.....	502,533	Aug. 1	480	115	64	654
Furniture. Convertible.....	A. Eckert.....	490,952	Jan. 31	3171	812	62	695
Furniture-fastener.....	G. C. Goodyear.....	501,564	July 18	1639	410	64	331
Furniture-fastening.....	J. H. Stiggleman.....	491,333	Feb. 7	537	137	62	851
Furniture. Folding leg for.....	O. G. Franks.....	493,021	Mar. 7	397	99	62	1437
Furniture-joint.....	L. R. Harsha.....	501,935	July 25	2247	561	64	453
Furniture. Knockdown.....	H. E. Clement.....	509,198	Nov. 21	1997	{ 485 486	{ 65	1166
Furniture-leg fastening.....	G. C. Goodyear.....	509,618	Nov. 28	2751	663	65	1320
Furniture-tightening device.....	H. L. Freeman.....	505,979	Oct. 3	274	72	65	54
Furniture. Writing-slide for.....	N. M. Olson.....	489,389	Jan. 3	622	168	62	134
Furrower and marker. Combined land.....	J. Ramey.....	504,617	Sept. 5	491	126	64	1362
Furs. Carrotting.....	H. A. A. Lussigny.....	501,797	July 18	2027	.....	64	397
Furs. Carrotting.....	H. A. A. Lussigny.....	501,798	July 18	2027	.....	64	397
Fuse. Electric safety.....	C. Thalacker.....	502,541	Aug. 1	501	120	64	658
Fuse. Binding-post.....	S. H. Stupakoff.....	497,732	May 16	2165	541	63	1040
Fuse-block. Electric.....	T. J. Fay.....	499,664	June 13	1531	369	63	1672
Fuse-block. Multiple.....	G. T. Voorhees.....	499,614	June 13	1461	350	63	1660
Fuse-block. Relay.....	G. T. Voorhees.....	499,485	June 13	1246	297	63	1623
Fuse-box. Combination.....	W. F. Bossert.....	489,364	Jan. 3	583	{ 157 158	{ 62	125
Fuse device. Thermostatic.....	A. Wurts.....	492,547	Feb. 28	2379	590	62	1271
Fuse-holder. Revolving.....	C. H. Ruggles.....	498,698	May 30	3755	927	63	1351
Fuse-lighter.....	W. C. Matthews.....	504,603	Sept. 5	474	121	64	1358
Fuse. Multiple.....	G. T. Voorhees.....	502,333	Aug. 1	138	31	64	591
Fuse-plug.....	H. C. West.....	508,665	Nov. 14	1119	275	65	924
Fuse. Projectile.....	J. Rapp.....	493,735	Mar. 21	1558	397	62	1694
Gaff-hook.....	G. A. Stanton.....	503,176	Aug. 15	1577	388	64	884
Gaff or boom.....	A. Voss.....	507,052	Oct. 17	2118	525	65	425
Gag-swivel.....	J. M. Harter and S. E. Harsh.....	497,660	May 16	2057	513	63	1020
Gage:							
See Age-gage.	Printing-press gage.						
Axle-gage.	Ring-gage.						
Cigar-maker's gage.	Riveting-machine gage.						
Combination-gage.	Saw-gage.						
Coupling-gage.	Saw-setting gage.						
Cutting-gage.	Saw-table gage.						
Depth-gage.	Saw-tooth gage.						
Door-hanging gage.	Shears-gage.						
File-gage.	Siding-gage.						
Height-gage.	Steam and water gage.						
Inseam-gage.	Surface-gage.						
Jewel and pivot gage.	Taper-gage.						
Lumber-gage.	Telephone-gage.						
Marking-gage.	Track-gage.						
Micrometer-gage.	Vacuum-gage.						
Pin-gage.	Water-gage.						
Pressure-gage.	Watchmaker's gage.						
Gage and cane. Combined.....	G. W. Bowen.....	505,385	Sept. 19	1768	458	64	1628
Gage-line holder.....	A. S. Snyder.....	492,636	Feb. 28	2518	623	62	1299
Gage-runner attachment.....	D. G. Hobby.....	496,566	May 2	277	73	63	669
Gages, &c. Stock for surface.....	C. W. Preston.....	498,726	May 30	3820	942	63	1363
Gaining-machine.....	F. and C. A. Johnson.....	501,653	July 18	1833	{ 456 457	{ 64	364
Galley-support.....	J. L. Dodd.....	511,235	Dec. 19	2400	585	65	1884
Galvanic battery.....	C. H. Brown.....	503,567	Aug. 15	2199	549	64	996
Galvanic battery.....	W. Burnley.....	498,422	May 30	3221	818	63	1269
Galvanic battery.....	W. C. Caball.....	489,522	Jan. 10	851	221	62	193
Galvanic battery.....	C. J. Coleman.....	495,306	Apr. 11	1267	316	63	252

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Galvanic battery.....	D. H. Fitch.....	494,852	Apr. 4	527	132	63	102
Galvanic battery.....	G. L. Foote.....	489,559	Jan. 10	901	235	62	204
Galvanic battery.....	J. A. S. Gregg.....	507,708	Oct. 31	3269	799	65	665
Galvanic battery.....	M. M. Hayden.....	500,284	June 27	2560	625	63	1877
Galvanic battery.....	C. W. Holtzer.....	496,878	May 9	798	210	63	781
Galvanic battery.....	F. K. Irving.....	496,658	May 2	429	115	63	696
Galvanic battery.....	H. T. Johnson.....	511,434	Dec. 26	2760	667	65	1961
Galvanic battery.....	E. H. Lyon.....	502,405	Aug. 1	259	61	64	613
Galvanic battery.....	N. M. Powell.....	490,231	Jan. 17	1977	518	62	434
Galvanic battery.....	W. R. Reud.....	489,832	Jan. 10	1294	338	62	254
Galvanic battery and electrical toy instrument.....	W. A. Connelly.....	498,743	May 30	3852	949	63	1368
Galvanic battery element.....	A. L. de Mériteus.....	496,743	May 2	561	151	63	720
Galvanic dry battery.....	J. von der Poppenburg.....	504,746	Sept. 12	721	1-0	64	1419
Galvanizing iron. Apparatus for.....	G. Retterer.....	491,720	Feb. 14	1072	271	62	979
Galvanometer.....	A. H. Hoyt.....	497,448	May 16	1732	435	63	961
Galvanometer.....	A. H. Hoyt.....	497,449	May 16	1724	435	63	961
Galvanometer.....	A. H. Hoyt.....	497,522	May 16	1844	465	63	982
Galvanometer.....	A. H. Hoyt.....	500,264	June 27	2533	620	63	1873
Galvanometer.....	E. F. Northrup.....	494,964	Apr. 4	682	175	63	131
Game.....	A. M. Grubbs.....	500,888	July 4	562	146	64	102
Game.....	A. M. Watson.....	498,702	May 30	3764	928	63	1353
Game apparatus.....	M. B. Andrews.....	502,455	Aug. 1	347	83	64	630
Game apparatus.....	Z. E. Bates.....	507,098	Oct. 24	2202	544	65	453
Game apparatus.....	C. H. Burch.....	499,317	June 13	940	228	63	1568
Game apparatus.....	F. N. Carpenter.....	505,027	Sept. 12	1181	303	64	1507
Game apparatus.....	J. B. Davids.....	489,854	Jan. 10	1326	346	62	290
Game apparatus.....	J. B. Davids.....	489,855	Jan. 10	1327	346	62	291
Game apparatus.....	J. B. Davids.....	489,856	Jan. 10	1327	346	62	291
Game apparatus.....	J. B. Davids.....	489,857	Jan. 10	1328	346	62	291
Game apparatus.....	A. Faber du Faur, Jr., and W. H. Bristol.....	496,195	Apr. 25	2649	665	63	539
Game apparatus.....	J. W. Frey.....	498,781	June 6	47	11	63	1397
Game apparatus.....	J. A. Haigh.....	505,826	Oct. 3	36	10	65	10
Game apparatus.....	F. R. Hogeboom.....	503,793	Aug. 22	2575	641	64	1062
Game apparatus.....	J. Huebner.....	507,323	Oct. 24	2613	643	65	528
Game apparatus.....	S. N. Johnson.....	492,961	Mar. 7	300	76	62	1419
Game apparatus.....	W. E. Kelly.....	509,601	Nov. 28	2727	659	65	1316
Game apparatus.....	H. Knight.....	509,813	Nov. 28	3064	739	65	1379
Game apparatus.....	W. W. Lapham.....	509,316	Nov. 21	2206	533	65	1204
Game apparatus.....	J. H. McGrady.....	506,530	Oct. 10	1273	319	65	256
Game apparatus.....	C. C. Moore.....	508,524	Nov. 14	903	222	65	941
Game apparatus.....	A. Myers.....	503,382	Aug. 15	1914	474 475 400	64 63	944 332
Game apparatus.....	C. Neilson.....	495,509	Apr. 18	1589	399 400	63	332
Game apparatus.....	R. Oberwimmer.....	509,179	Nov. 21	1964	478	65	1159
Game apparatus.....	W. D. Pickens.....	508,834	Nov. 14	1364	337	65	1029
Game apparatus.....	A. M. Quick.....	508,754	Nov. 14	1244	310	65	1008
Game apparatus.....	S. Robbins.....	499,041	June 6	522	122	63	1462
Game apparatus.....	A. V. Sanford.....	506,407	Oct. 10	1062	264	65	215
Game apparatus.....	W. Schaaf and G. A. Ritz.....	506,797	Oct. 17	1698	427	65	348
Game apparatus.....	F. J. Secker.....	498,367	May 30	3209	798	63	1254
Game apparatus.....	H. C. Smith.....	493,527	Apr. 18	1618	407	63	337
Game apparatus.....	G. E. Sovereign.....	498,451	May 30	3338	830	63	1279
Game apparatus.....	A. E. Stokes.....	494,496	Mar. 28	2811	705	62	1943
Game apparatus.....	C. Trogdon.....	491,298	Feb. 7	395	101	62	822
Game apparatus.....	D. Whitburn.....	503,022	Aug. 8	1315	322	64	822
Game apparatus.....	E. L. Williams.....	499,073	June 6	570	136	63	1490
Game apparatus.....	M. M. Wilson.....	499,000	June 6	452	106	63	1470
Game apparatus.....	M. M. Wilson.....	504,073	Aug. 29	3005	751	64	1180
Game apparatus. Coin-controlled.....	W. Boardman.....	493,395	Mar. 14	981	253	62	1567
Game apparatus. Coin-controlled.....	E. H. Davis.....	508,922	Nov. 21	1549	379	65	1078
Game apparatus. Coin-controlled.....	D. T. Nuttle.....	504,996	Sept. 12	1138	291	64	1498
Game apparatus. Parlor.....	O. F. Brinkman.....	503,403	Aug. 15	1938	481	64	949
Game appliance.....	L. H. Buchanan.....	503,942	Aug. 29	2787	699	64	1140
Game-board.....	R. J. Chipman.....	497,307	May 16	1501	378	63	921
Game-board.....	J. B. Davids.....	489,851	Jan. 10	1324	345	62	290
Game-board.....	J. B. Davids.....	489,852	Jan. 10	1325	345	62	290
Game-board.....	J. B. Davids.....	489,853	Jan. 10	1325	345	62	290
Game-board.....	J. B. Davids.....	497,908	May 23	2464	615	63	1109
Game-board.....	J. B. Davids.....	497,909	May 23	2465	616	63	1109
Game-board.....	J. B. Davids.....	497,910	May 23	2465	616	63	1109
Game-board.....	F. W. Hawkes.....	503,318	Aug. 15	1814	449	64	925
Game-board.....	W. G. Howell.....	505,314	Sept. 19	1654	427	64	1607
Game-board.....	A. Malinowski.....	497,452	May 16	1729	436	63	961
Game-board.....	F. H. Monks.....	500,409	June 27	2764	681	63	1914
Game-board.....	G. H. Monks.....	491,293	Feb. 7	389	99	62	821
Game-board.....	G. W. Seebach.....	499,351	June 13	1019	245	63	1583
Game-board. Whist.....	W. A. Logue.....	490,148	Jan. 17	1844	481	62	409
Game-counter.....	C. C. Fields.....	499,218	June 13	791	188	63	1542
Game-counter.....	S. B. Miller.....	494,011	Mar. 21	2013	514	62	1782
Game counter and register for pool-tables.....	L. F. Torrey and J. La Sha.....	501,632	July 18	1750	436	64	351
Game or exercising apparatus.....	W. P. Lyle.....	503,379	Aug. 15	1911	473	64	943
Game. Parlor.....	F. Pettersch.....	501,844	July 18	2084	515	64	408
Game. Parlor.....	J. R. Phelps.....	497,726	May 16	2159	540	63	1039
Game puzzle.....	C. F. Spencer.....	489,394	Jan. 3	627	169	62	135
Game-register.....	M. J. Neumann, Jr.....	503,978	Aug. 29	2861	718	64	1154
Games. Device for keeping scores in progressive.....	N. Hill.....	496,594	May 2	274	73	63	669
Gaming device. Coin-actuated.....	F. Sanderson.....	496,211	Apr. 25	2673	672	63	544
Gaming-machine. Slot.....	R. S. Williams.....	495,255	Apr. 11	1238	309	63	246
Gang-plank. Warehouse.....	L. Kuckartz.....	502,568	Aug. 1	534	127	64	664
Garbage and ash can.....	H. E. Wolcott.....	511,484	Dec. 26	2837	686	65	1976
Garbage, &c. Apparatus for pulping and compressing.....	N. Dowling.....	506,362	Oct. 10	976	242	65	197
Garbage. Apparatus for treating.....	N. Dowling.....	506,361	Oct. 10	974	242	65	197

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Garbage-burning furnace	S. H. Brown	501,181	July 11	1037	263	64	204
Garbage-bucket	A. R. Miranda	499,137	June 6	662	159	63	1506
Garbage. Disposing of city	H. B. Arnold	501,037	July 4	789	206 207	64	144
Garbage-furnace	B. C. Heavey	505,656	Sept 26	2267	574 575	64	1737
Garbage, night-soil, &c. Apparatus for destroying	A. Engle and S. C. Thompson	508,511	Nov. 14	869	214 215	65	935
Garbage or like wastes. Apparatus for treating	C. J. Best and W. A. Hall	501,760	July 18	1971	487	64	388
Garbage or like wastes. Treating	C. J. Best and W. A. Hall	501,761	July 18	1972	487 488	64	388
Garbage or rubbish drier	J. Mann	509,177	Nov. 21	1961	478	65	1159
Garbage. Process of and apparatus for treating	N. Dowling	506,363	Oct. 10	978	242	65	197
Garbage-receptacle	W. H. Barry	510,464	Dec. 12	1034	217	65	1620
Garbage-receptacle	P. Jasnowski	498,011	May 23	2619	654	63	1136
Garbage-receptacle	D. M. Lewis	508,325	Nov. 7	564	138	65	862
Garbage-receptacle	C. J. L. MacLeod	503,212	Aug. 15	1632	401	64	894
Garbage-receptacle	O. C. Newton	511,156	Dec. 19	2272	556	65	1860
Garbage-receptacle	J. C. Roth	498,920	June 6	303	70	63	1446
Garbage-receptacle	A. H. Zenner	496,243	Apr. 25	2730	683	63	554
Garbage-vessel	G. B. Sweger	496,917	May 9	868	229	63	794
Garden implement	J. H. Hanneken and J. T. May	509,308	Nov. 21	2189	526	65	1202
Garden implement	R. M. Rockey	499,251	June 13	834	198	63	1550
Garden-rake	J. A. Linn	509,921	Dec. 5	125	29	65	1433
Garden-tool	J. G. Clifton	510,406	Dec. 12	934	225	65	1602
Garden-tool	M. Powers	492,364	Feb. 21	2068	516 517	62	1195
Garden-tool. Combined	S. M. Alexander	508,393	Nov. 14	687	169	65	899
Garment. Bicycle	M. H. Lawson	491,057	Jan. 31	3347	853	62	731
Garment-clasp	M. E. Ohnstedt	509,551	Nov. 28	2644	639	65	1299
Garment-fastener	F. E. Bennett	511,577	Dec. 26	2983	727	65	2004
Garment-fastener	D. M. Floerckey	502,432	Aug. 1	307	73	64	622
Garment-fastener	V. H. Oberly	503,980	Aug. 29	2862	718	64	1154
Garment-fastener	W. F. Peet	490,921	Jan. 31	3119	800	62	685
Garment-fastening	B. Bernstein	491,070	Feb. 7	13	4	62	751
Garment-fastening	A. T. Smith	501,303	July 11	1216	308	64	236
Garment-hanger	W. O. Bement	495,926	Apr. 18	2246	566	63	448
Garment-holder. Adjustable	P. A. Sweeney	505,578	Sept. 26	2134	540	64	1712
Garment-hook	F. E. Bennett	493,011	Mar. 7	377	94	62	1433
Garment-hook	F. E. De Long	492,741	Feb. 28	2673	663	62	1330
Garment-hook	F. E. De Long	492,742	Feb. 28	2674	664	62	1330
Garment-hook	F. E. De Long	492,743	Feb. 28	2675	664	62	1330
Garment-hook	F. E. De Long	492,744	Feb. 28	2677	664 665	62	1330
Garment-hook	F. E. De Long	492,745	Feb. 28	2679	665	62	1331
Garment-hook	G. B. Mershon, Jr.	491,425	Feb. 7	619	155	62	866
Garment-hook	N. C. Sample	504,090	Aug. 29	3037	758	64	1187
Garment-protector	E. E. Fittler	503,841	Aug. 22	2635	659	64	1093
Garment-shaper	J. E. Leavitt	492,514	Feb. 28	2324	576	62	1258
Garment-stretcher	A. Clarke	510,405	Dec. 12	933	224	65	1602
Garment-supporter	L. G. Abbott	498,217	May 23	2940	732	63	1192
Garment-supporter	G. B. Adams	489,702	Jan. 10	1101	284	62	244
Garment-supporter	G. E. Adams	496,630	May 2	376	102	63	668
Garment-supporter	G. E. Adams	499,773	June 20	1721	414	63	1718
Garment-supporter	G. E. Adams	507,871	Oct. 31	3539	870	65	716
Garment-supporter	G. E. Adams	508,076	Nov. 7	157	44	65	788
Garment-supporter	J. W. Beaumont	502,393	Aug. 1	241	57	64	610
Garment-supporter	C. J. Daniels	507,787	Oct. 31	3399	893	65	689
Garment-supporter	W. B. Draper	499,215	June 13	788	187	63	1542
Garment-supporter	H. N. Elliott, E. L. Bemis, and E. L. Ward	495,154	Apr. 11	1025	255	63	208
Garment-supporter	A. W. Fries	492,396	Feb. 28	2120	529	62	1218
Garment-supporter	R. Gemmell	502,228	July 25	2710	684	64	541
Garment-supporter	F. E. Holt	492,356	Feb. 21	2057	513	62	1192
Garment-supporter	F. Kern	495,893	Apr. 18	2202	554	63	439
Garment-supporter	W. H. Ralph	493,648	Mar. 21	1411	358	62	1664
Garment-supporter	E. S. Smith	500,437	June 27	2808	692	63	1921
Garment-supporter	F. W. Taylor	509,338	Nov. 21	2246	543	65	1212
Garment-supporter	D. H. Warner	500,637	July 4	161	42	64	32
Garment-supporter	E. Whalen	489,619	Jan. 10	984	257	62	220
Garment-supporter	R. S. Willard	498,527	May 30	3459	857	63	1300
Garment-supporter clasp	G. N. Buck	507,646	Oct. 31	3181	778	65	648
Garment-supporter pulley	G. E. Adams	498,754	June 6	1	1	63	1389
Garment-supporters. Fastening for	E. S. Smith	500,353	June 27	2685	658	63	1899
Garment-supporting bracket	J. J. Bisel	508,861	Nov. 14	1414	351	65	1039
Garment-supporting bracket	J. J. Bisel	511,580	Dec. 26	2986	728	65	2004
Garment-turner	W. Denton	509,655	Nov. 28	2803	674 675	65	1330
Garter	G. H. Blakesley	504,410	Sept. 5	161	42	64	1300
Gas alarm. Escaping	C. J. Milligan	491,580	Feb. 14	851	215	62	934
Gas and air engine	E. Field	506,486	Oct. 10	1208	300 301 302	65	243
Gas and air mixing apparatus	W. Smethurst and J. Wade	490,087	Jan. 17	1740	453	62	387
Gas and electric light fixture. Combined	F. X. Gartland	490,903	Jan. 31	3096	794	62	681
Gas and electric-light fixture. Combined	J. A. O'Neill	503,912	Aug. 22	2741	687	64	1115
Gas apparatus	C. F. Cattell	493,975	Mar. 21	1958	499 500	62	1769
Gas apparatus	C. W. Isbell	506,819	Oct. 17	1741	438 439	65	356
Gas apparatus	L. and L. Stevens, Jr.	495,917	Apr. 18	2236	563	63	446
Gas apparatus	A. M. Sutherland	501,698	July 18	1856	461	64	369
Gas apparatus. Combination-valve connection for water	O. N. Guldin	510,506	Dec. 12	1097	265	65	1632
Gas. Apparatus for and method of producing	A. Kitson and T. Walker	507,073	Oct. 17	2146	532	65	430

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Gas. Apparatus for charging liquids with carbonic acid	J. F. Theurer.....	505,239	Sept. 19	1522	398	64	1583
Gas. Apparatus for charging liquids with carbonic acid	J. F. Theurer.....	505,240	Sept. 19	1525	398	64	1583
Gas. Apparatus for manufacturing	T. G. Hall	494,198	Mar. 28	2333	591	62	1855
Gas. Apparatus for manufacturing	A. C. Humphreys	501,250	July 11	1140	289 290 291	64	222
Gas. Apparatus for manufacturing	J. W. Kenevel	493,891	Mar. 21	1797	458	62	1739
Gas. Apparatus for manufacturing	J. J. Kirkham	502,125	July 25	2537	636 637	64	507
Gas. Apparatus for manufacturing	L. L. Merrifield, J. T. Westcott, and W. H. Pearson, Jr.	505,714	Sept. 26	2367	598	64	1754
Gas. Apparatus for obtaining residuum contained in water used in the manufacture of	C. G. Cobb	506,670	Oct. 17	1483	373	65	308
Gas. Apparatus for producing	J. S. Rogers and J. H. Baker	489,594	Jan. 10	950	247	62	212
Gas. Apparatus for the generation of	M. P. Goff	504,303	Aug. 29	3389	847 848	64	1252
Gas. Apparatus for the manufacture of	J. B. Archer	491,067	Feb. 7	5	2, 3	62	749
Gas. Apparatus for the manufacture of	J. B. Archer	501,130	July 11	957	244	64	189
Gas. Apparatus for the manufacture of	J. B. Archer	505,998	Oct. 3	306	79, 80	65	60
Gas. Apparatus for the manufacture of	J. Askins	491,398	Feb. 7	560	141 142	62	855
Gas. Apparatus for the manufacture of	A. T. Bennett	493,855	Mar. 21	1746	445	62	1730
Gas. Apparatus for the manufacture of	H. R. Earl	498,005	May 23	2611	652	63	1134
Gas. Apparatus for the manufacture of	H. M. Pierson	500,424	June 27	2785	686 687	63	1917
Gas. Apparatus for the manufacture of	J. M. Rose	505,537	Sept. 26	2043	521 522	64	1693
Gas. Apparatus for the manufacture of	J. R. Rose	506,077	Oct. 3	430	112 113	65	84
Gas. Apparatus for the manufacture of	S. W. Van Syckel	502,791	Aug. 8	937	228	64	753
Gas. Apparatus for the manufacture of	C. E. White	496,927	May 9	884	232	63	797
Gas-black. Apparatus for the manufacture of	D. M. P. V., and S. P. Schermerhorn	489,332	Jan. 3	532	145	62	115
Gas-burner	A. T. Bennett	493,256	Mar. 21	1748	445	62	1730
Gas-burner	D. Daly	496,350	Apr. 25	2912	727	63	589
Gas-burner	L. Daru	496,298	Apr. 25	2815	704	63	570
Gas-burner	J. M. Döhrer	490,764	Jan. 31	9864	735	62	634
Gas-burner	P. Gary	489,802	Jan. 10	1255	328	62	275
Gas-burner	C. A. Hartmann and G. A. McKee	499,731	June 20	1643	396	63	1706
Gas-burner	F. J. Leibman	501,283	July 11	1190	301	64	231
Gas-burner	W. L. Mitchell	492,041	Feb. 21	1570	391	62	1092
Gas-burner	A. Wienecke	506,759	Oct. 17	1642	411	65	337
Gas-burner attachment	B. F. Field	511,518	Dec. 26	2885	702	65	1986
Gas-burner attachment	M. Wheeler	501,391	July 11	1383	346	64	265
Gas-burner cut off	E. Denne	491,042	Jan. 31	3325	848	62	726
Gas burner for heating stoves or grates	P. I. Miller	503,705	Aug. 22	2437	607	64	1054
Gas burner. Fuel	J. B. Wallace	504,821	Sept. 12	848	217 218	64	1442
Gas burner. Heating	J. R. Williamson and I. W. Busby	509,710	Nov. 28	2890	699	65	1345
Gas-burner heating attachment	G. Edwards	494,470	Mar. 28	2760	692	62	1933
Gas-burner lighting attachment	N. Marshall	504,735	Sept. 12	701	176	64	1415
Gas burner. Natural	H. H. Engelman	508,689	Nov. 14	1147	283	65	990
Gas burner. Natural	W. G. Taylor	500,694	July 4	260	70, 71	64	49
Gas burner. Oil	W. C. Heister	508,312	Nov. 7	544	134	65	858
Gas burner. Regenerative	T. Thorp	496,586	May 2	303	81, 82	63	674
Gas-burner. Self-closing	A. Spear	490,321	Jan. 24	2141	558	62	479
Gas-burner. Self-generating	H. F. Smith	500,359	July 4	689	181	64	125
Gas burners. Self-closing cut-off for	S. Hecht	508,108	Nov. 7	212	55	65	798
Gas burners. Self-closing cut-off for	C. H. Keeney	491,943	Feb. 14	1418	354	62	1047
Gas cocks. Time mechanism for operating	G. B. Snow	507,564	Oct. 31	3020	742	65	619
Gas-compressor	E. Lawson	495,348	Apr. 11	1325	332	63	263
Gas-cut-off apparatus. Automatic	N. Lombard	501,951	July 25	2266	567	64	456
Gas-engine	J. S. Biggar	491,403	Feb. 7	569	143	62	857
Gas-engine	F. Cordenons	500,754	July 4	358	93	64	66
Gas-engine	J. Foos and C. F. Endter	494,134	Mar. 28	2229	568	62	1835
Gas-engine	C. J. B. Gaume	501,881	July 18	2151	533 534	64	420
Gas-engine	W. W. Grant	497,239	May 9	1346	343 344	63	880
Gas-engine	C. F. Hirsch and A. Schilling	507,436	Oct. 24	2795	684 685	65	564
Gas-engine	D. D. Hobbs	506,817	Oct. 17	1736	437	65	355
Gas-engine	G. E. Hoyt	502,255	July 25	2765	699	64	551
Gas-engine	G. E. Hoyt	510,140	Dec. 5	502	114	65	1504
Gas-engine	S. Lawson	498,476	May 30	3370	840	63	1225
Gas-engine	G. W. Lewis	511,535	Dec. 26	2913	709	65	1992
Gas-engine	W. von Oechelhaeuser and H. Junkers	508,833	Nov. 14	1362	336 337 338	65	1029
Gas-engine	C. W. Pinkney	499,935	June 20	1982	481 482	63	1764
Gas-engine	C. W. Pinkney	504,614	Sept. 5	487	125	64	1361
Gas-engine	C. W. Pinkney	505,327	Sept. 19	1670	431	64	1610
Gas-engine	C. W. Pinkney	511,158	Dec. 19	2275	557	65	1861
Gas-engine	J. W. Raymond	491,855	Feb. 14	1281	317	62	1020
Gas-engine	C. Sintz	509,255	Nov. 21	2102	506 507	65	1185
Gas-engine	C. V. Walls	498,700	May 30	3759	927 928 929	63	1352
Gas-engine	H. A. Weeks and G. W. Lewis	511,478	Dec. 26	2830	684 685	65	1975
Gas engine	W. H. Worth	504,260	Aug. 29	3322	830	64	1240
Gas engine. Carbonic-acid or other	A. Danner and G. Rothenbücher	502,430	Aug. 1	303	73	64	621
Gas-engine. Compression	H. W. Tuttle	510,213	Dec. 5	625	147 148	65	1528

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Gas-engine igniter	D. Best	496,718	May 2	517	138	63	713
Gas-engine igniter	C. W. Weiss	492,126	Feb. 21	1693	422	62	1117
Gas-fixtures. Safety stop-cock for	L. Brodt	508,275	Nov. 7	490	118	65	848
Gas for heating purposes. Apparatus for producing and utilizing	G. A. Watson	503,817	Aug. 22	2605	650	64	1088
Gas from hydrocarbon liquids. Apparatus for producing	J. S. Rogers	506,730	Oct. 17	1591	651	65	327
Gas-furnace	W. T. Bate	499,157	June 6	694	167	63	1511
Gas-furnace	J. H. Tuffs	492,367	Feb. 21	2072	517	62	1195
Gas furnace and producer. Regenerative	F. Siemens	501,107	July 11	922	518	64	183
Gas. Furnace for the manufacture of	J. C. Dods	501,457	July 11	1474	236	64	283
Gas-furnace. Parlor	J. W. Cowperthwait	502,658	Aug. 1	689	237	64	692
Gas-generating apparatus	W. T. Bate	499,155	June 6	690	370	63	1510
Gas-generating apparatus	W. T. Bate	507,981	Nov. 7	6	371	65	760
Gas-generating apparatus	J. M. Goldsmith	489,737	Jan. 10	1154	165	62	254
Gas-generator	J. De Neal	507,975	Oct. 31	3703	299	65	746
Gas-generator	A. C. Erskine	508,001	Nov. 7	33	300	65	765
Gas-generator	J. P. Jackson	497,097	May 9	1137	301	63	841
Gas-generator	J. H. Miller, Jr.	494,012	Mar. 21	2020	291	62	1782
Gas-generator	J. Nolan	500,935	July 4	622	515	64	114
Gas-generator	W. B. Wright	510,462	Dec. 12	1031	622	65	1619
Gas generator and burner. Combined oil	M. Beck	503,399	Aug. 15	1934	247	64	948
Gas generator and burner for heating purposes. Petroleum	T. A. Stombs	498,410	May 30	3264	481	63	1266
Gas generator and burner. Hydrocarbon	C. Devoe	506,772	Oct. 17	1661	416	65	341
Gas generator and burner. Hydrocarbon	E. A. Edwards	495,726	Apr. 18	1945	417	63	392
Gas generator. Hydrogen	W. and T. Hawkins	490,437	Jan. 24	2315	489	62	512
Gas-governor	A. Ford	498,543	May 30	3491	601	63	1306
Gas-governor	L. W. Martyr and H. Eldridge	503,350	Aug. 15	1862	863	64	934
Gas-governor	B. E. Patterson	429,324	Jan. 3	520	461	62	112
Gas-heater	D. Drysdale	492,577	Feb. 28	2423	142	62	1281
Gas-heater	H. C. Earle	491,045	Jan. 31	3329	604	62	727
Gas-heater	J. Y. Farke	506,932	Oct. 17	1929	849	65	390
Gas-heater	F. P. Ziegler	504,352	Sept. 5	110	477	64	1291
Gas-holder tank	F. Mayer	505,629	Sept. 26	2212	28	64	1726
Gas-holder tank	F. Mayer	507,022	Oct. 17	2064	560	65	416
Gas-holders. Overflow device for telescoping	F. V. Matton	511,444	Dec. 26	2777	517	65	1964
Gas. Illuminating hydrocarbon	E. Tatham	502,642	Aug. 1	659	612	64	688
Gas. Incandescent burner for hydrocarbon	J. S. P. Stutley	494,040	Mar. 21	2061	526	62	1789
Gas-lamps. Lighting	I. Hartig	509,531	Nov. 28	2616	633	65	1293
Gas lighter and extinguisher. Time	F. A. Langwith	495,556	Apr. 18	1663	419	63	345
Gas-lighter. Electric	T. W. Lane	429,653	Jan. 10	1025	267	62	229
Gas-lighter. Electric	D. J. Quinn and P. W. Hoffmann	496,618	May 2	355	96	63	684
Gas lighter or extinguisher	R. Geissler	501,780	July 18	1996	493	64	393
Gas-lighting apparatus	G. Gördt	501,565	July 18	1640	410	64	331
Gas-lighting apparatus. Electric	T. W. Lane	499,298	June 13	915	222	63	1564
Gas-lighting apparatus. Electric	T. W. Lane and C. E. Lee	459,297	June 13	913	221	63	1563
Gas-lighting apparatus. Electric	A. M. Sloss	489,616	Jan. 10	979	255	62	219
Gas lighting or extinguishing apparatus	J. Sangster	498,492	May 30	3395	845	63	1289
Gas lighting or extinguishing apparatus. Automatic	P. Everitt	504,447	Sept. 5	216	56	64	1310
Gas-liquefying apparatus	F. B. Deane	509,205	Nov. 21	2008	58	65	1168
Gas-machine	J. S. Wood	499,076	June 6	574	137	63	1491
Gas. Making	E. Tatham	499,483	June 13	1240	603	63	1622
Gas. Making	P. A. N. Winand	496,502	May 2	170	48	63	650
Gas-making apparatus	M. E. Wilson	498,096	May 23	2745	686	63	1159
Gas-making furnace	J. Fehrenbatch	505,759	Sept. 26	2441	615	64	1768
Gas. Making pure carbonic-acid	E. Luhnmann	491,365	Feb. 7	510	62	62	845
Gas manufacture. Apparatus for	J. W. Hayes	507,003	Oct. 17	2029	502	65	410
Gas. Manufacture of	J. L. Hastings	505,524	Sept. 26	2017	516	64	1689
Gas. Manufacturing	J. B. Archer	491,066	Feb. 7	2	1, 2	62	749
Gas. Manufacturing	C. L. Fitch	459,472	Jan. 10	763	202	62	176
Gas. Manufacturing	M. P. Goff	507,491	Oct. 24	2875	705	65	579
Gas. Manufacturing	J. R. Rose	506,078	Oct. 3	432	113	65	84
Gas. Manufacturing	H. M. Young	507,252	Oct. 24	2482	114	65	503
Gas-manufacturing apparatus	W. A. Koneman	500,333	June 27	2652	612	63	1894
Gas-manufacturing apparatus	E. E. Morrell	495,900	Apr. 18	2210	649	63	441
Gas. Manufacturing hydrocarbon	J. W. Tallmadge	499,606	June 13	1442	557	63	1657
Gas. Manufacturing hydrogen	H. S. Blackmore	497,700	May 16	2123	346	63	1032
Gas-meter	T. F. Downey	491,411	Feb. 7	578	145	62	858
Gas-meter	J. H. Mansur	498,181	May 23	2871	146	63	1181
Gas-meter	J. R. Wallace	502,388	Aug. 1	235	717	65	609
Gas-meter	S. Williams	492,600	Feb. 28	2461	55	62	1289
Gas-meter casing	W. N. Milsted	505,715	Sept. 26	2369	612	64	1754
Gas-meter. Coin-freed	G. Carter	504,266	Aug. 29	3329	632	64	1241
Gas-meter. Coin-operated	D. Orme	497,682	May 16	2088	833	63	1026
Gas-meter connection	A. H. Gindele	506,489	Oct. 10	1216	521	65	244
Gas-meter frame	H. Logue	490,149	Jan. 17	1845	522	62	409
Gas-meter with rotating drum. Dry	P. F. H. Sobolewski	511,368	Dec. 26	2638	481	65	1941
Gas-mixer	C. G. Freeman	509,369	Nov. 28	2304	642	65	1234

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Gas-mixer.....	C. M. and C. E. Kemp.....	507,013	Oct. 17	2051	507	65	414
Gas-mixer.....	C. H. Page, Jr.....	507,748	Oct. 31	3321	813	65	675
Gas-mixer.....	G. J. Roberts.....	502,531	Aug. 1	477	115	64	654
Gas-mixer. Fuel.....	W. G. Taylor.....	497,435	May 16	1703	430	63	957
Gas-mixer. Fuel.....	W. G. Taylor.....	499,151	June 6	682	164	63	1509
Gas-motor.....	A. Niemczyk.....	508,042	Nov. 7	93	27	65	776
Gas-motor engine.....	C. B. Wattles.....	509,981	Dec. 5	232	54, 55	65	1453
Gas. Obtaining hydrogen and carbonic-acid.....	F. Salomon.....	507,331	Oct. 24	2622		65	530
Gas or carbureted-air engine.....	E. Delamare-Deboutteville and L. Malandin.....	511,593	Dec. 26	3008	732	65	2008
Gas or oil burner.....	W. B. Harris and C. W. Claybourne.....	508,384	Nov. 7	662	733	65	881
Gas or oil motor engine.....	H. Schumm.....	497,689	May 16	2105	525	63	1029
Gas or oil motor engine.....	H. Schumm.....	510,712	Dec. 12	1480	526	65	1702
Gas or oil motor engine.....	C. Stein.....	511,661	Dec. 26	3118	365	65	2028
Gas or petroleum engine.....	P. H. Irgens.....	505,767	Sept. 26	2454	366	64	1770
Gas or similar motor engine.....	H. Williams.....	490,006	Jan. 17	1596	617	62	358
Gas or vapor burner. Self-generating.....	R. Wallwork and A. C. Wells.....	489,244	Jan. 3	406	618	62	91
Gas or vapor engine.....	B. Chatterton.....	505,751	Sept. 26	2423	113	64	1764
Gas-pressure regulator.....	R. Brame.....	494,699	Apr. 4	269	611	63	54
Gas-pressure regulator.....	D. Wilson.....	499,489	June 13	1252	612	63	1624
Gas-pressure regulator. Safety.....	J. Fleischer.....	498,253	May 30	3003	298	63	1219
Gas. Process of and apparatus for making and burning fuel.....	G. Jones.....	507,500	Oct. 24	2899	748	65	582
Gas. Process of and apparatus for manufacturing.....	T. G. Hall.....	494,200	Mar. 28	2336	749	62	1856
Gas. Process of and apparatus for the manufacture of.....	E. R. Ellsworth.....	506,168	Oct. 3	601	153	65	1116
Gas. Process of and apparatus for the manufacture of.....	J. L. Hastings.....	505,525	Sept. 26	2023	516	64	1690
Gas-producer.....	O. W. Ketchum.....	490,771	Jan. 31	2873	518	62	636
Gas-producer feed device.....	C. W. Bildt.....	493,229	May 30	2962	738	63	1211
Gas-protector.....	F. M. Reed.....	489,392	Jan. 3	624	739	62	134
Gas-pumping apparatus.....	C. W. and B. A. Buerkle, Jr.....	505,973	Oct. 3	267	169	65	52
Gas. Purifying ammonia.....	G. L. Vail and T. Charlton.....	505,427	Sept. 19	1841	71	64	1643
Gas-purifying apparatus.....	J. Goetz.....	503,133	Aug. 15	1505	473	64	870
Gas-regulating and advertising cabinet.....	J. Ruthven.....	505,372	Sept. 19	1743	370	64	1624
Gas-regulating burner.....	C. S. Ford, Sr.....	501,459	July 11	1477	451	64	284
Gas-regulator.....	L. Gardner.....	503,131	Aug. 15	1503	452	64	870
Gas-regulator.....	M. G. Reynolds.....	498,861	June 6	193	369	63	1427
Gas regulator and cut-off.....	G. Palm.....	509,395	Nov. 28	2361	370	65	1244
Gas-regulator for calcium lights.....	J. von Ey.....	498,897	June 6	263	573	63	1439
Gas regulator or governor.....	R. R. Beard.....	502,064	July 25	2445	61	64	5-9
Gas-retort-charging apparatus.....	W. Arrol and W. Foulis.....	498,755	June 6	2	614	64	1389
Gas-retort-charging apparatus.....	A. Coze.....	508,090	Nov. 7	187	2	65	793
Gas-retorts. Apparatus for stirring and drawing.....	W. Foulis.....	498,779	June 6	44	50	63	1396
Gas-scrubber.....	W. R. Beal.....	510,396	Dec. 12	920	44	65	1599
Gas scrubber and purifier.....	W. T. Bate.....	499,156	June 6	693	221	63	1511
Gas separator or purifier.....	O. Reasoner.....	495,059	Apr. 11	828	166	63	173
Gas storing and distributing apparatus.....	E. Hill.....	497,545	May 16	1877	210	63	988
Gas. Tile for use in apparatus for the manufacture of.....	J. B. Archer.....	502,693	Aug. 8	761	473	63	988
Gas. Tile for use in apparatus for the manufacture of.....	J. B. Archer.....	504,314	Sept. 5	3	185	64	721
Gas-trap.....	U. Reiffer and J. F. Stauffer.....	506,940	Oct. 17	1938	3	64	1271
Gas washing and scrubbing apparatus.....	J. H. Fitzgerald.....	493,156	Mar. 7	598	480	65	392
Gas washing and scrubbing device.....	A. C. Wood and J. H. Tuffs.....	503,395	Aug. 15	1930	150	62	1477
Gases. Apparatus for and process of obtaining combined nitrogen and fuel.....	T. B. Fogarty.....	500,650	July 4	184	479	64	947
Gases. Apparatus for treating pulverulent materials with.....	E. Solvay.....	503,556	Aug. 15	2184	480	64	36
Gases. Method of and apparatus for propelling producer.....	W. H. Forbes.....	503,842	Aug. 22	2636	546	64	993
Gases. Treating pulverulent material with.....	E. Solvay.....	503,558	Aug. 15	2188	659	64	1094
Gases under high pressure for power. Apparatus for using.....	G. H. Chappell.....	505,028	Sept. 12	1182	547	64	994
Gaseous fluid. Tubular structure filled with.....	J. A. Sumovski.....	511,472	Dec. 26	2821	303	64	1507
Gasket. Packing.....	C. K. Dodge.....	505,703	Sept. 26	2350	305	65	1973
Gasoline-burner.....	J. Williams and G. A. Cummer.....	493,540	Mar. 14	1219	682	64	1751
Gasoline-burner attachment.....	A. Sayers.....	493,186	Mar. 7	643	594	62	1611
Gasoline-burners. Starting attachment for.....	H. E. F. Borzell and E. E. Bardsley.....	489,284	Jan. 3	466	129	62	102
Gasoline-heater.....	T. C. Mosely and A. H. Kingman.....	490,880	Jan. 31	3042	164	62	1444
Gasoline-heater. Odorless.....	W. E. Robbins.....	510,520	Dec. 12	1118	62	62	671
Gate:					270	65	1636
See Automatic gate. Folding gate.							
Automatic sliding or rolling gate. Portable gate.							
Bridge-gate. Railway-gate.							
Car-gate. Railway-crossing gate.							
Car platform-gate. Sliding gate.							
Elevator-gate. Stock-yard gate.							
Elevator safety-gate. Swinging gate.							
End-gate. Tilting gate.							
Farm-gate. Water-gate.							
Fence-gate. Wire gate.							
Flood-gate.							
Gate.....	G. Adams.....	511,034	Dec. 19	2067	512	65	1820

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Gate.....	T. J. Andre.....	505,212	Sept. 19	1488	388	64	1576
Gate.....	G. H. Aylworth.....	508,799	Nov. 14	1307	325	65	1020
Gate.....	D. Baptist.....	503,448	Aug. 15	2003	497	64	960
Gate.....	N. J. Bishop.....	500,050	June 20	2162	524 525	63	1796
Gate.....	A. Boyd.....	490,737	Jan. 31	2819	724	62	626
Gate.....	E. Cahill.....	493,477	Mar. 14	1115	286	62	1591
Gate.....	J. L. Chadwick.....	491,637	Feb. 14	943	237	62	953
Gate.....	C. Christian.....	496,858	May 9	754	201	63	773
Gate.....	T. A. Churchill.....	510,957	Dec. 19	1951	476	65	1800
Gate.....	W. D. Culwell.....	499,970	June 20	2033	493	63	1773
Gate.....	J. H. Dickenson.....	490,015	Jan. 17	1628	424	62	364
Gate.....	A. and S. A. Diffonderfer.....	509,516	Nov. 28	2559	626	65	1288
Gate.....	T. E. Foudray.....	489,604	Jan. 10	966	251	62	216
Gate.....	V. Frioux.....	504,829	Sept. 12	858	220	64	1444
Gate.....	J. H. Haskin.....	502,460	Aug. 1	353	85	64	631
Gate.....	H. D. Herrington.....	504,780	Sept. 12	781	197	64	1429
Gate.....	G. A. Hess.....	497,663	May 16	2062	514	63	1021
Gate.....	J. Hughes.....	508,018	Nov. 7	60	17	65	769
Gate.....	J. P. Irwin.....	493,725	Mar. 21	1540	393	62	1689
Gate.....	A. E. Jester and J. G. Alexander.....	508,573	Nov. 14	982	241	65	956
Gate.....	J. E. Knapp.....	510,802	Dec. 12	1629	405	65	1729
Gate.....	C. L. Leonard and W. A. Carter.....	510,689	Dec. 12	1444	356	65	1695
Gate.....	J. Losey.....	504,392	Sept. 5	129	34	64	1294
Gate.....	C. H. Lucas.....	504,357	Sept. 5	64	17	64	1283
Gate.....	G. W. Mauk.....	501,801	July 18	2032	500	64	398
Gate.....	B. Miller.....	491,579	Feb. 14	850	215	62	934
Gate.....	W. K. Mills.....	500,593	July 4	84	24	64	17
Gate.....	R. T. Mulcahy.....	511,635	Dec. 26	3023	753	65	2021
Gate.....	M. E. Myers.....	501,526	July 18	1579	397	64	318
Gate.....	W. Neeb.....	490,491	Jan. 24	2411	623	62	532
Gate.....	A. Neutasher.....	507,717	Oct. 31	3284	803	65	668
Gate.....	E. D. Pugh.....	510,445	Dec. 12	1000	238	65	1614
Gate.....	A. Rickert.....	497,031	May 9	1035	264	63	823
Gate.....	A. J. Russell.....	502,206	July 25	2672	675	64	533
Gate.....	C. H. Russell.....	492,237	Feb. 21	1876	468 469	62	1155
Gate.....	J. A. Schramm.....	495,272	Apr. 11	1214	304	63	242
Gate.....	M. F. Shehan.....	502,263	July 25	2781	702	64	553
Gate.....	H. A. Smith.....	494,390	Mar. 28	2651	665	62	1913
Gate.....	J. W. Taylor and G. W. Walters.....	505,009	Sept. 12	1155	296	64	1502
Gate.....	W. R. White.....	493,538	Mar. 14	1214	311	62	1610
Gate.....	W. R. White.....	493,539	Mar. 14	1216	311 312	62	1610
Gate.....	W. A. Williams.....	489,621	Jan. 10	925	257	62	220
Gate.....	L. W. Youngs.....	509,346	Nov. 21	2256	546	65	1213
Gate and mechanism therefor.....	T. H. Lindley.....	505,274	Sept. 19	1581	412	64	1594
Gate-brace.....	C. C. A. Sienknecht.....	491,906	Feb. 14	1360	338	62	1036
Gate-closer.....	T. C. Dickson.....	506,213	Oct. 10	713	179	65	146
Gate-fastener.....	T. A. Carraher.....	504,633	Sept. 12	916	237	64	1457
Gate-hanger.....	F. A. Cullen.....	505,195	Sept. 19	1461	377	64	1571
Gate-opening mechanism.....	C. E. Mathers.....	490,974	Jan. 31	3204	818	62	701
Gate-operating device.....	W. S. Hartley.....	494,860	Apr. 4	538	136	63	104
Gate-operating mechanism.....	N. Smith.....	500,161	June 27	2375	576	63	1845
Gate-post.....	J. W. Barnes.....	495,291	Apr. 11	1246	311	63	248
Gathering or doubling machine.....	H. D. Klots.....	506,434	Oct. 10	1115	277	65	225
Gear-case.....	S. H. Percy.....	501,626	July 18	1740	433	64	349
Gear-casing.....	W. H. Forbes and G. B. Shepley.....	504,338	Sept. 5	42	12	64	1279
Gear-cutter. Duplex.....	R. M. Clough.....	490,638	Jan. 31	2661	686	62	596
Gear-cutting and hobbing machine.....	U. H. E., and F. L. Eberhardt.....	510,122	Dec. 5	472	108	65	1499
Gear-cutting machine.....	U. H. E., and F. L. Eberhardt.....	510,121	Dec. 5	468	106 107	65	1498
Gear-cutting machine.....	A. Mertes.....	498,720	May 30	3807	938 939	63	1360
Gear-cutting machine.....	E. H. Parks.....	505,606	Sept. 26	2179	551	64	1720
Gear-cutting machine.....	J. Walker.....	496,676	May 2	456	122 123	63	702
Gear-cutting machine.....	D. C. Woodward.....	495,866	Apr. 18	2160	542	63	431
Gear-cutting machine. Worm.....	G. S. Rominger.....	490,503	Jan. 24	2430	627	62	535
Gear. Driving.....	J. F. Guild.....	508,701	Nov. 14	1169	288	65	993
Gear. Expansion or cut-off.....	O. F. Jones.....	489,904	Jan. 10	1410	365	62	305
Gear for machine. belts. Engaging or disengaging.....	W. Maybach.....	492,872	Mar. 7	161	39	62	1390
Gear-planer tool-controlling mechanism.....	J. E. Gleason.....	509,467	Nov. 28	2512	607	65	1274
Gear. Reversing.....	D. Pitceathly.....	490,308	Jan. 24	2125	552 553	62	476
Gear. Reversing.....	A. Radovanovic.....	490,754	Jan. 31	2848	731	62	631
Gear. Reversing.....	E. G. Smith.....	489,104	Jan. 3	192	51	62	45
Gear. Reversing.....	C. Ward.....	510,218	Dec. 5	636	150	65	1530
Gear-wheel cutter.....	F. J. Gay.....	511,607	Dec. 26	3037	740	65	2013
Gearing.....	W. I. Bunker.....	492,178	Mar. 7	8	3	62	1361
Gearing.....	A. M. Forrester.....	494,741	Apr. 4	339	86	63	67
Gearing.....	E. A. Garey.....	501,415	July 11	1418	355	64	272
Gearing.....	A. J. Hoyt.....	507,681	Oct. 31	3229	790 791	65	657
Gearing.....	E. D. Speer.....	510,368	Dec. 5	865	208	65	1574
Gearing.....	J. Zimmermann.....	504,645	Sept. 5	532	136	64	1370
Gearing. Chain.....	E. J. Garrard.....	491,420	Feb. 7	589	148	62	860
Gearing. Differential.....	J. Thomson.....	507,695	Oct. 31	3249	795	65	661
Gearing. Machine for cutting worms for.....	G. H. Nutt.....	492,966	Mar. 7	308	79	62	1420
Gearing. Variable transmitting.....	H. C. Behr.....	491,866	Feb. 14	1301	321	62	1024
Gearing. Worm.....	C. W. Fowler.....	493,493	Mar. 14	1137	291	62	1595
Gelatine and glue. Apparatus for manufacturing.....	F. A. Wolf.....	496,469	May 2	124	33	63	641
Gelatine-circulating device.....	T. C. Merz.....	489,539	Jan. 10	871	228	62	197

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Gem cutting and polishing machine	W. C. Knuth	509,814	Nov. 28	3065	{ 739 740	{ 65	1379
Gems. Cluster-setting for	R. Fuchs	505,218	Sept. 19	1495	390	64	1578
Generator:							
<i>See</i> Current-generator. Gas-generator.							
Electric generator. Hydrocarbon-generator.							
Electric-current generator. Pressure-generator.							
Steam-generator.							
Generator	E. Hayes	489,002	Jan. 3	38	11	62	10
Generator	F. M. Reed	492,366	Feb. 21	2071	517	62	1195
Gig-mill	N. H. Grosslin	493,549	Mar. 14	1235	316	62	1614
Gin-saw fender	H. S. Taylor	490,049	Jan. 17	1679	436	62	374
Gin-saw-filing machine	J. C. McCurry	510,926	Dec. 19	1888	463	65	1788
Gin-saw guard	T. F. Marlow	492,500	Feb. 28	2306	572	62	1255
Gin-saw-sharpening machine	J. Y. Lyle	505,774	Sept. 26	2464	621	64	1772
Girder and joist. Fireproof	J. H. Blakesley	503,642	Aug. 22	2341	584	64	1036
Girder and wall. Hollow-tile	C. P. Oudin	511,249	Dec. 19	2422	590	65	1888
Girder-bracing tie-bar	J. M. Cornell	495,785	Apr. 18	2034	515	63	409
Girder clamp and hanger	C. MacTaggart	507,743	Oct. 31	3314	811	65	674
Glass:							
<i>See</i> Opera, field, marine, Prescription-glass.							
and other glass. Toilet-glass.							
Glass annealing and flattening furnace	J. George and C. M. Shortle	510,784	Dec. 12	1598	398	65	1724
Glass annealing furnace	J. George and C. M. Shortle	508,934	Nov. 21	1567	384	65	1081
Glass-annealing kiln	W. F. Modes	505,716	Sept. 26	2371	599	64	1754
Glass. Apparatus for the manufacture of	L. West	499,824	June 13	1475	354	63	1662
Glass article and making same. Ornamental	J. S. Irwin	502,461	Aug. 1	354	85	64	631
Glass articles and blanks therefor. Forming	W. Jarskouw	496,416	May 2	40	11	63	626
Glass articles. Apparatus for attaching stems and feet to	L. Schaub	509,250	Nov. 21	2095	505	65	1183
Glass articles. Apparatus for forming stemmed	J. T. Hanes and T. Blankinsop	490,905	Jan. 31	3099	795	62	681
Glass articles. Manufacture of hollow	L. Appert	507,400	Oct. 24	2734	671	65	552
Glass articles. Molding circular	H. C. Yocum and M. V. Kacer	498,147	May 23	2817	705	63	1172
Glass-batch mixer	J. Goodman	490,346	Jan. 24	2188	569	62	489
Glass-batch mixer	D. Pugh	491,445	Feb. 7	629	158	62	868
Glass. Bed for polishing plate	R. Brockman	497,115	May 9	1161	298	63	846
Glass-beveling machine. Plate	E. Hill	507,127	Oct. 24	2253	{ 555 556	{ 65	463
Glass-blower tire fue	J. Casner	509,195	Nov. 21	1993	{ 484 485	{ 65	1165
Glass-blowing apparatus	H. Hilde	493,867	Mar. 21	1764	{ 449 450	{ 62	1733
Glass-blowing tube	A. Pitman	503,676	Aug. 22	2388	596	64	1045
Glass bottles. Apparatus for the manufacture of	B. A. Spaull	503,220	Aug. 15	1647	{ 404 405	{ 64	897
Glass bottles. Finishing-tool for	T. K. Sheldon and M. N. Lynn	500,960	July 4	673	177	64	122
Glass bottles. Mold for making	T. W. Synnot	507,337	Oct. 24	2632	648	65	532
Glass by sand-blast. Decorating	M. Suess	504,543	Sept. 5	385	.....	64	1342
Glass-carrying vehicle	R. M. Roberts	499,593	June 13	1422	340	63	1653
Glass, china, or earthenware. Means for connecting metallic fittings to	O. E. and J. F. Green	499,918	June 20	1963	477	63	1761
Glass. Chipping	S. Evans	494,999	Apr. 4	731	186	63	140
Glass. Chipping or ornamenting	E. A. Savary	495,375	Apr. 11	1370	342	63	271
Glass. Composition of	O. Jensen and R. Keck	494,636	Apr. 4	173	.....	63	35
Glass-cutter	S. Bray	506,466	Oct. 10	1169	290	65	236
Glass-cutter and guide therefor	E. Walsh, Jr.	507,395	Oct. 24	2728	669	65	550
Glass-decorating apparatus	J. Macher	501,014	July 4	752	197	64	137
Glass. Depositing layers of metal on	J. H. Scharling	505,576	Sept. 26	2129	{ 539 540	{ 64	1711
Glass domes. Forming	H. Heckert	497,574	May 16	1923	483	63	996
Glass for beveling. Setting and holding plate	E. Hill	506,401	Oct. 10	1053	262	65	213
Glass, &c., for the sand-blast process. Preparing	S. Evans	494,998	Apr. 4	728	186	63	140
Glass-furnace	T. A. Zellers	498,148	May 23	2818	705	63	1172
Glass grinding and polishing. Apparatus for recovering sand used in	J. M. Krampf	494,209	Mar. 28	2355	596	62	1859
Glass leers. Window	J. H. Lubbers	492,765	Feb. 28	2718	{ 675 676	{ 62	1339
Glass. Machine for embedding wire in	F. Shuman	510,716	Dec. 12	1486	367	65	1703
Glass. Machine for manufacturing articles of	W. Bechtold	493,808	Mar. 21	1682	{ 428 429	{ 62	1717
Glass. Machine for manufacturing wire	F. Shuman	510,823	Dec. 12	1671	415	65	1737
Glass. Machine for ornamenting bed-plates for casting sheet	E. Walsh, Jr.	507,572	Oct. 31	3047	745	65	623
Glass-making apparatus	T. A. Edison	506,216	Oct. 10	717	180	65	147
Glass. Making imitation leaded	E. Walsh, Jr.	511,563	Dec. 26	2968	723	65	2001
Glass. Making plate	T. A. Edison	506,215	Oct. 10	716	180	65	147
Glass manufacture	J. Zihlmann	496,334	Apr. 25	2878	719	63	582
Glass. Manufacturing wire	F. Shuman	510,822	Dec. 12	1670	415	65	1737
Glass. Marbled	C. F. E. Grosse	494,063	Mar. 21	2100	.....	62	1796
Glass-mold	T. B. Atterbury	511,491	Dec. 26	2848	689	65	1978
Glass-mold	R. W. Blaze	508,597	Nov. 14	1018	251	65	963
Glass-mold	W. H. Jones	490,909	Jan. 31	3104	796	62	682
Glass-mold-cooling apparatus	E. Kaye	501,077	July 11	854	221	64	171
Glass-mold label-former	J. S. Irwin	490,966	Jan. 31	3193	816	62	699
Glass-mold. Mechanically-operated	S. Hipkins, Jr.	498,116	May 23	2776	693	63	1164
Glass molds. Apparatus for mechanically operating paste	M. J. Owens	489,543	Jan. 10	876	229	62	199
Glass-molds. Apparatus for operating	W. H. Jones	490,908	Jan. 31	3103	{ 795 796	{ 62	682
Glass. Mosaic art	A. Verhagen	504,506	Sept. 5	326	83	64	1331
Glass or other furnace	W. H. Forbes	498,640	May 30	3653	904	63	1334
Glass. Ornamenting	S. Evans	495,000	Apr. 4	733	187	63	140
Glass. Ornamenting	Q. Guillaume	510,597	Dec. 12	1283	312	65	1664

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Glass-pipe-casting machine	R. G. Guptill	494,951	Apr. 4	660	170	63	127
Glass plates. Machinery for grinding	R. Friedel	496,052	Apr. 25	2443	{ 615 616 145 146 }	63	500
Glass-polishing machinery. Plate	J. B. Ford	496,731	May 2	541	{ 145 146 }	63	717
Glue-pot	F. Kahrs	498,717	May 30	3802	937	63	1359
Glass-rolling apparatus	N. M. Miller	510,080	Dec. 5	403	89, 90	65	1485
Glass-rolling device	R. Gray	510,338	Dec. 5	816	198	65	1565
Glass-rolling machinery	P. V. Peltier	508,748	Nov. 14	1235	308	65	1007
Glass structure	E. W. Cunningham	508,287	Nov. 7	505	122	65	852
Glass surfaces. Producing colors on	J. C. Duntze	508,873	Nov. 14	1432		65	1043
Glass-tank furnace	W. F. Modes	492,820	Mar. 7	76	18	62	1372
Glass tanks or boxes. Manufacture of	J. Armstrong	449,082	June 6	584	139	63	1492
Glass tile	C. Lewy	510,644	Dec. 12	1373	336	65	1681
Glass-tube cutter	A. Adams, Jr.	505,211	Sept. 19	1486	388	64	1576
Glassware. Apparatus for the manufacture of	H. Schulze-Berge	493,302	Mar. 14	845	{ 215 216 }	62	1539
Glassware-engraving machine	H. A. Ruhe	509,829	Nov. 28	3088	746	65	1383
Glassware. Forming articles of	J. J. Brannagan	502,344	Aug. 1	160	37	64	595
Glassware-grinding machine	A. R. Wilson	507,701	Oct. 31	3260	797	65	663
Glassware. Machine for printing	C. Z. F. Rott	491,025	Jan. 31	3294	{ 841 842 }	62	720
Glassware. Manufacture of	T. B. Atterbury	499,085	June 6	589	141	63	1493
Glassware. Manufacture of	J. J. Brannagan	504,552	Sept. 5	404	103	64	1345
Glassware. Manufacture of	N. Kopp	495,048	Apr. 11	813	205	63	170
Glassware. Snap for holding	T. C. Steimer	508,854	Nov. 14	1397	348	65	1036
Glassware-threading device	L. Friedrich	509,214	Nov. 21	2021	490	65	1170
Glassware. Tool for the manufacture of	T. B. Atterbury	498,835	June 6	149	36	63	1418
Glazier's tool. Combination	E. F. Hayward	494,921	Apr. 4	623	159	63	120
Glazing system	H. S. De Forest	511,325	Dec. 26	2556	623	65	1925
Globes. Making lens	C. J. Bockius	503,825	Aug. 22	2615	653	64	1089
Glory-hole furnace	A. Thompson	499,058	June 6	551	129	63	1487
Glory-hole furnace	C. D. Trimble	509,146	Nov. 21	1913	468	65	1149
Glove	G. M. Cluze	499,096	June 6	600	144	63	1495
Glove	L. Cox	491,471	Feb. 7	677	170	62	878
Glove	E. and S. Jay	490,354	Jan. 24	2200	573	62	491
Glove	E. Smellie	499,601	June 13	1435	{ 343 344 }	63	1656
Glove. Boxing	J. Bennett	500,049	June 20	2161	524	63	1795
Glove-cabinet	A. Bever	503,306	Aug. 15	1786	441	64	921
Glove-fastener	G. E. Adams	489,890	Jan. 10	1375	358	62	300
Glove-fastener	W. B. H. Dowse	508,605	Nov. 14	1030	254	65	965
Glove-fastener	F. E. Hall	490,436	Jan. 24	2314	601	62	512
Glove-fastener	F. E. Hall	490,627	Jan. 24	2640	679	62	577
Glove-fastener	F. E. Hall	503,081	Aug. 8	1400	346	64	838
Glove-fastener	E. J. Kraetzer	490,444	Jan. 24	2324	603	62	514
Glove-fastener	E. J. Kraetzer	507,623	Oct. 31	3133	787	65	640
Glove-fastening	W. B. H. Dowse	508,604	Nov. 14	1029	253	65	965
Glove-fastening	J. S. Healey	494,953	Apr. 4	665	171	63	128
Glove-fastening	E. J. Kraetzer	494,104	Mar. 21	2171	554	62	1810
Glove-fastening	C. A. Pfenning	493,559	Mar. 14	1261	323	62	1619
Glove-fastening	C. A. Pfenning	507,927	Oct. 31	3624	896	65	731
Glove-fastening	C. A. Pfenning	507,928	Oct. 31	3625	896	65	731
Glove-fastening	J. R. Smith	504,309	Aug. 29	3398	851	64	1254
Glove-holder	S. Free	506,038	Oct. 3	366	97	65	72
Glove or clothing fastener	F. E. Hall	490,435	Jan. 24	2313	600	62	512
Glove or dress fastener	D. R. Reynolds	490,044	Jan. 17	1674	435	62	374
Glove or garment fastener	E. J. Kraetzer	502,404	Aug. 1	258	61	64	613
Glove or garment fastening	J. S. Healey	494,954	Apr. 4	666	172	63	128
Glove-turning device	E. Schwallbach, Jr.	493,656	Mar. 21	1424	363	62	1667
Glue-extracting apparatus	L. Bertram	501,759	July 18	1969	487	64	388
Glue for cardboard and photographs	H. W. Vogel	505,618	Sept. 26	2194		64	1723
Glue. Making	E. Rauppach and L. Bergel	500,428	June 27	2795		63	1919
Glue or gelatine. Manufacturing elastic	E. Tessen	505,615	Sept. 26	2192		64	1723
Glue-press	A. E. Palmer	495,054	Apr. 11	819	207	63	172
Glue to paper. Machine for transferring	A. Becker	498,502	May 30	3421	849	63	1294
Gluing-machine	T. Dean	510,630	Dec. 12	1341	{ 329 330 171 172 }	65	1675
Godevil	H. Hall	504,725	Sept. 12	672		64	1409
Gold from its ores. Extracting	C. Moldenhauer	492,221	Feb. 21	1854		62	1151
Gold from ores containing it. Apparatus for the separation of	W. D. Bohm	509,289	Nov. 21	2160	519	65	1195
Gold or silver. Extracting	H. Parkes and J. C. Montgomerie	496,950	May 9	914		63	803
Gold or silver from ores or compounds containing same. Extracting	H. Parkes and J. C. Montgomerie	496,951	May 9	915		63	803
Gold. Recovering	J. Blair	492,133	Feb. 21	1705	434	62	1120
Gold-separator	A. M. Bair	496,391	May 2	7	2	63	620
Gold, silver, and copper from ores. Obtaining	A. French	490,193	Jan. 17	1912		62	422
Gong. Electro-mechanical	F. M. Dunn	504,827	Sept. 12	856	{ 219 220 }	64	1444
Gong or call-bell	N. J. Busby	504,705	Sept. 12	648	164	64	1404
Gore-marker. Elastic	J. Kent	500,007	June 20	2090	506	63	1783
Governor	G. A. Brachhausen and P. Riessner	500,372	June 27	2710	665	63	1904
Governor	P. Lochmann	491,219	Feb. 7	258	64	62	797
Governor	J. D. Silberzahn	505,279	Sept. 19	1591	414	64	1596
Governor	J. N. Wright	506,964	Oct. 17	1973	489	65	399
Governor and clutch. Combined	J. L. and J. S. Hall	505,827	Oct. 3	38	10	65	10
Governor. Centrifugal shaft	G. S. Neeley	506,534	Oct. 10	1279	320	65	257
Governor. Electric automatic steam	E. A. Edwards	504,492	Sept. 5	300	76, 77	64	1326
Governor. Electric motor	J. Marty, Jr.	511,347	Dec. 26	2603	633	65	1933
Governor. Engine	J. Begtrup	510,312	Dec. 5	784	190	65	1558
Governor. Engine	J. Begtrup	510,313	Dec. 5	786	190	65	1558
Governor. Engine	J. Begtrup	510,314	Dec. 5	788	190	65	1559

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Governor. Engine.	J. Begtrup	510,315	Dec. 5	788	191	65	1539
Governor. Engine.	W. T. Davis	499,875	June 20	1896	461	63	1749
Governor. Engine.	G. E. Dow	504,205	Aug. 29	3233	806	64	1223
Governor. Engine.	R. de Eicken	490,343	Jan. 24	2179	568	62	487
Governor. Engine.	J. A. Hutchinson	495,089	Apr. 11	888	224 } 225 }	63	185
Governor. Engine.	R. H. Mather	500,019	June 20	2112	512	63	1787
Governor. Engine.	R. H. Thurston	504,953	Sept. 12	1058	271	64	1483
Governor. Engine.	G. H. Ward	489,171	Jan. 3	285	79	62	65
Governor for mechanical motors	J. E. Hart	490,249	Jan. 17	2011	526	62	441
Governor for pumping engines. Fluid pressure	F. L. Clark	499,450	June 13	1196	285	63	1614
Governor. Gas-engine.	H. J. Hartig	507,584	Oct. 31	3070	751	65	627
Governor. Gas-engine.	C. W. Weiss	494,662	Apr. 4	212	53	63	44
Governor safety attachment	W. F. Brown	498,002	May 23	2605	651	63	1133
Governor safety-stop.	J. Begtrup	510,316	Dec. 5	790	191	65	1560
Governor safety-stop. Engine.	J. Barclay	492,258	Feb. 21	1906	475 } 476 }	62	1162
Governor. Speed.	C. E. Doolittle	502,557	Aug. 1	519	124	64	662
Governor. Speed.	W. H. von Mengerhausen	499,242	June 13	823	196	63	1548
Governor. Speed.	L. Rushworth and I. M. Livsey	494,894	Apr. 4	586	147	63	113
Governor speed-regulator	F. N. Saylor	499,255	June 13	839	200	63	1550
Governor. Steam-brake	B. T. Reilly	489,757	Jan. 10	1191	312	62	262
Governor. Steam-engine	R. Allison	492,254	Feb. 21	1900	474	62	1161
Governor. Steam-engine	A. J. Chausse	506,977	Oct. 17	1994	494	65	403
Governor. Steam-engine	E. Conrady	503,785	Aug. 22	2563	638	64	1080
Governor. Steam-engine	G. H. Evans	498,006	May 23	2614	653	63	1135
Governor. Steam-engine	J. W. Hayes	493,624	Mar. 14	1373	348	62	1641
Governor. Steam-engine	F. Phillips	494,746	Apr. 4	347	88, 89	63	69
Governing device for compound engines	M. C. Bullock	504,691	Sept. 5	620	158 } 159 }	64	1337
Governing gas, steam, or other motive power engines. } Apparatus for	C. W. Pinkney	504,613	Sept. 5	485	124 } 125 }	64	1361
Grader. Earth.	J. Elliott	494,805	Apr. 4	448	111 } 112 }	63	87
Grading and ditching machine	C. B. Taylor	499,178	June 6	733	174	63	1517
Grading and excavating machine	J. B. Cornwall	504,300	Aug. 29	3383	846	64	1252
Grading powdered material. Apparatus for	W. W. Gillespie	509,728	Nov. 28	2922	707	65	1351
Grafting implement	J. Fuchs	505,651	Sept. 26	2360	572	64	1735
Grafting-knife	W. Wiltse, Jr.	496,079	Apr. 25	2479	626	63	507
Grain-binder	J. F. Appleby	502,267	Aug. 1	2	1, 2	64	567
Grain-binder	C. Colahan	500,738	July 4	331	88	64	62
Grain-binder	P. P. Coler	489,219	Jan. 3	367	102	62	83
Grain-binder	A. Goodyear	496,647	May 2	407	110 } 111 }	63	693
Grain-binder	J. A. Graham and E. J. Birkett	503,662	Aug. 22	2369	591 } 592 }	64	1041
Grain-binder	P. Hanson	510,174	Dec. 5	554	129 } 130 }	65	1515
Grain-binder	H. A. and W. M. Holmes	497,278	May 9	1416	359 } 360 }	63	800
Grain-binder	W. M. Holmes	509,470	Nov. 28	2519	361 } 362 }	63	800
Grain-binder	M. Kane	495,044	Apr. 11	807	608 } 203 }	65	1275
Grain-binder	M. Kane	499,638	June 20	1832	445 } 204 }	63	169
Grain-binder	G. L. Phelps	496,096	Apr. 25	2508	633 } 634 }	63	1738
Grain-binder	G. L. Phelps	500,608	July 4	118	31, 32	64	513
Grain-binder	W. M. Piatt	510,989	Dec. 19	2007	496 } 497 }	65	1809
Grain-binder	F. A. Seiberling and C. H. Knecht	496,797	May 2	648	172 } 173 }	63	734
Grain-binder	A. Stark	492,590	Feb. 28	2439	607 } 117 }	62	1284
Grain-binder	A. Stark	502,540	Aug. 1	493	118 } 119 }	64	657
Grain-binder	J. F. Steward	504,373	Sept. 5	99	25 } 414 }	64	1289
Grain-binder	E. G. Watrous	509,008	Nov. 21	1680	415 } 25 }	65	1105
Grain-binder. Automatic	J. F. Steward	504,372	Sept. 5	97	24 } 608 }	64	1289
Grain-binder cord-knotter	A. Stark	492,591	Feb. 28	2443	607 } 48 }	62	1285
Grain-binder knotting mechanism	G. Schubert	489,096	Jan. 3	373	48 } 612 }	62	41
Grain-binder reel	H. Benroth	507,255	Oct. 24	2487	613 } 676 }	65	504
Grain-binders. Butt-adjuster for	A. Stark	502,210	July 25	2680	677 } 677 }	64	535
Grain-binders. Knotting-hook for tyers for	W. W. Burson	490,636	Jan. 31	2656	625 } 307 }	62	595
Grain-binder's needle	C. Paul	508,745	Nov. 14	1231	307 } 296 }	65	1006
Grain-binding machine.	W. Bayley	497,111	May 9	1156	297 } 612 }	63	845
Grain-bins. Construction of hopper-bottom	M. Macdonald and J. S. Metcalf	507,324	Oct. 24	2614	643 } 2125 }	65	528
Grain-cleaner	O. M. Morse	505,573	Sept. 26	2125	538 } 2871 }	64	1710
Grain cleaner and grader. Gravity and cut-off	D. J. Davidson	507,498	Oct. 24	2871	704 } 1031 }	65	578
Grain-cleaner or oat-sifting machine	N. B. Higbie	493,429	Mar. 14	1031	266 } 312 }	62	1577
Grain cleaning and separating machine	J. O. King	506,513	Oct. 10	1250	312 } 392 }	65	251
Grain-cleaning machine	S. Bisbee	510,768	Dec. 12	1573	393 } 825 }	65	1719
Grain-cleaning machine	T. A. Seip	489,504	Jan. 10	825	216 } 1070 }	62	188
Grain-cleaning machine	T. A. Seip	493,451	Mar. 14	1070	275 } 606 }	62	1583
Grain-conveyer	H. M. Fulwider	506,172	Oct. 3	606	155 } 170 }	65	117
Grain-conveyer	J. B. Stoner	492,879	Mar. 7	170	41 } 322 }	62	1392
Grain-conveyer	J. Vogt	508,788	Nov. 14	1290	322 } 322 }	65	1017

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				Spec.	Dr. g.	
Grain-drill	E. Christman and W. G. Munn	497,864	May 23	2393	598	63 1096
Grain-drill	A. J. Fisher	495,670	Apr. 18	1849	463	63 375
Grain-drill	E. H. Grafunder	492,009	Feb. 21	1516	379	62 1082
Grain-drill	W. G. Lawrence	499,025	June 6	499	117	63 1478
Grain-drill	J. B. Nugent and H. G. Gilbert	490,849	June 20	1847	449	63 1740
Grain-drill	F. R. Packham	490,360	Jan. 24	2209	450	62 493
Grain-drill	J. W. Rhodes	502,831	Aug. 8	1003	575	64 766
Grain-drill	A. Rosander	502,636	Aug. 1	646	244	64 686
Grain-drill	S. W. Rowell	502,468	Aug. 1	366	245	64 633
Grain-drill	J. A. M. Tyler	500,725	July 4	313	84	64 59
Grain-drill	W. A. Van Brunt	490,728	Jan. 31	2805	719	62 624
Grain-drill attachment	W. Webster	489,353	Jan. 3	568	720	62 122
Grain-drill cultivating-hoe	W. Anderson	511,183	Dec. 19	2317	153	65 1868
Grain-drill feed device	J. J. Esler	500,323	June 27	2639	567	65 1868
Grain-drill shoe	W. A. Van Brunt	495,075	Apr. 11	855	645	63 1891
Grain-drill spring device	J. M. Fender	492,465	Feb. 28	2233	619	63 178
Grain-dump. Portable	C. L. Young	510,225	Dec. 5	650	552	62 1241
Grain-elevator	G. C. Flagg and E. T. Guymon	495,698	Apr. 18	1893	154	65 1533
Grain-elevator	D. Wilde	508,070	Nov. 7	140	476	63 382
Grain-elevator. Pneumatic	J. B. Stoner	489,340	Jan. 3	549	39, 40	65 785
Grain. Extracting weevils from	D. R. Bowker	505,648	Sept. 26	2257	149	62 118
Grain huller, scourer, and polisher. Combined	B. E. Fischer	498,510	May 30	3431	571	64 1735
Grain-meter	W. Howard	503,746	Aug. 22	2510	851	63 1295
Grain-meter	D. Wilde	495,145	Apr. 11	1008	625	64 1069
Grain-meter	J. O. Wyman and O. L. Eugen	489,776	Jan. 10	1218	251	63 205
Grain-meter. Oscillating	C. H. Myers	505,840	Oct. 3	58	319	62 267
Grain-meter. Rotating	E. Gilford	496,406	May 2	26	15	65 14
Grain-meter. Rotating	A. B. Landis	492,869	Mar. 7	155	7, 8	63 623
Grain-mixing device	F. Kaucher	495,590	Apr. 18	1718	37	62 1389
Grain, nuts, &c. Machine for scouring and cleaning	C. O. Tinkham and O. B. Sims	505,010	Sept. 12	1156	433	63 355
Grain. Preparing raw	H. T. Brown and G. H. Morris	490,538	Jan. 24	2482	296	64 1502
Grain-press	M. T. F. Wiesebeck	504,098	Aug. 29	3054	297	62 566
Grain-purifier	F. M. Schell	499,598	June 13	1429	763	64 1190
Grain-reel	E. B. Hyde	501,424	July 11	1427	342	63 1655
Grain-scourer	E. K. Bodine	510,769	Dec. 12	1580	358	64 274
Grain-scourer	A. P. Campbell	493,065	Mar. 7	456	393	65 1720
Grain-scourer	A. Hancock	507,903	Oct. 31	3585	115	62 1449
Grain-scourer and dust-collector. Combined	A. Heine	499,385	June 13	1071	884	65 724
Grain scouring and polishing machine	J. H. Williamson	503,889	Aug. 22	2702	8-5	63 1592
Grain-scouring machine	P. Provost	504,173	Aug. 29	3180	677	64 1107
Grain-scouring machine	D. E. Sibley	493,603	Mar. 14	1340	794	64 1213
Grain-scouring machine	R. W. Welch	491,623	Feb. 14	926	795	62 1635
Grain-screen	J. Benesh	506,657	Oct. 17	1462	341	62 949
Grain-separating screen	C. and J. Closz	494,290	Mar. 28	2481	233	62 949
Grain-separator	J. C. Benson	504,466	Sept. 5	249	368	65 304
Grain-separator	H. Hamper	498,388	May 30	3235	625	62 1881
Grain-separator	F. F. Landis	492,213	Feb. 21	1838	65	64 1316
Grain-separator	C. E. McNeal	499,468	June 13	1220	805	63 1260
Grain-separator	O. M. Morse	499,795	June 20	1752	460	62 1148
Grain-separator	O. M. Morse	499,796	June 20	1756	291	63 1618
Grain-shocks. Device for use in binding	P. Kiefer	504,592	Sept. 5	459	424	63 1724
Grain-splitting machine	J. Winter	500,729	July 4	319	425	63 1724
Grain-spout	F. B. Giesler	492,004	Feb. 21	1509	117	64 1355
Grain-spout carriage	E. D. Mayo	494,153	Mar. 28	2263	85	64 60
Grain steeping and washing apparatus	W. H. Prinz	500,509	June 27	2908	375	62 1080
Grain-ventilator	S. A. Towel	501,116	July 11	939	575	62 1841
Granary. Portable	W. J. Adam	500,458	June 27	2836	715	63 1939
Grand stand	P. P. Cuplin	491,087	Feb. 7	39	240	64 185
Grapes, &c. Apparatus for cleaning Malaga	E. Fabbri	494,193	Mar. 28	2324	241	63 1926
Graphophone. Coin-controlled	C. S. Tainter	506,348	Oct. 10	954	10	62 755
Graphophone-reproducer	C. S. Tainter	510,656	Dec. 12	1390	588	62 1853
Graphoscope	H. Franz	499,380	June 13	1063	237	65 193
Grapple	J. C. Manning and A. C. Wilson	504,600	Sept. 5	471	238	63 1581
Grapple	H. N., N. A., and E. A. Smith	510,053	Dec. 5	361	258	63 1581
Grapple-carrier	F. Farrar	489,226	Jan. 3	379	120	64 1358
Grapple for baskets, &c.	W. A. Alrich	507,056	Oct. 17	2123	80	65 1477
Grapple or grip tongs	J. A. Fitzsimmons	490,866	Jan. 31	3015	379	62 85
Grass-cutting attachment	C. Lusted, Sr	508,030	Nov. 7	76	527	65 426
Grate	B. F. Chollar	494,462	Mar. 28	2751	725	62 666
Grate	J. W. Cobb	489,462	Jan. 10	750	21, 22	65 772
Grate	W. S. Dobbs	502,554	Aug. 1	515	690	62 1931
Grate	E. Fales	494,371	Mar. 28	2613	198	62 173
Grate	E. Fales	494,372	Mar. 28	2615	123	64 661
Grate	E. Fales	494,373	Mar. 28	2616	656	62 1906
Grate	E. Fales	499,914	June 20	1956	637	62 1906
Grate	E. Fales	505,450	Sept. 26	1877	657	62 1907
Grate	E. J. Gordon	501,064	July 11	836	475	63 1760
Grate	J. J. Hall	500,493	June 27	2884	483	64 1663
Grate	J. Martin	494,989	Apr. 4	719	217	64 168
Grate	F. H. Richards	510,547	Dec. 12	1196	709	63 1955
Grate	A. Shearer	503,169	Aug. 15	1567	183	63 137
Grate	G. W. Walker	500,446	June 27	2821	288	65 1649
					385	64 882
					386	63 1924

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Grate	J. W. Warner and R. Galbraith	507,949	Oct. 31	3664	907	65	739
Grate	C. Whitfield	510,623	Dec. 12	1332	325	65	1674
Grate. Alternating dumping	E. L. Long	501,623	July 18	1735	432	64	348
Grate and means for operating same	E. Scanlan and J. Zipp	496,006	Apr. 25	2365	598	63	486
Grate attachment	J. S. Montgomery	508,736	Nov. 14	1217	303	65	1003
Grate attachment. Adjustable	M. C. Ruffon	497,921	May 23	2479	619	63	1111
Grate-bar	E. B. Cox	510,579	Dec. 12	1255	304	65	1659
Grate-bar	E. Gibson	509,523	Nov. 28	2602	629	65	1291
Grate-bar	J. L. Mason	506,922	Oct. 17	1916	474	65	388
Grate-bar	R. W. Peck	498,024	May 23	2641	660	63	1139
Grate-bar	C. A. Tilloy	490,932	Jan. 31	3137	{ 804 805 }	62	689
Grate-bar and grate	H. T. Richardson	494,694	Apr. 4	264	67	63	53
Grate-bar. Interlocking and interchangeable rock- ing	R. Carey	503,578	Aug. 22	2223	557	64	1016
Grate-bar. Oscillating	F. W. Ingram and E. E. Carr	494,865	Apr. 4	546	{ 138 139 }	63	106
Grate. Basket	E. J. Jahnson	500,003	June 20	2085	505	63	1782
Grate. Basket	J. Lewis	495,418	Apr. 11	1433	361	63	283
Grate-basket	J. McWade	507,075	Oct. 17	2150	533	65	430
Grate. Fire	C. W. Beehler	493,056	Mar. 7	441	111	62	1446
Grate. Fire	A. Stroh	504,635	Sept. 5	515	133	64	1367
Grate. Fireplace	W. E. Fitch	501,061	July 11	832	216	64	167
Grate-front and hearth. Folding	W. H. Vance	494,046	Mar. 21	2068	529	62	1791
Grate, &c. Inclined	H. H. Campbell	505,748	Sept. 26	2417	610	64	1762
Grate. Rocking	L. Hall	493,085	Mar. 7	487	122	62	1456
Grate. Rocking	J. H. Johns	495,092	Apr. 11	892	{ 225 226 }	63	186
Grate. Self-feeding open-fireplace	J. W. Shaw	496,326	Apr. 25	2866	715	63	580
Grate shaking mechanism	E. Fales	505,451	Sept. 26	1878	483	64	1663
Grate. Traveling	E. B. Cox and F. H. Richards	510,573	Dec. 12	1245	302	65	1658
Grater	A. H. Scarles	507,287	Oct. 24	2542	626	65	513
Grater. Nutmeg	A. L. Platt	505,886	Oct. 3	132	34	65	27
Grater. Vegetable	M. Josephson	510,141	Dec. 5	504	115	65	1205
Grater. Vegetable	R. Olp	502,527	Aug. 1	472	113	64	653
Grave-alarm	A. Lindquist	500,072	June 20	2197	535	63	1802
Grave border and protector	G. R. Mease	510,696	Dec. 12	1451	358	65	1696
Grave-screening machine	F. T. Gilbert	489,380	Jan. 3	606	162	62	130
Gravel washer and separator	F. T. Gilbert	489,378	Jan. 3	602	162	62	129
Gravel washing and separating machine	F. T. Gilbert	489,379	Jan. 3	604	162	62	130
Gravity-helmet	J. F. Corker	500,686	July 4	248	67	64	47
Grease, &c. Composition of matter for removing	B. Ehman	491,413	Feb. 7	582	.....	62	859
Grease-trap	N. Jr., and P. J. Barry	492,261	Feb. 21	1911	477	62	1163
Gridiron, &c.	H. D. Monachesi	498,984	June 6	415	96	63	1464
Gridiron. Electrically-heated	W. Mitchell	491,322	Feb. 7	435	112	62	831
Grill for door or window openings	P. Tiedge	509,971	Dec. 5	209	48	65	1449
Grinder. Center	C. H. Norton	496,891	May 9	822	{ 217 218 }	63	785
Grinder. Cutter	H. A. Wilbur	506,613	Oct. 10	1388	348	65	278
Grinder. Drill	T. Hall	497,095	May 9	1134	290	63	841
Grinder for sharpening the metallic burrs of grind- ing-machines	J. and P. Jacobsen	506,694	Oct. 17	1519	381	65	314
Grinder. Knife	S. C. Rogers	507,634	Oct. 31	3156	773	65	644
Grinder. Sickle	C. E. Stuart	503,998	Aug. 29	2898	726	64	1160
Grinder. Universal	C. H. Norton	504,306	Aug. 29	3393	{ 249 250 }	64	1253
Grinding and crushing mill	R. Steinbach	507,943	Oct. 31	3648	{ 902 903 }	65	736
Grinding and polishing tool	J. F. Budke	504,519	Sept. 5	347	88	64	1334
Grinding and sharpening shearing combs and cutters, &c. Machine for	J. Moffat and W. W. Virtue	494,072	Mar. 21	2117	540	62	1799
Grinding apparatus	F. D. Winkley	492,451	Feb. 28	2207	552	62	1235
Grinding, crushing, or disintegrating grain, &c. Ma- chine for	S. Straker	493,531	Mar. 14	1206	{ 308 309 }	62	1607
Grinding cutlery. Apparatus for	A. Johnston	504,387	Sept. 5	117	{ 31 32 }	64	1292
Grinding disk-cutters and apparatus therefor	A. Johnston	504,386	Sept. 5	115	29, 30	64	1292
Grinding flat facets. Machine for	M. Offenbacher	497,334	May 16	1542	388	63	928
Grinding-machine	D. H. Church	494,058	Mar. 21	2086	{ 532 533 }	62	1794
Grinding-machine	J. H. Crane	491,530	Feb. 14	770	196	62	917
Grinding-machine	J. B. Deeds and W. Mack	497,567	May 16	1916	482	63	994
Grinding-machine	A. Johnston	504,389	Sept. 5	123	32, 33	64	1293
Grinding-machine	J. H. King	509,538	Nov. 28	2624	63	65	1294
Grinding-machine	S. Ross, Jr.	494,893	Apr. 4	584	{ 146 147 }	63	113
Grinding-machine	F. Schumann	489,333	Jan. 3	535	{ 145 146 }	62	116
Grinding-machine	T. Shaw	505,178	Sept. 19	1433	369	64	1566
Grinding-machine	E. H. Vogel	504,006	Aug. 29	2911	730	64	1163
Grinding-machine. Cutter	J. B. Flint	497,313	May 16	1511	{ 380 381 }	63	923
Grinding-machine for metals	W. Bright	499,706	June 20	1596	386	63	1697
Grinding-machine. Pan	J. Thompson and W. F. Vaughn	501,583	July 18	1666	417	64	336
Grinding machine. Reamer	R. Conrader	498,240	May 30	2982	743	63	1215
Grinding machine. Roll	G. Vine	493,952	Mar. 21	1909	{ 487 488 }	62	1760
Grinding machine. Saw	H. Ehrhardt	510,165	Dec. 5	541	125	65	1512
Grinding machine. Saw	J. B. Rhodes	504,404	Sept. 5	148	32, 39	64	1297
Grinding-machine work-carrying device	T. Settle	510,196	Dec. 5	596	139	65	1522
Grinding-mill	R. W. F. Abbé	496,677	May 2	457	123	63	702
Grinding-mill	F. Schmidt	501,106	July 11	922	236	64	183
Grinding-mill	J. Thompson	504,761	Sept. 12	744	185	64	1424

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Grinding-mill feed mechanism.....	H. H. Ring.....	499,145	June 6	672	161	63	1508
Grinding-mill. Portable.....	J. G. Mole.....	490,812	Jan. 31	2939	754	62	650
Grinding mower-knives. Machine for.....	R. Dutton.....	503,127	Aug. 15	1494	367	64	868
Grinding or polishing machine.....	E. Post.....	497,477	May 16	1770	445	63	968
Grinding or polishing wheel.....	W. L. Messer.....	496,836	May 2	708	187	63	745
Grinding or polishing wheel and manufacturing same.....	F. N. Gardner.....	494,471	Mar. 28	2761	692	62	1933
Grinding or polishing wheel and manufacturing same.....	F. N. Gardner.....	494,472	Mar. 28	2764	693	62	1934
Grinding or pulverizing mill.....	J. Hunt.....	493,164	Mar. 7	613	153	62	1479
Grinding-pan.....	J. H. Kinhead.....	492,962	Mar. 7	302	76	62	1419
Grinding-pan.....	W. G. Stevenson.....	499,367	June 13	1041	253	63	1587
Grinding-ring.....	A. M. Corning.....	499,714	June 20	1608	389	63	1700
Grinding rotary cutters. Machine for.....	D. E. Bice.....	504,655	Sept. 5	545	139	64	1373
Grinding the point ends of drills, &c. Apparatus for.....	A. Palmer and F. E. Blackmore.....	490,588	Jan. 24	2548	656	62	559
Grinding thread-cutting tools. Machine for.....	C. P. R. Thiel and M. M. Aust.....	504,000	Aug. 29	2902	726	64	1161
Grinding-wheels. Compounding and making.....	E. Johnson and J. Frykberg.....	495,251	Apr. 11	1184	693	63	237
Grindstone.....	W. H. Clapp.....	504,329	Sept. 5	28	9	64	1276
Grindstone.....	G. W. Gandee and J. Peters.....	489,298	Jan. 3	482	133	62	105
Grindstone attachment.....	J. M. Clock.....	498,623	May 30	3626	898	63	1329
Grindstone casing or trough.....	C. Graf-Link.....	498,647	May 30	3669	907	63	1336
Grindstone, emery-wheel, &c.....	D. F. Walker.....	491,789	Feb. 14	1179	296	62	999
Grip-button.....	W. F. Whiting.....	501,981	July 25	2306	577	64	463
Grip-opener.....	W. P. Courtney.....	501,764	July 18	1976	488	64	389
Grip-opener. Automatic.....	W. P. Courtney.....	497,166	May 9	1242	316	63	860
Grooving-machine.....	W. L. Davis.....	496,868	May 9	774	205	63	777
Grooving machine. Roll.....	F. A. Pratt and J. Johnston.....	504,172	Aug. 29	3175	793	64	1212
Grubbing-machine.....	W. Smith.....	509,774	Nov. 28	2991	794	65	1364
Guano distributor.....	E. Wingate.....	500,246	June 27	2507	613	63	1869
Guard:							
See Axle-box dust-guard. Pocket-guard.							
Burglar-guard. Railway cattle-guard.							
Car safety-guard. Railway-frog foot-guard.							
Car-wheel dust and Railway surface cattle-oil guard.							
Cattle-guard. Sewer-guard.							
Cycle mud-guard. Snow-guard.							
Elevator-guard. Spark-guard.							
Fire-guard. Trousers-guard.							
Gin-saw guard. Velocipede mud-guard.							
Hatchway-guard. Watch safety-guard.							
Horse-hoof guard. Window-guard.							
Penholder-guard.							
Guard and reflector.....	C. J. and G. W. Giddings.....	503,955	Aug. 29	2828	706	64	1147
Gudgeon.....	W. Forge.....	489,733	Jan. 10	1147	297	62	253
Guide.....	J. E. Prest.....	492,749	Feb. 28	2625	666	62	1332
Guide-post clamp.....	G. T. Francis.....	505,515	Sept. 26	2000	512	64	1685
Guitar.....	J. S. Back.....	508,858	Nov. 14	1407	350	65	1038
Guitar.....	W. Becker.....	493,810	Mar. 21	1687	430	62	1718
Guitar.....	C. F. Hartmann.....	498,113	May 23	2773	694	63	1163
Guitar.....	J. F. Stratton.....	496,706	May 2	497	133	63	710
Guitar arm-rest and support.....	H. E. Le Valley.....	491,755	Feb. 14	1122	283	62	989
Guitar. Lyro.....	W. Hay.....	508,543	Nov. 14	930	228	65	946
Guitar winding-key.....	J. Ayuso.....	510,375	Dec. 5	876	211	65	1576
Guitars. Adjustable tail-piece for.....	F. A. Ingersoll.....	500,581	July 4	66	19	64	14
Guitars, mandolins, zithers, or other stringed instruments. Attachment for.....	I. Nightingale.....	494,485	Mar. 28	2782	698	62	1937
Gumming and cutting strips, labels, &c. Apparatus for.....	D. W. Collins.....	506,682	Nov. 14	1139	281	65	988
Gun.....	J. H. Brown.....	496,637	May 2	390	105	63	690
Gun.....	R. Sauer.....	505,006	Sept. 12	1152	295	64	1502
Gun. Air.....	J. B. Thacher and E. C. Fasoldt.....	504,820	Sept. 12	846	217	64	1442
Gun and electrical devices therefor. Magazine.....	J. L. McCullough.....	509,091	Nov. 21	1829	448	65	1133
Gun. Animal.....	B. Riggs.....	497,607	May 16	1976	495	63	1005
Gun-barrels to stocks. Means for separably attaching.....	W. Mason.....	499,464	June 13	1216	290	63	1618
Gun-barrels to the stocks. Means for separably attaching.....	W. Mason.....	498,983	June 6	413	96	63	1464
Gun. Breakdown.....	A. Fyrberg.....	498,427	May 30	3292	821	63	1270
Gun. Breakdown.....	I. S. Heatly.....	489,191	Jan. 3	321	88, 69	62	73
Gun. Breakdown.....	F. A. Hollenbeck.....	505,794	Sept. 26	2492	629	64	1778
Gun. Breakdown.....	J. Rider.....	511,362	Dec. 26	2627	638	65	1939
Gun. Breakdown breech-loading.....	G. A. Sachs.....	495,639	Apr. 18	1795	450	63	367
Gun. Breech-loading.....	D. E. Grant.....	490,650	Jan. 31	2679	690	62	599
Gun. Breech-loading.....	D. E. Grant.....	494,330	Mar. 28	2540	640	62	1893
Gun. Breech-loading.....	L. L. Hepburn.....	502,489	Aug. 1	409	96, 97	64	642
Gun. Breech-loading.....	C. S. Lott.....	507,823	Oct. 31	3458	850	65	701
Gun. Breech-loading.....	W. Mason.....	511,632	Dec. 26	3079	752	65	2020
Gun. Breech-loading.....	J. Rider.....	500,949	July 4	638	168	64	117
Gun. Breech-loading breakdown.....	H. Greene.....	489,947	Jan. 17	1505	393	62	340
Gun. Breech-loading shot.....	C. F. Hacker.....	493,084	Mar. 7	485	121	62	1455

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Gun breech mechanism	A. Welin	497,695	May 16	2116	528	63	1031
Gun-carriage brake	F. Mohr	500,927	July 4	612	529	64	112
Gun carriage. Disappearing	S. M. Mansfield	502,569	Aug. 1	536	160	64	665
Gun carriage or mounting	J. B. G. A. Canet	503,072	Aug. 8	1387	128	64	836
Gun-case	C. N. Markle	492,304	Feb. 21	1976	343	62	1177
Gun-cleaner	W. Geneste	489,606	Jan. 10	968	492	62	217
Gun feed. Machine	C. M. Broderick and J. Vankeirs- bilck	504,516	Sept. 5	343	252	64	1334
Gun feed. Machine	R. J. Gatling	499,534	June 13	1331	87	63	1638
Gun feed. Magazine	R. J. Gatling	502,882	Aug. 8	1078	315	64	780
Gun. Gas-operated breech-loading	J. M. Browning	502,549	Aug. 1	509	266	64	660
Gun. Machine	C. M. Broderick and J. Vankeirs- bilck	504,517	Sept. 5	345	121	64	1334
Gun. Machine	R. J. Gatling	497,781	May 23	2255	122	63	1072
Gun. Machine	R. J. Gatling	502,185	July 25	2636	566	64	597
Gun. Machine	R. J. Gatling	504,831	Sept. 12	868	665	64	1448
Gun. Magazine	L. M. R. Daudeteau	491,772	Feb. 14	1155	223	62	995
Gun. Magazine	R. Dinsmore	492,864	Mar. 7	143	290	62	1387
Gun. Magazine	M. H. Durst	502,812	Aug. 8	963	35, 36	64	758
Gun. Magazine	C. S. Evans	505,757	Sept. 26	2433	235	64	1766
Gun. Magazine	O. H. J. Krag and E. Jørgensen	492,212	Feb. 21	1834	614	62	1147
Gun. Magazine	J. P. Lee	506,322	Oct. 10	913	459	65	186
Gun. Magazine	J. L. McCullough	509,548	Nov. 28	2637	460	65	1297
Gun. Magazine	M. F. Richardson and C. A. Wood- bury	496,231	Apr. 25	2706	678	63	549
Gun. Magazine	A. W. Savage	502,018	July 25	2367	679	64	475
Gun-magazine	B. F. Whitten and J. F. Porcher	502,389	Aug. 1	236	595	64	609
Gun. Magazine bolt	H. A. Pitcher	501,192	July 11	1051	56	64	206
Gun-mounting	J. B. G. A. Canet	497,704	May 16	2128	265	63	1033
Gun-mounting	J. B. G. A. Canet	504,198	Aug. 29	3224	532	64	1221
Gun-mounting	J. B. G. A. Canet	508,278	Nov. 7	493	803	65	849
Gun-mounting	F. F. Fletcher	499,530	June 13	1324	804	63	1636
Gun. Multicharge	G. J. Hilder	493,382	Mar. 14	962	312	62	1563
Gun-rack for tents	S. S. Pague	493,645	Mar. 21	1408	313	62	1664
Gun. Recoil-operated quick-firing	C. Holmström	509,313	Nov. 21	2196	357	65	1203
Gun. Repeating air	E. E. Bailey	507,470	Oct. 24	2841	528	65	573
Gun rifle attachment. Shot	W. J. Redwine	490,614	Jan. 24	2597	530	62	568
Gun-sight	T. E. Armitstead	504,696	Sept. 5	630	531	64	1329
Gun-sight	D. M. Barringer	494,240	Mar. 28	2404	160	62	1867
Gun-sight	F. W. Freund	469,051	Apr. 25	2441	606	63	499
Gun-sights by electricity. Device for illuminating	G. G. di Giovanni	497,540	May 16	1871	615	63	987
Gun-sighting apparatus	F. F. Fletcher	499,532	June 13	1328	472	63	1637
Gun. Spring	W. H. Cram	501,765	July 18	1977	314	64	389
Gun. Spring	J. Monaghan	498,070	May 23	2706	489	63	1151
Gun. Straight-pull bolt	J. P. Lee	506,319	Oct. 10	892	920	65	182
Gun. Straight-pull bolt	J. P. Lee	506,320	Oct. 10	904	221	65	184
Gun. Straight-pull bolt	J. P. Lee	506,321	Oct. 10	910	222	65	185
Gun. Straight-pull bolt	F. H. Richards	506,339	Oct. 10	936	223	65	190
Gun. Straight-pull magazine	A. H. Russell	501,367	July 11	1343	224	64	257
Gun. Submarine	J. P. Holland	491,051	Jan. 31	3340	335	62	729
Gun. Trap	M. S. Barker	509,716	Nov. 28	2901	336	65	1347
Gun-tubes or cannon. Machine for finishing bores of large	M. F. Smith	493,191	Mar. 7	649	851	62	1486
Gun-wad. Compound cork and oil	H. E. Anderson	506,299	Oct. 10	868	166	65	177
Gun wad. Shot	A. E. Veon	509,273	Nov. 21	2126	214	65	1189
Guns. Automatic recoil-rest for breech-loading	H. Borchardt	499,315	June 13	937	511	63	1568
Guns. Auxiliary valve for pneumatic	J. Rapieff	490,125	Jan. 17	1803	227	62	400
Guns. Auxiliary valve for pneumatic	J. Rapieff	502,016	July 25	2363	470	64	474
Guns. Breech-bolt for bolt	A. Mauser	496,691	May 2	476	471	63	706
Guns. Breech mechanism for breech-loading	F. F. Fletcher	499,531	June 13	1325	127	63	1637
Guns. Carriage for quick-firing	J. B. G. A. Canet	499,516	June 13	1308	313	63	1633
Guns. Coupling for firing-pins and pin-nuts in bolt	P. Mauser	499,328	June 13	961	308	63	1572
Guns. Discharging-valve adapted to air	T. J. Winans	495,767	Apr. 18	2006	232	63	404
Guns. Ejector mechanism for breakdown	F. C. Stanley	510,999	Dec. 19	2024	509	65	1812
Guns. Ejector mechanism for drop-down	J. Ross	491,270	Feb. 7	330	499	62	811
Guns. Extractor and ejector for bolt	K. Krnka	495,137	Apr. 11	991	84	63	202
Guns. Fixed magazine for breech-loading bolt	P. Mauser	490,029	Jan. 17	1651	248	62	369

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Guns. Hydraulic recoil-brake for	A. Kampf	500,908	July 4	584	152	64	107
Guns. Manufacture of	J. H. Brown	496,395	May 2	12	3	63	621
Guns on ships. Means for handling and firing	A. McDougall	498,678	May 30	3722	920	63	1346
Guns or cannon. Adjusting device for rifling	M. F. Smith	499,683	June 13	1559	376	63	1677
Guns. Pneumatic safety-lock for breech-loading	B. D. Barrow	496,589	May 2	307	83	63	675
Guns. Power mechanism for pointing and training	H. S. Maxim	508,733	Nov. 14	1212	301 302	65	1002
Guns. Safety device for breakdown	M. Bye and E. G. Parry	495,298	Apr. 11	1256	313 314	63	250
Guns. Shiftable magazine for bolt	P. Mauser	492,543	Feb. 28	2369	588	62	1269
Guns. Telescopic sight for ships	B. A. Fiske	504,337	Sept. 5	39	12	64	1278
Gut-cleaning machine	C. C. Post	495,514	Apr. 18	1596	401 402	63	333
Gutta-percha from the leaves and twigs of the gutta-percha tree. Process of and apparatus for the extraction of	D. Rigole	495,757	Apr. 18	1986	502	63	400
Gutta-percha or balata. Treating	P. C. Beiersdorf	508,560	Nov. 14	955		65	951
Gutter-beading machine	C. Oberle and E. Faller	509,936	Dec. 5	153	35	65	1438
Gutter. Hanging	C. C. Moore	498,286	May 30	3055	761	63	1228
Gutter. Roof	L. C. Sims	490,815	Jan. 31	2943	755	62	651
Gymnasiums. Weight-holder for cabinet	J. E. Whitney	491,326	Feb. 7	442	114	62	832
Gymnastic apparatus	T. Bessing	494,912	Apr. 4	612	156	63	118
Gymnastic apparatus	T. Bessing	498,376	May 30	3220	801	63	1257
Gynecological wall-table	E. J. Noblett	498,293	May 30	3081	766 767	63	1232
Gypsum composition. Manufacturing	M. B. Church	497,948	May 23	2520		63	1118
Gypsum. Forming retarded	M. B. Church	497,947	May 23	2519		63	1118
Gyrating bolt	W. E. Getz	502,116	July 25	2527	633	64	505
Hair-cleaning machine	F. Hall	504,348	Sept. 5	54	15	64	1281
Hair-crimper	H. C. Bernner	495,292	Apr. 11	1247	311	63	249
Hair-crimper	C. A. Kruttsch	502,567	Aug. 1	533	127	64	664
Hair-curler	L. E. Pease	499,439	June 13	1176	281	63	1610
Hair-curler	M. V. Seidell	492,561	Feb. 28	2398	596	62	1276
Hair-drying apparatus	J. Machado	495,558	Apr. 18	1667	420	63	346
Hair-drying machine	J. N. Powell	494,889	Apr. 4	578	145	63	112
Hair. Machine for interlacing curled horse	F. Ochs	502,376	Aug. 1	212	50	64	604
Hair. Manufacture of curled	P. Woll, Jr	497,737	May 16	2171	543	63	1042
Hair-pin	J. W. Granger	497,049	May 9	1057	271	63	827
Hair structure	J. Y. Borden	489,283	Jan. 3	465	129	62	102
Hair twisting and curling machine	P. Woll, Jr	493,004	Mar. 7	367	92	62	1431
Halter	J. C. Covert	506,475	Oct. 10	1194	296	65	240
Halter	B. H. Hobart and E. A. Rockwell	501,619	July 18	1727	430	64	347
Halter	L. Staples	496,705	May 2	496	132	63	709
Halyards. Device for reeving	S. A. L. Waters	505,782	Sept. 26	2476	624	64	1775
Ham-holder	M. U. Loree	499,238	June 13	817	194	63	1546
Ham-holder	C. C. Umbenhauer	501,973	July 25	2297	574	64	461
Hams or other meats. Device for testing	G. M. Storey	495,382	Apr. 11	1382	344	63	273
Hame	L. Anderson	505,430	Sept. 26	1848	475	64	1657
Hame	P. Barker	503,758	Aug. 22	2528	629	64	1073
Hame	P. W. Corcoran	497,772	May 23	2247	563	63	1071
Hame	W. H. Hannigan	492,157	Feb. 21	1752	436	62	1130
Hame	A. D. Heist	502,119	July 25	2531	634	64	506
Hame	J. Q. A. Russell	490,615	Jan. 24	2599	669 670	62	569
Hame and trace connector	W. B. Nichols	495,560	Apr. 18	1669	421	63	346
Hame-bending machine	A. W. Freeman	498,469	May 30	3363	838	63	1284
Hame clip and section. Combined	L. Knight	510,687	Dec. 12	1441	356	65	1694
Hame-coupling	A. A. Parsons	500,603	July 4	98	28	64	20
Hame-fastener	E. E. Bull	506,306	Oct. 10	876	216	65	178
Hame-fastener	P. F. Cullen and P. F. Mulchrone	502,176	July 25	2626	662	64	525
Hame-fastener	J. L. O'Connor	505,842	Oct. 3	62	16	65	14
Hame-fastener	J. L. O'Connor	505,843	Oct. 3	63	16	65	15
Hame-fastener	I. Pennington	502,862	Aug. 8	1051	258	64	775
Hame-fastener	M. Potter	493,838	Mar. 21	1717	438	62	1724
Hame-fastening	W. H. Johnson	493,214	Mar. 7	681	174	62	1492
Hame-hook	A. B. Rosson	499,177	June 6	732	173	63	1517
Hame-staple	J. A. O. Livoni	505,470	Sept. 26	1905	491	64	1668
Hame-staple	C. A. Nelson	491,128	Feb. 7	97	27	62	768
Hammer	J. Ryan	510,049	Dec. 5	352	79	65	1476
Hammer and hatchet. Combination	C. Bronk	504,908	Sept. 12	989	254	64	1471
Hammer and nail-extracting device	C. M. Blydenburgh	510,525	Dec. 12	1126	273	65	1637
Hammer. Blacksmith's	C. Weigant	503,630	Aug. 22	2325	579	64	1033
Hammer. Bush	E. T. Viett	494,266	Mar. 28	2443	615 616	62	1874
Hammer. Carpenter's	E. G. Duryea	493,989	Mar. 21	1983	505	62	1774
Hammer. Drop	W. P. Hatch and T. Murphy	509,897	Dec. 5	90	21	65	1437
Hammer. Drop	J. White and A. O. Kittredge	511,381	Dec. 26	2671	647	65	1947
Hammer. Foot-power	G. Humphry	494,335	Mar. 28	2554	643	62	1896
Hammer. Forging	A. Sperl	500,970	July 4	690	181	64	136
Hammer. Power	C. C. Bradley	497,012	May 9	1008	258	63	818
Hammer. Power	C. M. Brown	497,013	May 9	1009	259	63	818
Hammer. Power	D. Longworth	498,354	May 30	3186	793 794	63	1250
Hammer. Power	J. O'Brien	493,874	Mar. 21	1772	452	62	1735
Hammer. Power	O. W. Orcutt	503,492	Aug. 15	2076	518	64	973
Hammer. Power	F. Ryman	498,752	May 30	3863	952	63	1371
Hammer. Steam	C. Deyherle	498,896	June 6	262	61	63	1438
Hammer. Tack	J. Gose	507,317	Oct. 24	2606	641	65	526
Hammock	C. A. De Laney	498,245	May 30	2991	745	63	1216
Hammock	G. B. French	507,426	Oct. 24	2781	681	65	561
Hammock	W. Hines	501,944	July 25	2256	563	64	454
Hammock	F. J. House and F. X. Martin	490,287	Jan. 24	2086	544	62	467
Hammock	J. Shinn	500,692	July 4	254	68	64	48

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hammock attachment.	F. J. Herrick	490,250	Jan. 17	2012	526	62	441
Hammock-bodies. Securing suspension-loops to the ends of	I. E. Palmer	510,087	Dec. 5	416	93	65	1488
Hammock-hook	E. C. Grant	508,698	Nov. 14	1165	287	65	993
Hammock-rope attachment.	F. J. Herrick	495,200	Apr. 11	1096	272	63	221
Hammock-spreader and canopy-support.	L. A. Perry	495,366	Apr. 11	1355	339	63	268
Hammock-spreaders. Manufacture of	E. T. Fellowes	498,542	May 30	3490	863	63	1306
Hammock-stretcher	V. P. Travers	492,852	Mar. 7	122	31	62	1381
Hammock-stretcher and awning-support. Combined.	V. P. Travers	495,532	Apr. 18	1627	409	63	338
Hammock-support.	N. G. Reynolds	504,618	Sept. 5	491	127	64	1362
Hammock-support. Adjustable.	D. Ford	506,776	Oct. 17	1670	421	65	343
Hammock-support. Folding	D. Morse	497,282	May 9	1434	363	63	893
Hand-bag. Extension	E. Desmarais	495,151	Apr. 11	1021	254	63	207
Hand-drill	M. M. Olm	509,938	Dec. 5	155	36	65	1438
Hand-press	W. S. Kisinger	500,660	July 4	207	54	64	40
Hand-power attachment	F. M. Foster	491,418	Feb. 7	587	147	62	860
Hand-rake	W. Cronk	509,999	Dec. 5	261	61	65	1459
Hand-wrench	F. B. Ide	492,626	Feb. 28	2504	620	62	1296
Handle:							
See Bag-handle.	Detachable handle.						
Bicycle-handle.	Dish-handle.						
Brake-handle.	Hoe-handle.						
Broom-handle.	Knife-handle.						
Casket-handle.	Saw-handle.						
Coffee-pot handle.	Tool-handle.						
Coffin-handle.	Trunk-handle.						
Crank-handle.	Vessel-handle.						
Culinary-vessel handle.	Wire handle.						
Handle.	F. W. Hoefer	489,560	Jan. 10	902	235	62	204
Handle.	G. Jackson	508,223	Nov. 7	400	97	65	833
Handle-attaching device for picks or other tools.	A. Walker	500,447	June 27	2821	695	63	1924
Handle-clamp, &c.	L. J. King	504,221	Aug. 29	3259	813	64	1226
Handle-fastener. Tool.	M. Carman	510,326	Dec. 5	800	193	65	1562
Handle for covers of milk-cans, &c.	J. I. Flanagan	510,780	Dec. 12	1594	397	65	1723
Handle for erasers or brushes.	E. J. Wahl	510,106	Dec. 5	446	99	65	1494
Handle for sheet-metal vessels	H. S. Raymond	503,682	Aug. 22	2395	597	64	1046
Handle for shovels, forks, &c.	W. McLaughlin	499,141	June 6	667	160	63	1507
Handle for stove-lid lifters, &c.	G. W. Warner	496,587	May 2	304	82	63	675
Handle for tableware, &c. Non-conducting.	A. Conradt	494,627	Apr. 4	162	38	63	33
Handle for umbrellas, &c.	M. W. Klaff	495,978	Apr. 25	2324	588	63	478
Handles. Means for attaching	G. H. Urban	489,170	Jan. 3	284	79	62	65
Handles to implements. Device for attaching	J. Klemm	510,271	Dec. 5	724	175	65	1546
Handles to vessels. Attaching	E. M. Peacock	503,673	Aug. 22	2385	595	64	1044
Handles to vessels. Attaching	E. M. Peacock	503,674	Aug. 22	2386	595	64	1044
Handles to vessels. Attachment of	C. J. Zeitinger	493,140	Mar. 7	575	144	62	1472
Hanger:							
See Clothes-line hanger.	Pantaloons-hanger.						
Display-hanger.	Picture-hanger.						
Door-hanger.	Pipe-hanger.						
Eaves-trough hanger.	Pulley-line hanger.						
er.	Shade-hanger.						
Garment-hanger.	Shade or curtain hanger.						
Gate-hanger.	Trolley-wire hanger.						
Hat-hanger.	Trousers-hanger.						
Hose-hanger.	Whip-hanger.						
Lamp-hanger.	Window-hanger.						
Mail-bag hanger.	Wire-hanger.						
Meat-hanger.							
Hanger	W. H. Case	511,121	Dec. 19	2217	543	65	1850
Hanger	C. C. Lockstaedt	494,148	Mar. 28	2235	574	62	1840
Hanger	W. Trehwella	507,394	Oct. 24	2727	669	65	550
Hangings. Machine for ornamenting.	R. Berkan	510,110	Dec. 5	451	101	65	1495
Hansom-doors. Device for opening	C. J. Rishor	493,520	Mar. 14	1184	303	62	1604
Harbor and river bars and shoals and preventing the formation of the same. Apparatus for removing	R. M. Scott	510,713	Dec. 12	1482	366	65	1702
Harmonica	M. Ams	504,899	Sept. 12	971	250	64	1467
Harmonica	E. Dienst	501,495	July 18	1529	383	64	309
Harmonica	G. Hyman	505,223	Sept. 19	1502	391	64	1579
Harmonica	C. Strauss	505,493	Sept. 26	1938	500	64	1675
Harmonica-case	M. Hohner	499,831	June 20	1822	443	63	1736
Harmonica. Mouth.	M. Hohner	501,837	July 18	2073	512	64	412
Harness	I. N. Darr	500,863	July 4	524	136	64	95
Harness	T. Decker	509,464	Nov. 28	2508	606	65	1273
Harness	J. G. Garman	510,908	Dec. 19	1856	457	65	1781
Harness	J. H. Gibson	498,366	May 30	3232	804	63	1259
Harness	J. J. Griffin	497,541	May 16	1873	472	63	987
Harness	F. C. Kimball	492,210	Feb. 21	1828	458	62	1146
Harness	C. L. Passmore	503,725	Aug. 22	2470	614	64	1061
Harness	J. H. Rhoads	509,247	Nov. 21	2091	504	65	1182
Harness	J. W. Schaub	496,284	Apr. 25	2790	698	63	566
Harness	E. J. Schermerhorn	509,690	Nov. 28	2859	690	65	1340
Harness	A. T. Snell and W. R. H. Weldon	500,516	June 27	2930	719	63	1944
Harness	C. R. Spencer	499,684	June 13	1560	377	63	1677
Harness	H. Stout	508,781	Nov. 14	1280	319	65	1015
Harness	J. F. Welcome	489,440	Jan. 3	705	189	62	151
Harness	J. H. Whitaker	496,028	Apr. 25	2398	607	63	492
Harness attachment	J. C. Camp	500,531	June 27	2948	724	63	1947
Harness-checking attachment.	W. Loser	499,172	June 6	724	172	63	1516
Harness-fastening	S. H. Haas	499,883	June 20	1912	464	63	1752
Harness-line ring	M. C. Flack	509,026	Nov. 21	1704	421	65	1109
Harness-loop.	C. W. James	503,856	Aug. 22	2656	665	64	1098

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Harness-pad	H. Doering	496,821	May 2	688	182	63	741
Harness-pad	C. Schroeder	489,270	Jan. 3	448	124	62	99
Harness-pad	C. Schroeder	497,255	May 9	1375	349	63	884
Harness-rack	J. T. Kitching	506,511	Oct. 10	1252	312	65	251
Harness-rosette	L. D. Jones	493,094	Mar. 7	500	125	62	1458
Harness-strap attachment	J. Reed	509,449	Nov. 28	2477	597	65	1267
Harness-support	W. Morgan	494,532	Mar. 28	2673	719	62	1953
Harness-suspending device	L. Townsend	503,814	Aug. 22	2602	650	64	1087
Harness-tool	J. Cunningham	491,086	Feb. 7	38	10	62	755
Harness-tool	L. H. Millen and W. L. McCammon.	497,674	May 16	2075	518	63	1023
Harp	G. B. Durkee	509,022	Nov. 21	1699	420	65	1108
Harp	I. Hammerl	510,857	Dec. 12	1772	435	65	1753
Harp. Æolian	C. J. Holbrook	493,773	Mar. 21	1616	411	62	1705
Harp support. Mouth-	J. Gose	507,318	Oct. 24	2606	641	65	527
Harrow	C. A. Anderson and J. S. Winston	502,391	Aug. 1	237	56	64	609
Harrow	J. B. Aton	496,037	Apr. 25	2412	610	63	494
Harrow	N. L. Beck	491,400	Feb. 7	563	142	62	856
Harrow	J. T. Bell	496,811	May 2	673	178	63	738
Harrow	R. H. Buckingham	491,036	Jan. 31	3315	845	62	724
Harrow	K. C. Bullard	490,336	Jan. 24	2166	565	62	485
Harrow	A. Byington	497,367	May 16	1594	403	63	938
Harrow	J. J. Callender	509,791	Nov. 28	3024	730	65	1371
Harrow	G. C. Crane	493,071	Mar. 7	463	117	62	1451
Harrow	T. F. Emans	507,894	Oct. 31	3569	879	65	721
Harrow	W. W. Green	491,100	Feb. 7	57	15	62	759
Harrow	W. W. Hinkle and I. H. Gaither	492,680	Feb. 28	2584	639	62	1311
Harrow	J. I. Hoke	509,434	Nov. 28	2444	588 589	65	1262
Harrow	J. W. Jackson	510,793	Dec. 12	1616	402	65	1727
Harrow	C. La Dow	494,538	Mar. 28	2685	723	62	1955
Harrow	C. La Dow	501,841	July 18	2078	513	64	407
Harrow	C. La Dow	501,886	July 18	2161	536	64	421
Harrow	C. La Dow	501,887	July 18	2163	536	64	422
Harrow	W. J. Lawrence	501,012	July 4	750	196	64	137
Harrow	W. J. Lawrence	503,545	Aug. 15	2165	541	64	990
Harrow	K. Laiminger	490,713	Jan. 31	2782	715	62	620
Harrow	T. J. Mann	493,507	Mar. 14	1162	297	62	1599
Harrow	D. Manuel	490,294	Jan. 24	2095	546	62	469
Harrow	A. Neal and R. B. Suhr	503,434	Aug. 15	1984	492	64	956
Harrow	J. B. Nugent and H. G. Gilbert	490,718	Jan. 31	2791	716	62	621
Harrow	J. F. Packer	498,295	May 30	3088	769 770	63	1234
Harrow	F. C. Patten	496,440	May 2	81	24	63	634
Harrow	C. Perrin	502,692	Aug. 1	758	183	64	705
Harrow	C. Perrin	503,675	Aug. 22	2386	595	64	1045
Harrow	S. Riley and W. Evans	493,116	Mar. 7	535	134	62	1464
Harrow	H. H. Sater	503,166	Aug. 15	1561	384	64	880
Harrow	E. E. Whipple	490,130	Jan. 17	1816	474	62	404
Harrow	E. E. Whipple	492,315	Feb. 21	1929	495	62	1180
Harrow	W. Williams	495,924	Apr. 18	2244	565	63	447
Harrow	C. E. Wyman	494,614	Apr. 4	144	33	63	30
Harrow and clod-crusher. Combined	S. B. Flynt	510,126	Dec. 5	482	109 110	65	1501
Harrow and cultivator. Combination	T. Boutwell and A. P. Magee	511,038	Dec. 19	2073	513 514	65	1821
Harrow and cultivator. Combination	E. B. West	502,059	July 25	2437	613	64	487
Harrow and cultivator. Combined side	G. W. Randolph	509,767	Nov. 28	2981	721 722	65	1363
Harrow and leveler. Race-track	J. E. E. Goward	506,491	Oct. 10	1217	303	65	244
Harrow and pulverizer. Combined	H. James	498,273	May 30	3039	756	63	1225
Harrow and roller	F. B. Harvey	490,198	Jan. 17	1921	499	62	423
Harrow and roller	F. B. Harvey	499,990	June 20	2064	500	63	1779
Harrow and roller	F. B. Harvey	500,064	June 20	2183	532	63	1799
Harrow attachment	C. A. Anderson and J. S. Winston	496,036	Apr. 25	2410	610	63	494
Harrow attachment, &c.	F. Berlin	489,213	Jan. 3	356	100	62	81
Harrow attachment	J. R. Storie	493,310	Mar. 14	859	219	62	1542
Harrow cleaner. Disk-	W. A. Daley	507,312	Oct. 24	2591	637	65	524
Harrow, cultivator, &c	S. T. Eskew	497,642	May 16	2029	505	63	1015
Harrow. Disk	G. G. Crowley	489,146	Jan. 3	251	70	62	58
Harrow. Disk	A. J. Glass	498,428	May 30	3294	822	63	1271
Harrow. Disk	R. W. Hardie	496,198	Apr. 25	2652	666	63	540
Harrow. Disk	G. S. Kermeen	506,047	Oct. 3	381	101	65	75
Harrow. Disk	T. Maxon	494,785	Apr. 4	418	104	63	81
Harrow. Disk	W. P. Millar	495,051	Apr. 11	816	206	63	171
Harrow. Disk	E. A. Ovenshire	511,273	Dec. 19	2463	601	65	1895
Harrow. Disk	J. F. Platt	493,182	Mar. 7	687	162	62	1483
Harrow. Disk	E. Fridmore	503,773	Aug. 22	2546	634	64	1076
Harrow. Disk	E. Fridmore	503,774	Aug. 22	2549	635	64	1077
Harrow. Disk	J. H. Thomas	503,178	Aug. 15	1579	388	64	885
Harrow-disk sharpener	J. O. Ingle, Jr., T. R. Stedman, and R. J. Lawson.	508,719	Nov. 14	1195	296	65	993
Harrow-disks. Hardening	J. S. Corbin	506,671	Oct. 17	1485	373	65	308
Harrow. Folding	C. L. Burnett	504,428	Sept. 5	192	49	64	1306
Harrow for listed corn	J. E. Beach	508,398	Nov. 14	697	171	65	901
Harrow-frame	F. X. Krabach	501,724	July 18	1897	472	64	376
Harrow or cultivator	T. C. Durham	492,717	Feb. 23	2639	654	62	1323
Harrow or cultivator tooth	F. X. Krabach	489,960	Jan. 17	1520	397	62	343
Harrow. Revolving	A. Johnson and F. Syvrd	500,253	June 27	2518	615	63	1870
Harrow riding attachment	T. P. Navin	511,025	Dec. 19	2054	508	65	1818
Harrow. Rotary	E. Erekson	505,038	Sept. 12	1203	310	64	1511
Harrow. Rotary	C. Robert	509,686	Nov. 28	2855	689 690	65	1339
Harrow. Rotary wheel	F. P. Baldwin and H. D. Sabin	508,536	Nov. 14	920	226	65	944

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Harrow. Rotary wheeled	J. B. Kelsey, J. Wallace, and J. B. Thompson.	510,143	Dec. 5	507	116	65	1505
Harrow scraper. Disk	A. Byington	492,385	Feb. 28	2107	525	62	1215
Harrow. Spring-tooth	H. W. Eisenhart	490,226	Jan. 17	1971	517	62	433
Harrow. Spring-tooth	J. S. Kurtz	489,417	Jan. 3	659	179	62	141
Harrow spring-tooth	H. Gale	502,488	Aug. 1	408	96	64	642
Harrow. Sully	A. Larson	510,071	Dec. 5	390	86	65	1483
Harrow-teeth. Holder for spring	H. W. Eisenhart	492,349	Feb. 21	2046	510	62	1190
Harrow-tooth	L. D. Corser	504,444	Sept. 5	212	56	64	1310
Harrow-tooth	J. M. Tomlinson	511,664	Dec. 26	3123	763	65	2029
Harrow-tooth fastening device	O. R. Baldwin	506,654	Oct. 17	1458	367	65	303
Harrow-tooth holder	A. B. Farquhar	492,326	Feb. 21	2006	499	62	1193
Harrow-tooth holder. Spring	H. W. Eisenhart	495,317	Apr. 11	1279	320	63	255
Harrow-tooth-holding device	J. G. Stowe	491,297	Feb. 7	394	101	62	822
Harrow-tooth socket	G. M. Bowen	511,039	Dec. 19	2075	514	65	1822
Harrow. Twin cultivating	T. A. Waldrip	501,609	July 18	1712	427	64	344
Harrow. Wheeled	F. Anderson	490,132	Jan. 17	1820	475	62	405
Harvester	T. J. Hamlet	496,358	Apr. 25	2930	731	63	593
Harvester	F. W. Husemann	508,317	Nov. 7	550	135	65	859
Harvester	M. S. Mishler	492,412	Feb. 28	2149	537	62	1223
Harvester	H. E. Pridmore	504,089	Aug. 29	3034	758	64	1186
Harvester	G. W. Scott	502,534	Aug. 1	482	116	64	655
Harvester	O. O. Storle	491,746	Feb. 14	1108	280	62	986
Harvester and binder	W. N. Whiteley and W. Bayley	500,175	June 27	2397	583	63	1849
Harvester. Bean	P. F. Wells	500,089	June 20	2216	540	63	1805
Harvester. Beet	G. A. Farrall	499,782	June 20	1733	419	63	1720
Harvester. Beet	G. A. Farrall	509,571	Nov. 28	2677	648	65	1305
Harvester. Beet	H. B. Martin	504,423	Sept. 5	185	48	64	1305
Harvester-binder	J. S. Mercer and W. Greatrex	503,798	Aug. 22	2580	642	64	1083
Harvester-binder tension-needle	T. A. Strobe	492,444	Feb. 28	2195	549	62	1233
Harvester-brake	C. Grattan	490,197	Jan. 17	1920	499	62	423
Harvester bundle-carrier	A. E. Bagley	506,653	Oct. 17	1457	367	65	303
Harvester. Cane	W. R. Chisholm	506,904	Oct. 17	1877	468	65	381
Harvester conveyer-belt	D. W. Storms	503,014	Aug. 8	1307	320	64	820
Harvester. Corn	W. F. Abbott	504,188	Aug. 29	3210	800	64	1219
Harvester. Corn	S. H. Brown and J. E. Solt	498,409	May 30	3263	813	63	1265
Harvester. Corn	C. A. Bullard	511,403	Dec. 26	2709	656	65	1952
Harvester. Corn	G. N. Cleveland	500,055	June 20	2169	527	63	1797
Harvester. Corn	E. A. Harrington	493,710	Mar. 21	1503	385	62	1683
Harvester. Corn	N. W. Hartman	509,162	Nov. 21	1936	473	65	1153
Harvester. Corn	I. W. J., and T. G. Hempy	511,268	Dec. 19	2457	599	65	1894
Harvester. Corn	P. F. Hodges	489,680	Jan. 10	1063	277	62	237
Harvester. Corn	P. R. Hunt	491,889	Feb. 14	1333	330	62	1030
Harvester. Corn	J. H. Ledford	494,640	Apr. 4	177	44	63	36
Harvester. Corn	W. K. Liggett	509,229	Nov. 21	2060	497	65	1177
Harvester. Corn	W. K. Liggett	509,230	Nov. 21	2063	498	65	1178
Harvester. Corn	J. J. Mealy	490,790	Jan. 31	2907	747	62	643
Harvester. Corn	W. H. Myers and L. Anderson	493,639	Mar. 21	1392	354	62	1662
Harvester. Corn	R. Pederson	494,023	Mar. 21	2035	519	62	1785
Harvester. Corn	J. E. Perkins	506,541	Oct. 10	1291	323	65	259
Harvester. Corn	W. M. Piatt	497,967	May 23	2547	636	63	1123
Harvester. Corn	W. M. Piatt	501,101	July 11	910	233	64	181
Harvester. Corn	W. J. Ruddy	505,559	Sept. 26	2098	532	64	1704
Harvester. Corn	J. Simser	495,526	Apr. 18	1613	406	63	336
Harvester. Corn	H. L. and W. E. Smith	497,390	May 16	1627	411	63	944
Harvester. Corn	W. R. Steiner	505,492	Sept. 26	1935	498	64	1674
Harvester. Corn	J. F. Steward	498,320	May 30	3123	779	63	1240
Harvester. Corn	L. G. Stewart	511,554	Dec. 26	2938	716	65	1996
Harvester. Corn	E. Warder	503,757	Aug. 22	2526	628	64	1072
Harvester. Corn	J. F. Winchell	510,945	Dec. 19	1931	471	65	1796
Harvester. Corn	J. F. Winchell	510,946	Dec. 19	1933	472	65	1796
Harvester. Corn or cane	H. Poole	498,693	May 30	3748	925	63	1350
Harvester. Cotton-cane	G. Beekman	495,007	Apr. 11	751	191	63	159
Harvester. Cotton	G. Beekman	501,670	July 18	1811	451	64	361
Harvester. Cotton	L. Cooper	504,019	Aug. 29	2927	733	64	1165
Harvester. Cotton	B. Gause	503,041	Aug. 8	1344	331	64	828
Harvester. Cotton	G. Lisenard	494,105	Mar. 21	2172	554	62	1810
Harvester. Cotton	G. N. Todd	510,730	Dec. 12	1503	555	65	1706

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Harvester. Cotton.....	G. N. Todd.....	510,731	Dec. 12	1506	{ 372 373 }	65	1706
Harvester-cutter.....	W. E. Ball.....	499,953	June 20	2009	{ 487 487 }	63	1769
Harvester cutter-bar.....	C. D. Hillabold.....	497,320	May 16	1522	{ 383 383 }	63	924
Harvester cutter-bar.....	W. H. Palmer.....	505,325	Sept. 19	1668	{ 430 430 }	64	1610
Harvester cutting apparatus.....	M. Wilson.....	489,062	Jan. 3	122	{ 33 33 }	62	30
Harvester dropping or gaveling attachment.....	W. A. Line.....	500,402	June 27	2754	{ 678 678 }	63	1912
Harvester elevating and packing mechanism.....	A. Gardner.....	491,680	Feb. 14	1006	{ 253 254 }	62	966
Harvester-elevator.....	M. Kane.....	499,169	June 6	718	{ 170 170 }	63	1514
Harvester. Grain.....	E. Young.....	506,189	Oct. 3	640	{ 163 163 }	65	1223
Harvester. Grain-binding.....	A. Gardner.....	491,641	Feb. 14	950	{ 238 239 }	62	954
Harvester. Grain-binding.....	L. Miller.....	493,731	Mar. 21	1549	{ 395 395 }	62	1692
Harvester-header.....	O. B. Hollis.....	506,504	Oct. 10	1236	{ 307 307 }	65	248
Harvester. Pea.....	J. Bearman.....	503,031	Aug. 8	1332	{ 327 328 }	64	825
Harvester picker-stem. Cotton.....	G. N. Todd.....	497,462	May 16	1743	{ 440 440 }	63	964
Harvester-platform adjustment.....	M. Kane.....	499,837	June 20	1829	{ 445 445 }	63	1737
Harvester. Potato.....	J. N. Cocker.....	511,511	Dec. 26	2876	{ 698 698 }	65	1984
Harvester. Potato.....	J. Colgrove.....	490,596	Jan. 24	2560	{ 659 660 }	62	561
Harvester. Potato.....	H. C. Wilson.....	504,186	Aug. 29	3204	{ 799 799 }	64	1218
Harvester-reel.....	A. Rekart.....	491,264	Feb. 7	321	{ 82 82 }	62	810
Harvester-reel.....	C. P. Wall.....	504,795	Sept. 12	801	{ 204 204 }	64	1433
Harvester-reel.....	W. N. Whiteley and O. E. Perrigo.....	495,832	Apr. 18	2153	{ 540 540 }	63	430
Harvester-reel mechanism.....	A. Stark.....	495,846	Apr. 18	2126	{ 534 534 }	63	426
Harvester safety-wheel attachment.....	M. Kane.....	489,012	Jan. 3	54	{ 15 15 }	62	14
Harvester. Self-binding.....	W. Butterfield.....	494,321	Mar. 28	2525	{ 636 636 }	62	1891
Harvester. Self-binding.....	J. E. Deering and J. F. Steward.....	509,020	Nov. 21	1696	{ 418 419 }	65	1107
Harvester. Self-binding.....	P. Hanson.....	503,283	Aug. 15	1744	{ 431 432 }	61	914
Harvester. Self-binding.....	J. P. Monroe.....	506,711	Oct. 17	1549	{ 387 388 389 }	65	320
Harvester. Self-binding.....	O. O. Storie.....	493,530	Mar. 14	1203	{ 307 308 }	62	1607
Harvester sheaf-register.....	J. P. Rohn.....	492,109	Feb. 21	1667	{ 414 415 240 }	62	1112
Harvester straw-binder.....	F. P. Richards.....	495,121	Apr. 11	959	{ 241 242 243 }	63	197
Harvester tension and take-up device.....	E. S. Brown.....	496,620	May 2	460	{ 124 124 }	63	703
Harvester tension device.....	T. Sampson.....	500,778	July 4	393	{ 103 103 }	64	73
Harvester. Traveling.....	B. Holt.....	496,311	Apr. 25	2839	{ 709 709 }	63	574
Harvester. Traveling.....	B. Holt.....	506,877	Oct. 17	1827	{ 458 458 }	65	371
Harvesters and binders. Automatic dropper for.....	C. F. Wille.....	505,739	Sept. 26	2405	{ 608 608 }	64	1760
Harvesters. Lifting device for self-binding.....	F. Burgroff.....	503,526	Aug. 15	2129	{ 535 535 }	64	923
Harvesters. Mechanism for actuating pickers for cotton.....	G. Beekman.....	501,669	July 18	1809	{ 450 450 }	64	360
Harvesters or binders. Drive-wheel for.....	J. P. T. Davis.....	508,167	Nov. 7	308	{ 76 76 }	65	815
Harvesters. Picker-actuating mechanism for cotton.....	G. Beekman.....	501,671	July 18	1815	{ 452 453 644 }	64	361
Harvesters. Platform and binder-deck for grain.....	J. J. Dewey.....	500,321	June 27	2635	{ 645 645 }	63	1891
Harvesters. Sheaf-carrier for self-binding.....	J. F. Steward.....	490,591	Jan. 24	2553	{ 657 657 }	62	560
Harvesting and thrashing machine. Combined.....	J. L. Heald.....	509,082	Nov. 21	1805	{ 444 444 }	65	1128
Harvesting device. Cotton.....	G. Beekman.....	493,010	Mar. 7	376	{ 94 94 }	62	1433
Harvesting, husking, and separating machines. Roller for corn.....	C. H. Taylor.....	493,453	Mar. 14	1074	{ 276 276 }	62	1584
Harvesting-machine.....	F. Leonard.....	501,890	July 18	2166	{ 537 537 }	64	422
Harvesting-machine.....	E. A. Peck.....	502,861	Aug. 8	1045	{ 256 257 258 615 }	64	774
Harvesting-machine.....	F. H. Rogers.....	509,492	Nov. 28	2549	{ 616 617 617 }	65	1283
Harvesting-machine.....	W. N. Whiteley.....	497,151	May 9	1213	{ 311 311 }	63	856
Harvesting-machine bundle-carrier.....	E. G. Watrous.....	507,604	Oct. 31	3101	{ 757 757 }	65	633
Harvesting-machine knotting mechanism.....	W. N. Whiteley and S. Dyer.....	497,848	May 23	2353	{ 590 590 }	63	1089
Hasp-lock.....	J. L. Buckingham and C. S. McCrory.....	498,457	May 30	3346	{ 833 833 }	63	1281
Hasp-lock.....	D. O'Connor.....	489,613	Jan. 10	977	{ 254 254 }	62	218
Hasp-lock.....	C. V. Pugh.....	489,326	Jan. 3	524	{ 142 142 }	62	113
Hasp-lock.....	C. S. Van Anker.....	502,938	Aug. 8	1188	{ 292 292 }	64	799
Hat.....	R. Buck.....	506,100	Oct. 3	466	{ 121 121 }	65	91
Hat.....	C. Harkins.....	504,350	Sept. 5	56	{ 15 15 }	64	1281
Hat.....	I. Shepard.....	500,962	July 4	676	{ 177 177 }	64	123
Hat.....	T. Westerman.....	496,462	May 2	117	{ 32 32 }	63	640
Hat.....	G. Yule and W. A. Baglin.....	497,086	May 9	1118	{ 286 286 }	63	838
Hat and clothes rack. Combined.....	A. L. Coffey.....	494,269	Mar. 28	2447	{ 617 617 }	62	1875
Hat and coat hook.....	H. S. Hodge.....	490,768	Jan. 31	2869	{ 736 736 }	62	635
Hat and coat hook.....	F. Taylor.....	499,608	June 13	1447	{ 347 347 }	63	1658
Hat and coat hook.....	F. Taylor.....	509,629	Nov. 28	2765	{ 666 666 }	65	1323
Hat and coat hook.....	F. Taylor.....	509,630	Nov. 28	2766	{ 666 666 }	65	1323
Hat and coat hook.....	A. White.....	501,453	July 11	1467	{ 360 360 }	64	282
Hat and coat rack.....	H. Westphal.....	506,756	Oct. 17	1636	{ 410 410 }	65	336
Hat-block. Expandable.....	C. C. Widmer.....	493,200	Mar. 7	660	{ 168 168 }	62	1488
Hat blocking and stretching machine.....	A. W. Hilsinger.....	490,563	Jan. 24	2516	{ 647 647 }	62	552
Hat-blocking machine.....	W. Beckerle.....	509,284	Nov. 21	2149	{ 516 517 }	65	1193

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hat-blocking process and apparatus.	G. Yule and W. A. Baglin	499,492	June 13	1257	299 300	63	1624
Hat-bodies. Machine for uniting nap-bats to	W. A. Baglin	508,462	Nov. 14	784	193	65	918
Hat-body	G. Yule and W. A. Baglin	497,084	May 9	1115	286	63	838
Hat-body and making same	G. Yule and W. A. Baglin	497,083	May 9	1112	286	63	837
Hat box or case for traveling purposes	S. Malo	499,132	June 6	655	158	63	1505
Hat-brim-curling machine	W. J. McGill and A. W. Hilsinger.	510,359	Dec. 5	845	204	65	1570
Hat-brim-pressing machine	J. Marshall	489,591	Jan. 10	946	246 247	62	212
Hat-brim-shaping machine.	L. H. Hoyt	497,789	May 23	2264	568 569	63	1074
Hat-brim-softening device.	W. Mitchell	491,319	Feb. 7	432	111	62	830
Hat, coat, and umbrella rack	E. W. Trout	500,632	July 4	152	40	64	30
Hat expanding and contracting apparatus	P. Noë	491,853	Feb. 14	1278	317	62	1019
Hat-fastener	J. Parsons	503,771	Aug. 22	2543	633	64	1075
Hat-fastener. Lady's	E. McCormick	505,719	Sept. 26	2375	600	64	1755
Hat-fastener. Lady's	J. J. O'Connor	501,295	July 11	1208	305	64	234
Hat-hanger	F. L. Johnson	492,297	Feb. 21	1961	489	62	1174
Hat-holder	C. E. Boyer	505,696	Sept. 26	2342	593	64	1750
Hat-holder	G. M. R. Twose	501,972	July 25	2296	574	64	461
Hat-holder and coat-hook	J. M. Cotton	501,329	July 11	1268	318	61	243
Hat-holder. Foldable	J. W. Thayer	509,832	Nov. 28	3092	747	65	1384
Hat-iron. Portable	A. E. McDonald.	504,814	Sept. 12	839	215	64	1441
Hat or bonnet holder	G. Crouch	503,949	Aug. 29	2817	703	64	1145
Hat-pin guard. Lady's	C. S. Shepardson	494,602	Apr. 4	121	28	63	25
Hat-pouncing machine	J. B. Howe	490,788	Jan. 31	2902	746 747	62	642
Hat-pouncing machines. Pouncing-head for.	J. B. Howe	495,491	Apr. 18	1565	393 394	63	327
Hat-rack	W. M. Pegram	498,886	June 6	243	57	63	1435
Hat-rack. Locking	F. B. Trout.	490,326	Jan. 24	2149	561	62	481
Hat-retaining device.	A. B. Olson	509,092	Nov. 21	1833	449	65	1134
Hat-shaving tool	W. H. McMahon	504,275	Aug. 29	3346	836	64	1244
Hat-stand	O. S. and E. F. Conklin.	493,248	Mar. 14	746	191	62	1522
Hat-support	R. Macomb	503,797	Aug. 22	2579	642	64	1083
Hat-supporter	W. Applegath. (Reissue)	11,336	May 16	2215	554	63	1049
Hat-sweat.	J. Bohrmann	506,839	Oct. 17	1769	445	65	361
Hat sweats and bands. Machine for attaching	G. E. Brush	494,365	Mar. 28	2604	654	62	1905
Hat-tip-stretching machine	C. B. Schumann	497,969	May 23	2550	637	63	1123
Hat tray	H. Likly	489,968	Jan. 17	1533	401	62	346
Hat. Ventilated	C. H. Davies	488,989	Jan. 3	21	6	62	7
Hats. Attaching sweat-leathers to	D. Howell	508,315	Nov. 7	548	135	65	859
Hats. Securing attachment for ladies'	H. F. Schade	494,599	Apr. 4	118	28	63	25
Hatch-plate-moving device.	A. McDougall	493,282	Mar. 14	807	208	62	1533
Hatchway attachment. Elevator.	C. M. Prevear	489,755	Jan. 10	1188	311	62	261
Hatchway-door mechanism.	W. K. Crofford and W. Bardsley	494,550	Apr. 4	22	5, 6	63	6
Hatchway-guard.	C. J. Reynolds.	500,721	July 4	307	82	64	58
Hatchway mechanism	E. D. Shaw	497,828	May 23	2323	582	63	1084
Haulage-clip	W. D. Hodgkinson	497,664	May 16	2063	514	63	1021
Hay and stock rack	G. E. Schairer	489,094	Jan. 3	171	47	62	40
Hay and stock rack. Combined	H. Cartwright	495,106	Apr. 11	925	233	63	192
Hay-carrier	G. H. Fowler	508,102	Nov. 7	203	54	65	796
Hay-carrier	W. Loudon	498,748	May 30	3857	950 951	63	1369
Hay-carrier	J. W. and J. W. Provan	495,756	Apr. 18	1984	501 502	63	400
Hay-carrier track	W. Loudon	493,216	Mar. 7	685	175	62	1493
Hay-carriers. Adjustable stop device for	J. H. Burkholder	490,738	Jan. 31	2820	724 725	62	627
Hay-derrick	J. F. Hutchinson	502,078	July 25	2465	619	64	493
Hay-derrick. Portable	D. V. Garrison	494,473	Mar. 28	2767	694	62	1934
Hay drier and stacker	C. A. Guhr and A. E. Richter	503,368	Aug. 15	1896	470	64	940
Hay-elevator	W. Loudon	498,666	May 30	3699	914	63	1342
Hay-elevator	S. A. McNulty	503,352	Aug. 15	1865	461	64	935
Hay elevator and carrier	J. E. Porter	497,207	May 9	1296	330	63	870
Hay-fork	S. B. and S. Welch	502,155	July 25	2591	651 652	64	517
Hay fork. Double-harpoon clover-	D. A. Shank	499,258	June 13	843	201 202	63	1551
Hay-knife	A. Mosier	510,357	Dec. 5	843	203	65	1570
Hay-loader	A. Anderson	497,620	May 16	1993	499	63	1008
Hay-loader	E. B. Cartmell	491,636	Feb. 14	941	237	62	952
Hay-loader	F. M. Bird	511,109	Dec. 19	2193	539	65	1845
Hay-loader	E. W. Daily	507,109	Oct. 24	2217	547 548	65	456
Hay-loader	J. Drake	506,677	Oct. 17	1493	375	65	310
Hay-loader	S. Ferguson	510,965	Dec. 19	1966	482 483	65	1803
Hay-loader	G. D. Houston	496,159	Apr. 25	2597	653	63	529
Hay-loader	B. F. Hughes	498,060	May 23	2693	674 675	63	1148
Hay-loader	T. J. Snyder.	493,307	Mar. 14	853	217 218	62	1541
Hay loader and carrier. Combined	D. McCarthy	490,158	Jan. 17	1856	484 485	62	411
Hay or cotton press.	S. M. Neely	501,435	July 11	1441	361	64	277
Hay or hog rack.	W. H. Long	500,920	July 4	605	158	64	111
Hay or stock rack.	E. Ries	501,363	July 11	1338	334	64	256
Hay-press.	G. Behrenfeld	505,999	Oct. 3	309	80	65	60
Hay-press.	F. P. Fowler	507,425	Oct. 24	2778	680 681	65	560
Hay-press.	L. F. Gressett	493,996	Mar. 21	1992	508	62	1776
Hay-press.	C. D. McNeill and F. E. Huck	495,826	Apr. 18	2089	527	63	419

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hay-press.....	L. L. Moe.....	505,224	Sept. 19	1503	392	64	1579
Hay-press.....	J. T. Russell.....	502,843	Nov. 14	1376	{ 340 341 342 }	65	1032
Hay-press.....	J. F. Thompson, R. L. Murphree, and W. D. Harrison.	496,457	May 2	110	30	63	638
Hay-press.....	A. G. Wilson.....	507,250	Oct. 24	2479	611	65	502
Hay-press.....	A. Witte.....	502,942	Aug. 8	1192	{ 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	800	
Hay-press.....	W. H. Young.....	492,652	Feb. 28	2548	{ 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	62	1304
Hay-press attachment.....	F. B. Graham and J. H. Knapp.....	490,072	Jan. 17	1716	447	62	382
Hay-rack.....	C. W. Behrens.....	502,220	July 25	2696	670	64	538
Hay-rack.....	W. H. Capellen and H. A. Crabtree.....	492,709	Feb. 28	2628	651	62	1321
Hay-rack.....	W. H. Laird.....	505,317	Sept. 19	1659	428	64	1608
Hay-rack.....	H. A. Mowrey.....	506,180	Oct. 3	618	158	65	120
Hay-rack.....	A. H. Parker.....	491,442	Feb. 7	626	157	62	868
Hay-rack.....	J. W. Scott.....	494,695	Apr. 4	265	67	63	53
Hay-rack loader and unloader.....	F. G. Anderson.....	495,952	Apr. 25	2287	577	63	471
Hay-rake.....	B. F. Wenger.....	490,697	Jan. 31	2757	710	62	614
Hay rake and loader.....	C. W. Baird.....	508,395	Nov. 14	690	{ 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	65	899
Hay rake and loader.....	C. W. Baird.....	508,397	Nov. 14	694	171	65	900
Hay rake and loader.....	J. A. Crook.....	508,817	Nov. 14	1337	331	65	1025
Hay rake and loader.....	C. A. Fleming.....	504,975	Sept. 12	1101	{ 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 47		

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Heated vessel. Electrically-Heater:	W. Mitchell	491,321	Feb. 7	434	112	62	830
See Atmospheric heater. Hot-water heater.							
Bath-water heater. Hot-water or steam heater.							
Car-heater. Incubator-heater.							
Cheese-vat heater. Lamp-heater.							
Combination-heater. Milk-heater.							
Curling-iron heater. Oil-heater.							
Dental heater. Solar heater.							
Electric heater. Soldering-iron heater.							
Electrical heater. Steam-heater.							
Feed-water heater. Steam or hot-water heater.							
Fireplace-heater. Tan-liquor heater.							
Flat-iron heater. Tank-heater.							
Fluid-heater. Tire-heater.							
Gas-heater. Trough-heater.							
Gasoline-heater. Water-heater.							
Heater	H. W. Campbell	502,701	Aug. 8	799	193	64	727
Heater	M. Dewey	496,401	May 2	20	5, 6	63	622
Heater	G. E. Dixon	498,536	May 30	3478	{ 861 862 }	63	1304
Heater	R. M. Dixon	494,711	Apr. 4	292	73	63	59
Heater	C. A. Howard	503,141	Aug. 15	1517	373	64	872
Heater	A. Jack	492,726	Feb. 28	2653	657	62	1326
Heater	W. J. Jackson	492,207	Feb. 21	1825	{ 457 458 }	62	1145
Heater	C. S. Jones	498,122	May 23	2786	697	63	1166
Heater	C. Schellhammer	496,750	May 2	573	{ 153 154 }	63	722
Heater	J. A. Weaver	502,335	Aug. 1	140	32	64	591
Heater and condenser.	G. G. Paull and W. F. Brown	507,385	Oct. 24	2711	666	65	547
Heater-flue register.	W. H. Meyers	501,019	July 4	758	199	64	138
Heater for fireplaces, &c.	A. E. Lytle	492,732	Feb. 28	2658	659	62	1327
Heater or boiler.	H. Stanton	509,495	Nov. 28	2557	618	65	1282
Heaters. Temperature-regulator for electric	A. M. Butz	510,889	Dec. 19	1827	451	65	1776
Heating and circulating hot water. Apparatus for.	R. H. Kersey	511,436	Dec. 26	2767	669	65	1962
Heating and lighting vehicles. Device for	N. B. Ross	505,330	Sept. 19	1674	432	64	1611
Heating and ventilating apparatus and system.	F. P. Smith	509,332	Nov. 21	2237	541	65	1210
Heating and ventilating rooms. Apparatus for	W. S. Stuyvesant	495,528	Apr. 18	1620	407	63	337
Heating and ventilation system.	J. Scherffius	495,567	Apr. 18	1678	423	63	348
Heating and welding apparatus. Electric	C. L. Coffin	507,419	Oct. 24	2767	678	65	558
Heating apparatus	W. C. Baker	496,107	Apr. 25	2523	638	63	516
Heating apparatus	G. M. Drum	509,366	Nov. 28	2298	557	65	1233
Heating apparatus	B. M. Dunson	508,820	Nov. 14	1342	332	65	1026
Heating apparatus	E. F. Edgar	500,228	June 27	2484	606	63	1864
Heating apparatus	F. Mancheron	491,806	Feb. 14	1208	302	62	1005
Heating apparatus	T. J. Maw	505,713	Sept. 26	2365	598	64	1754
Heating apparatus	G. L. Shorey	500,693	July 4	255	69, 70	64	48
Heating apparatus	E. R. Solean	511,260	Dec. 19	2479	604	65	1898
Heating apparatus	H. J. Wattles	493,537	Mar. 14	1214	311	62	1609
Heating-apparatus boiler	C. W. Warnock	511,569	Dec. 26	2970	723	65	2001
Heating apparatus. Electric	M. W. Dewey	494,291	Mar. 28	2482	626	62	1881
Heating apparatus. Fluid-pressure regulator for	W. H. Page	507,077	Oct. 17	2152	533	65	431
Heating apparatus for railway-trains. Steam	J. R. Drozeski	508,291	Nov. 7	509	123	65	852
Heating apparatus. Gas	J. W. Weeks	507,699	Oct. 31	3257	797	65	663
Heating apparatus. Hot-water and steam	A. L. Snyder	502,055	July 25	2431	612	64	486
Heating apparatus. Portable	J. E. McElfrick	493,780	Mar. 21	1628	414	62	1708
Heating apparatus. Steam	F. Kaefler	499,231	June 13	809	192	63	1545
Heating apparatus. Water-	J. B. Butterworth	506,975	Oct. 17	1988	492	65	402
Heating attachment	W. Rennyson	492,431	Feb. 28	2174	{ 543 544 }	62	1228
Heating, cooling, and ventilating system.	J. H. Brady	504,961	Sept. 12	1070	{ 273 274 }	64	1486
Heating-furnace	J. A. P. Berg	503,641	Aug. 22	2340	584	64	1036
Heating-furnace	W. P. Winner	501,034	July 4	785	{ 205 206 }	64	143
Heating hot water and steam. Method of and apparatus for	W. Heckert	499,322	June 13	950	{ 229 230 }	63	1570
Heating, illuminating, or culinary purposes. Appliance for	F. E. Browne	498,380	May 30	3224	802	63	1258
Heating. Induction system of electrical.	S. B. Jenkins	494,295	Mar. 28	2488	627	62	1883
Heating pipe and radiator.	E. R. McCall	495,358	Apr. 11	1343	336	63	266
Heating plant	E. B. Cox	510,570	Dec. 12	1240	300	65	1657
Heating system	M. W. Bayliss	499,412	June 13	1134	271	63	1602
Heating system	I. N. Gordon	499,339	June 13	982	238	63	1575
Heating system. Steam	M. F. Lancronon	489,748	Jan. 10	1176	{ 306 307 }	62	259
Heating systems. Apparatus for regulating the temperature of hot-water	A. Mercer	510,183	Dec. 5	573	133	65	1518
Hedge-clip	R. Raby	503,161	Aug. 15	1552	380	64	879
Hedge-trimmer	A. C. Althouse	496,035	Apr. 25	2407	609	63	493
Hedge-trimmer	E. C. and A. M. Gordon	498,713	May 30	3791	935	63	1356
Hedge-trimmer	J. L. Jackson	490,074	Jan. 17	1718	418	62	382
Hedge-trimmer	J. T. Phelan	508,749	Nov. 14	1237	308	65	1007
Hedge-trimming machine	G. W. and C. E. Goss	508,936	Nov. 21	1569	{ 384 385 }	65	1082
Heel	H. Menier	502,571	Aug. 1	539	128	64	665
Heel	M. Murray	500,816	July 4	450	118	64	83
Heel	I. R. Rogers	497,132	May 9	1193	305	63	851
Heel and shank finishing machine	C. H. Kelley	490,808	Jan. 31	2931	752	62	648
Heel-attaching machine	H. A. Webster	505,074	Sept. 12	1268	{ 325 326 }	64	1523
Heel-burnishing machine	H. M. Loomer	505,050	Sept. 12	1219	{ 327 314 }	64	1514

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Heel-calk	J. Dolan	492,194	Feb. 21	1806	451	62	1141
Heel compressing and loading machine	C. W. Glidden	502,667	Aug. 1	706	168 169 170	64	695
Heel compressing and loading machine	C. W. Glidden	502,668	Aug. 1	715	171 172	64	697
Heel. Detachable	M. Wise	506,614	Oct. 10	1390	348	65	278
Heel-die	I. R. Rogers	509,768	Nov. 28	2983	722	65	1363
Heel-nail	G. A. Curtis	502,550	Aug. 1	511	122	64	660
Heel-nailing machine	C. W. Glidden	500,486	June 27	2871	707	63	1932
Heel-nailing machine	C. W. Glidden	502,669	Aug. 1	719	172 173	64	698
Heel-nailing machine	J. B. Tilton	498,092	May 23	2740	684 685	63	1157
Heel-nailing machines. Last and clamp for	W. V. Bither	497,010	May 9	1003	258	63	817
Heel or edge trimming machines. Shield-oiler for	F. D. Worden and J. M. Diven	500,523	June 27	2940	722	63	1946
Heel-pad	I. Levy	491,756	Feb. 14	1123	284	62	989
Heel-plate	H. E. Van Benschoten	491,149	Feb. 7	135	36	62	775
Heel-pressing machine	J. J. Heys	497,497	May 16	1814	456	63	976
Heel-stiffener machine	M. Chase and M. H. Foster	504,327	Sept. 5	22	7, 8	64	1275
Heel-stiffener machine	L. W. Litch	503,608	Aug. 22	2291	572	64	1027
Heel-trimming machine	A. B. Fowler and G. E. Warren	503,475	Aug. 15	2053	511 512 513	64	968
Heel-trimming machine	C. W. Glidden and H. W. Winter	505,043	Sept. 12	1209	311	64	1514
Heels with nails. Machine for loading	E. Woodward	507,772	Oct. 31	3374	826	65	685
Heeling-machine	A. D. Elliott	510,012	Dec. 5	295	66, 67	65	1466
Heeling-machine	C. W. Glidden	498,513	May 30	3434	852 853	63	1296
Height-gage	E. H. Carter and J. J. Beard	495,019	Apr. 11	769	196	63	163
Hemmer	S. Laskey	495,814	Apr. 18	2075	523	63	416
Hemp or other fibrous materials. Mechanism for spreading and drawing	J. Good	497,238	May 9	1344	342	63	880
Hermetically closing receptacles. Means for	L. A. Bonnamy	495,775	Apr. 18	2020	511	63	406
Hermetically sealed bucket	S. N. Long	496,835	May 2	707	187	63	745
Hernal instrument	A. Dallas	505,818	Oct. 3	27	7	65	8
Hexaoxyanthraquinone and making it	R. E. Schmidt	503,295	Aug. 15	1768		64	918
Hide-fleshing machine	A. E. Whitney	509,503	Nov. 28	2568	620 621	65	1285
Hide-working cylinder	A. E. Whitney	494,183	Mar. 28	2307	585	62	1850
Hides and skins. Machine for working	G. W. Baker	497,941	May 23	2509	625 626 627	63	1116
Hides. Clutch mechanism for machines for working	G. F. Tinney	497,146	May 9	1212	310	63	854
Hides. Machine for treating	W. R. Pullman and H. Smith	491,446	Feb. 7	631	158 159	62	869
Hides. Preparing	F. Grognet	503,235	Aug. 15	1669		64	900
Hides. Unhairing	J. Mellinger	490,791	Jan. 31	2910		62	643
High or low water alarm	W. Hodgson	502,191	July 25	2647	668	64	529
High or low water alarm	W. A. Kitts	503,606	Aug. 22	2225	570	64	1026
Hinge	C. E. Amsden	496,120	Apr. 25	2625	661	63	534
Hinge	E. R. Buhrman	506,154	Oct. 3	561	146	65	109
Hinge	T. Corscaden and F. Holland	502,706	Aug. 8	804	194	64	728
Hinge	R. M. Esplin	506,679	Oct. 17	1496	376	65	310
Hinge	W. H. Hart	504,877	Sept. 12	935	241	64	1460
Hinge	C. F. Hoffritz	504,162	Aug. 29	3156	788	64	1208
Hinge	A. C. Johnson	510,861	Dec. 12	1787	439	65	1756
Hinge	L. L. Pletcher	505,480	Sept. 26	1918	494	64	1671
Hinge	G. J. Reichardt	495,268	Apr. 11	1209	303	63	241
Hinge	F. J. Smith	493,190	Mar. 7	648	165	62	1486
Hinge	T. Tangney	509,702	Nov. 28	276	696	65	1343
Hinge	W. Veitch	509,979	Dec. 5	229	54	65	1453
Hinge. Adjustable	C. N. Partlow	507,242	Oct. 24	2469	608	65	501
Hinge and check. Spring	R. E. Lowe	491,998	Feb. 14	1348	335	62	1033
Hinge and door-check. Combined spring	H. W. Libbey	494,988	Apr. 4	718	182	63	137
Hinge and support for desks. Combined flush	A. Claypool	497,333	May 16	1863	470	63	955
Hinge-butts. Structural blank for	E. C. Smith	507,336	Oct. 24	2631	647	65	532
Hinge. Closet-seat	W. M. Webster	506,023	Oct. 3	343	91	65	67
Hinge. Combined strap and pivot	L. Lipp	502,306	Aug. 1	82	19	64	581
Hinge. Door	H. M. Locke	493,230	Mar. 7	711	122	62	1494
Hinge. Electric	W. S. Hull	499,428	June 13	1159	277	63	1607
Hinge fastening. Blind	H. Mullins	510,082	Dec. 5	410	91	65	1487
Hinge for collapsible boxes	W. V. Leonard	498,178	May 23	2867	716	63	1180
Hinge for desks. Stop	T. Morris	498,564	May 30	3525	872	63	1312
Hinge. Gate	J. P. Irwin	511,050	Dec. 19	2090	517	65	1825
Hinge. Gate	C. M. Lamb	504,450	Sept. 5	223	60	64	1312
Hinge. Gate	C. M. Lamb	504,451	Sept. 5	223	60	64	1312
Hinge. Gate	A. O. Quinby	490,834	Jan. 31	2970	762	62	656
Hinge. Gate	M. Watkins and E. T. Rugg	507,191	Oct. 24	2379	587	65	484
Hinge. Gate	W. R. White	496,926	May 9	882	231	63	797
Hinge. Lock	N. S. Clement	494,549	Apr. 4	21	5	63	6
Hinge. Lock	G. F. Pottle	509,047	Nov. 21	1738	430	65	1116
Hinge. Lock	J. G. Smith	497,730	May 16	2163	541	63	1040
Hinge-polishing machine	E. A. Moore	504,498	Sept. 5	315	79, 80	64	1328
Hinge-seats. Device for marking and gaging	W. R. Shepard	495,761	Apr. 18	1992	504	63	401
Hinge-setting machine	A. Lee	507,914	Oct. 31	3604	889	65	727
Hinge. Spring	J. W. Coultas	505,193	Sept. 19	1454	374 375	64	1570
Hinge. Spring	W. S. Crane	510,896	Dec. 19	1838	453	65	1778
Hinge. Spring	F. Ennis	495,965	Apr. 25	2305	582	63	474
Hinge. Spring	F. Ennis	495,966	Apr. 25	2306	583	63	474
Hinge. Spring	H. L. Ferris	496,476	May 2	133	37	63	643
Hinge. Spring	P. E. Glafcke	495,031	Apr. 11	789	200	63	166
Hinge. Spring	F. W. Hoefer	501,786	July 18	2007	495	64	395

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Hinge. Spring.	A. Keller	496,100	Apr. 25	2598	654	63	530
Hinge. Spring.	R. Labudde and F. Hansen	503,243	Aug. 15	1679	413	64	902
Hinge. Spring.	E. A. Leland	496,264	Apr. 25	2760	690	63	559
Hinge. Spring.	L. R. Pomeroy	504,403	Sept. 5	144	38	64	1297
Hinge. Spring.	H. Reichwein	495,370	Apr. 11	1359	340	63	260
Hinge. Spring.	F. D. Robinson	503,064	Aug. 8	1378	340	64	834
Hinge. Spring.	O. Seely	496,008	Apr. 25	2368	599	63	486
Hinge. Spring.	J. H. Shaw	508,249	Nov. 7	447	109	65	840
Hinge. Spring.	C. S. Van Wagoner	500,086	June 20	2210	540	63	1804
Hinge. Stop.	G. P. Hart	491,645	Feb. 14	959	241	62	956
Hinge. Tension.	J. H. Stiggleman	496,802	May 2	660	175	63	736
Hinge. Trunk.	H. W. Gibbs	506,632	Oct. 10	1417	355	65	284
Hitch. Halter.	R. H. Bacot	504,650	Sept. 5	537	138	64	1371
Hitching device.	C. W. Collins	495,961	Apr. 25	2298	581	63	473
Hitching device.	J. L. Crowley	505,894	Oct. 3	148	39	65	29
Hitching device.	H. H. Koeller	497,188	May 9	1271	323	63	865
Hitching device.	K. Laiminger and J. Ackfeld	497,582	May 16	1933	486	63	997
Hitching device.	F. G. Milbrath	498,562	May 30	3524	872	63	1311
Hitching device.	J. E. Terry	489,510	Jan. 10	831	218	62	189
Hitching device. Horse.	J. Benedikt and I. Klein	506,656	Oct. 17	1461	367	65	304
Hitching device. Horse.	A. Fisher and G. H. Prestley	490,874	Jan. 31	302	779	62	669
Hitching-strap.	A. J. Cogley	509,652	Nov. 28	2799	673	65	1329
Hitching-strap.	E. Shaw	498,035	May 23	2656	664	63	1142
Hitching-strap.	F. Sweetland	489,837	Jan. 10	1307	341	62	227
Hitching-strap.	F. Sweetland	492,445	Feb. 28	2197	549	62	1233
Hitching-strap holder.	S. T. Smith	489,438	Jan. 3	703	188	62	151
Hitching-weight.	A. P. Watson	506,649	Oct. 10	1444	362	65	289
Hobby-horse.	A. T. Godbe	498,847	June 6	174	43	63	1423
Hobby-horse.	W. Sancto	509,451	Nov. 28	2479	598	65	1267
Hod.	M. D. Hurley	496,940	May 9	902	237	63	800
Hod.	R. and R. J. Law	500,334	June 27	2654	650	63	1894
Hod-elevator.	C. Carlson	495,781	Apr. 18	2028	513	63	408
Hod-elevator.	E. J. Garrard	491,419	Feb. 7	588	148	62	860
Hoe.	E. B. Hazel	502,720	Aug. 8	824	199	64	731
Hoe.	N. T. Peddyoord	506,336	Oct. 10	932	232	65	190
Hoe.	D. W. Richardson	501,662	July 18	1798	447	64	359
Hoe and fertilizer-distributor. Horse.	F. M. Haines	509,468	Nov. 28	2516	607	65	1274
Hoe. Combination.	F. W. Witham	495,081	Apr. 11	863	220	63	180
Hoe for removing ashes. Folding.	F. A. Rice	492,875	Mar. 7	166	39	62	1391
Hoe. Grubbing.	J. C. Thompson	509,264	Nov. 21	2116	509	65	1187
Hoe-handle.	J. P. Phillips	505,252	Sept. 19	1544	402	64	1587
Hoe. Horse.	C. Cottis	505,349	Sept. 19	1700	438	64	1616
Hog-scraper.	G. A. Lowry	497,724	May 16	2155	539	63	1038
Hog-trap.	J. F. Boman and J. Cornelius	497,163	May 9	1240	315	63	859
Hog-trap.	F. R. Patchett	491,810	Feb. 14	1212	303	62	1006
Hog-trough.	I. Jones	503,664	Aug. 22	2374	592	64	1042
Hoist. Tilting.	W. Thornburgh	507,766	Oct. 31	3358	823	65	681
Hoists. Cylinder for power.	D. E. Hall	492,769	Feb. 28	2726	678	62	1340
Hoisting and conveying apparatus.	W. Donahue	504,522	Sept. 5	351	89	64	1335
Hoisting and conveying apparatus.	P. Rasch	505,637	Sept. 26	2235	567	64	1730
Hoisting and conveying apparatus.	C. L. Saunders	489,662	Jan. 10	1036	270	62	231
Hoisting and conveying machine.	P. Rasch	505,639	Sept. 26	2240	568	64	1731
Hoisting and conveying machines. Elevated tramway for.	P. Rasch	505,635	Sept. 26	2230	566	64	1729
Hoisting and conveying machinery.	F. C. Birch	489,785	Jan. 10	1231	322	62	270
Hoisting and conveying tramway mechanism.	P. Rasch	505,638	Sept. 26	2237	567	64	1730
Hoisting and transfer apparatus.	W. D. Sherman	494,389	Mar. 28	2646	663	62	1912
Hoisting apparatus.	N. H. Gilmore	499,536	June 13	1335	316	63	1639
Hoisting apparatus.	G. F. Jennings	508,171	Nov. 7	314	78	65	816
Hoisting apparatus.	V. Mathieu	490,574	Jan. 24	2529	651	62	555
Hoisting apparatus.	L. M. Smith and A. P. Morrill	511,255	Dec. 19	2431	592	65	1989
Hoisting-block.	T. R. Ferrall	492,550	Feb. 28	2383	591	62	1273
Hoisting-bucket.	T. Cogswell	508,599	Nov. 14	1020	251	65	964
Hoisting-bucket.	G. Haiss	497,021	May 9	1019	261	63	820
Hoisting device.	H. Hagelstein	511,014	Dec. 19	2043	505	65	1816
Hoisting device.	J. Motheral	497,592	May 16	1953	489	63	1000
Hoisting-drum driving-gear.	P. White	489,355	Jan. 3	570	154	62	122
Hoisting-machine.	J. E. Ennis	494,328	Mar. 28	2535	638	62	1692
Hoisting-machine.	C. Griffith	491,168	Feb. 7	179	45	62	782
Hoisting-machine.	S. Griffiths	502,188	July 25	2643	667	64	528
Hoisting-machine.	D. S. White	508,155	Nov. 7	289	72	65	811
Hoisting machinery.	A. J. Shaw	505,065	Sept. 12	1249	320	64	1519
Hoisting machinery.	A. J. Shaw	505,066	Sept. 12	1252	321	64	1520
Hoisting machinery.	A. J. Shaw	505,067	Sept. 12	1254	321	64	1520
Hoisting machinery.	A. J. Shaw	505,068	Sept. 12	1257	322	64	1521
Hoisting mechanism.	H. A. Spencer	496,799	May 2	653	173	63	735
Hoisting mechanism. Elevated tramway for.	P. Rasch	505,636	Sept. 26	2233	566	64	1730
Hoisting. Method of and machinery for.	E. Reynolds	504,942	Sept. 12	1042	268	64	1481
Hoisting-whim.	C. A. Lawton	496,942	May 9	904	237	63	801
Holdback.	G. C. Edmunds	501,003	July 4	738	193	64	134
Holdback attachment. Vehicle.	F. O. Frasher	499,980	June 20	2050	497	63	1776
Holdback-hook.	W. G. Mauk	509,747	Nov. 28	2951	715	65	1357
Holdback. Vehicle.	S. L. Bligh	511,498	Dec. 26	2860	691	65	1980
Holdback. Vehicle.	C. W. Collyer	510,327	Dec. 5	801	193	65	1562

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Holdback. Vehicle.....	E. F. Eaton.....	497,093	May 9	1132	290	63	840
Holdback. Vehicle.....	J. F. Haines.....	502,718	Aug. 8	821	198	64	731
Holdback. Vehicle.....	C. A. Packard.....	503,158	Aug. 15	1546	379	64	878
Holdback. Vehicle.....	C. A. G. Swasey.....	499,447	June 13	1190	283	63	1613
Hole-straightener.....	P. H. Mack.....	496,316	Apr. 25	2852	711	63	577
Hollow articles. Apparatus for forming or shaping.....	F. Moorfield.....	506,247	Oct. 10	783	193 194 578	65	160
Hollow articles. Method of and apparatus for manu- facturing.....	R. R. Singer.....	507,175	Oct. 24	2349	579 580 541 542	65	479
Hollow articles. Method of and apparatus for the manufacture of.....	R. R. Singer.....	501,900	July 18	2182	542	64	425
Hollow-ware articles. Manufacturing.....	J. E. West and C. O. Whipple.....	507,700	Oct. 31	3259	797	65	663
Hominy-mill.....	R. G. Jenckes.....	504,784	Sept. 12	786	199	64	1430
Hominy-mill.....	O. H. Titus.....	489,723	Jan. 10	1133	293	62	250
Honeycomb. Device for casting bilateral artificial.....	P. Warnstorff.....	495,572	Apr. 18	1890	426	63	350
Honey-extractor. Centrifugal.....	J. R. Hawkins.....	501,717	July 18	1888	409	64	374
Honey-extractor. Centrifugal.....	O. M. Hill.....	494,421	Mar. 28	2690	675	62	1921
Honey-shipment case.....	T. McManus.....	495,597	Apr. 13	1730	436	63	356
Hoof-cleaner.....	J. W. Faestl.....	490,474	Jan. 24	2380	616	62	525
Hoof-cleaning tool.....	R. C. Jenner.....	502,042	July 25	2407	606	64	482
Hoof-expander.....	E. B. Chadwick.....	497,629	May 16	2009	501	63	1011
Hoof-pad.....	J. W. Fanning.....	489,896	Jan. 10	1387	360	62	302
Hoof-pad.....	F. A. Ryan.....	506,941	Oct. 17	1939	450	65	392
Hoof-spreader.....	J. W. Link and A. E. Wilcox.....	492,985	Mar. 7	337	85	62	1426
Hoof-trimmer.....	H. C. McCleave.....	494,013	Mar. 21	2022	515	62	1783
Hoof-trimmer or parer.....	J. Matteson.....	504,400	Sept. 5	140	37	64	1296
Hoof-weight.....	W. Hamilton.....	509,804	Nov. 28	3050	737	65	1377
Hook:							
See Cant-hook. Hammock-hook.							
Car-hook. Hat and coat hook.							
Case-hook. Holdback-hook.							
Check-hook. Lace-fastening hook.							
Clevis-hook. Lacing-hook.							
Coat-hook. Ladder-hook.							
Coat and hat hook. Mail-bag catch-hook.							
Cot or hammock Plumber's hook.							
hook. Snap-hook.							
Draft-hook. Straw or hay hook.							
Drapery-hook. Suspension-hook.							
Eyeglass-hook. Trolling-hook.							
Fish-hook. Tug-hook.							
Gaff-hook. Whiffletree-hook.							
Garment-hook. Wire hook.							
Hame hook.							
Hook.....	C. J. Brosnan.....	501,320	July 11	1248	314	64	241
Hook.....	O. A. De Long and E. Kempshall.....	511,326	Dec. 26	2557	624	65	1925
Hook.....	E. Dederick.....	498,630	May 30	3634	899	63	1331
Hook.....	N. Isachsen.....	499,118	June 6	637	153	63	1502
Hook.....	E. Kempshall.....	504,039	Aug. 29	2961	740	64	1172
Hook.....	H. S. Piggins.....	502,529	Aug. 1	475	114	64	654
Hook.....	F. Taylor.....	501,197	July 11	1062	268	64	208
Hook.....	F. Taylor.....	501,198	July 11	1062	269	64	209
Hook.....	W. Taylor.....	492,890	June 6	252	59	63	1437
Hook and eye.....	C. E. Barnes.....	491,399	Feb. 7	562	142	62	855
Hook and eye.....	Z. E. Bates and M. E. Collins.....	489,520	Jan. 10	849	221	62	193
Hook and eye.....	Z. E. Bates and M. E. Collins.....	509,347	Nov. 21	2258	546	65	1214
Hook and eye.....	J. D. R. Lamson.....	509,815	Nov. 28	3066	740	65	1379
Hook and eye.....	H. Prym.....	500,210	June 27	2455	599	63	1859
Hook and eye.....	O. E. Schmieder.....	489,095	Jan. 3	172	47	62	41
Hook and eye.....	W. S. Seymour.....	502,238	July 25	2732	689	64	544
Hook and eye.....	W. S. Seymour.....	506,735	Oct. 17	1600	403	65	329
Hook and eye.....	W. S. Seymour.....	506,736	Oct. 17	1601	403	65	330
Hook and eye.....	W. S. Seymour.....	506,737	Oct. 17	1602	403	65	330
Hook and eye.....	W. S. Seymour.....	506,738	Oct. 17	1603	404	65	330
Hook and eye.....	W. A. Towler.....	501,633	July 18	1753	436	64	351
Hook and eye.....	H. S. Wedmore.....	489,053	Jan. 3	112	30	62	28
Hooks and eyes. Eye for.....	J. M. Stewart.....	492,442	Feb. 28	2193	548	62	1232
Hooks and eyes. Machine for carding.....	J. W. Granger.....	491,281	Feb. 7	349	88	62	815
Hooks and eyes. Machine for manufacturing.....	J. W. Granger.....	491,282	Feb. 7	353	89	62	816
Hooks. Making wardrobe.....	C. Glover.....	497,783	May 23	2258	567	63	1073
Hooks. Method of and machine for making garment.....	R. C. Manville.....	491,289	Feb. 7	367	92 93 94 95 96 97	62	818
Hoop:							
See Barrel-hoop. Metal hoop.							
Mast-hoop. Toy hoop.							
Hoop and handle fastener.....	J. Bryan.....	506,190	Oct. 3	642	163	65	124
Hoop-bending machine.....	A. Syme.....	505,614	Sept. 26	2190	554	64	1722
Hoop-cutting machine.....	A. H. Adams.....	508,264	Nov. 7	474	114	65	845
Hoop-cutting machine.....	J. Naylor, Jr.....	507,503	Oct. 24	2902	713 714	65	583
Hoop-coupling.....	H. W. Ford.....	504,677	Sept. 5	595	151	64	1382
Hoop-dressing machine.....	D. Murray and A. Robbins.....	507,920	Oct. 31	3612	892 893 616 617	65	729
Hoop-driving machine.....	W. J. Hook.....	490,476	Jan. 24	2382	617	62	526
Hoop fastening. Barrel or other.....	E. W. Beazell.....	500,844	July 4	495	123	64	90
Hoop for boxes, &c.....	W. W. Miner.....	510,436	Dec. 12	982	234	65	1610
Hoop-making machine.....	J. Pleukharp and W. K. Liggett.....	501,730	July 18	1904	473 474	64	377

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Hoop-making machine.....	J. Pleukharp and W. K. Liggett.....	502,407	Aug. 1	262	62, 63	64	614
Hoop sawing and shaping machine.....	E. O. Hall.....	508,309	Nov. 7	539	132	65	857
Hoops. Manufacture of.....	E. J. Cochran.....	492,348	Feb. 21	2045	509	62	1190
Hop-carriage.....	I. W. Cahill and L. A. Dickinson.....	507,881	Oct. 31	3552	874	65	718
Hop-extract. Making.....	O. Schweissinger.....	496,752	May 2	576	63	722	
Hop-picking machine.....	B. A. Beardsley.....	503,190	Aug. 15	1596	{ 392 393 }	64	858
Horizon. Gyroscope artificial.....	J. N. Rowe.....	505,575	Sept. 26	2128	539	64	1711
Horse-blanket.....	H. B. Cleveland and W. E. Tuller.....	502,508	Aug. 1	438	105	64	647
Horse-blanket strap.....	A. P. Russell.....	500,619	July 4	133	36	64	26
Horse-boot.....	F. C. Pooler.....	498,302	May 30	3097	772	63	1235
Horse breaker or hobble.....	G. W. Kitterman.....	497,326	May 16	1531	386	63	926
Horse-canopy.....	W. H. Smawley, M. Sassaman, and M. W. Bowser.....	498,583	May 30	3549	880	63	1316
Horse-checking device.....	L. S. Franklin.....	502,092	July 25	2490	626	64	498
Horse-checking device.....	J. H. Gibson.....	493,888	Mar. 21	1793	457	62	1739
Horse-checking device.....	C. Roys.....	511,460	Dec. 26	2801	678	65	1970
Horse chin-rest.....	G. T. Duncan.....	496,248	Apr. 25	2738	685	63	555
Horse-detacher.....	D. R. Brown.....	500,186	June 27	2415	588	63	1852
Horse-detacher.....	E. C. Burnett.....	501,490	July 18	1522	382	64	308
Horse-detacher.....	J. H. Garner.....	491,734	Feb. 14	1090	276	62	082
Horse-detacher.....	H. Leemann.....	497,190	May 9	1274	323	63	866
Horse-detacher.....	W. Mather.....	490,610	Jan. 24	2591	668	62	567
Horse-detacher.....	I. A. McCaslin.....	491,807	Feb. 14	1210	302	62	1006
Horse-detacher.....	A. M. Mentzer.....	505,056	Sept. 12	1230	316	64	1515
Horse-detacher.....	J. E. Norwood.....	498,685	May 30	3735	{ 922 923 }	63	1348
Horse-detacher.....	J. E. Norwood.....	510,284	Dec. 5	742	180	65	1550
Horse-detacher.....	G. Riley.....	491,815	Feb. 14	1218	305	62	1007
Horse-detacher.....	J. Smail.....	507,461	Oct. 24	2829	692	65	570
Horse-detacher.....	D. K. Stone.....	498,322	May 30	3130	780	63	1241
Horse-detacher.....	F. Zipperling.....	509,112	Nov. 21	1860	{ 455 456 }	65	1139
Horse-detaching device.....	C. E. Harris.....	495,330	Apr. 11	1301	327	63	259
Horse-detaching device.....	C. L. Kirksey and F. P. Bowden.....	498,395	May 30	3243	807	63	1262
Horse-detaching device.....	C. M. Welch.....	509,010	Nov. 21	1685	415	65	1105
Horse-hitching device.....	C. Kasper.....	498,351	May 30	3182	792	63	1249
Horse-hoof guard.....	W. Brown.....	492,621	Feb. 28	2197	619	62	1295
Horse or carriage block.....	N. F. Carpenter.....	489,669	Jan. 10	1046	272	62	233
Horse-power.....	A. Aker.....	503,640	Aug. 22	2339	{ 583 584 }	64	1035
Horse-power.....	H. Bitner.....	495,009	Apr. 11	753	{ 191 192 }	63	159
Horse-power.....	M. W. Bowser, W. H. Smawley, and P. Mullin.....	494,545	Apr. 4	13	3	63	5
Horse-power.....	E. H. Condit.....	492,528	Feb. 14	767	195	62	916
Horse-power.....	J. Dages.....	491,267	Feb. 7	325	83	62	811
Horse-power.....	W. M. Lewis.....	493,827	Mar. 21	1707	434	62	1722
Horse-power.....	J. R. Terrell and W. E. Frasier.....	493,370	Mar. 14	950	244	62	1561
Horse-power motor.....	W. E. Mitchell.....	506,924	Oct. 17	1918	{ 474 475 }	65	388
Horse-rake.....	I. J. Borsum.....	511,037	Dec. 19	2071	513	65	1821
Horse-sandal.....	H. G. Haedrich, Jr.....	501,567	July 18	1642	411	64	360
Horse-shield.....	C. B. Tenney.....	511,558	Dec. 26	2948	718	65	1997
Horse-shield.....	C. B. Tuttle.....	500,085	June 20	2209	539	63	1804
Horse-tail holder.....	J. F. Lavine.....	509,816	Nov. 28	3067	740	65	1350
Horse-weight.....	M. S. O'Neil.....	494,159	Mar. 28	2270	576	62	1842
Horses. Apparatus for breaking.....	J. H. Johnston.....	508,172	Nov. 7	315	78	65	616
Horses. Apparatus for treating sprung legs in.....	A. Coté.....	495,181	Apr. 11	1065	265	63	215
Horses. Apparatus for treating sprung legs in.....	A. Coté.....	502,449	Aug. 8	1029	253	64	771
Horses. Device for stopping runaway.....	L. Chauvin, Sr.....	494,844	Apr. 4	513	129	63	99
Horses. Fore-leg spreader for.....	G. Glascock.....	510,337	Dec. 5	815	197	65	1565
Horses from cribbing. Device for preventing.....	P. L. Stombaugh.....	510,722	Dec. 12	1493	369	65	1704
Horses. Machine for driving.....	S. Williams.....	500,311	June 27	2616	639	63	1887
Horses. Nostril-protector for.....	A. W. Joerges and J. A. O'Connell.....	501,463	July 11	1480	372	64	285
Horses to vehicles. Device for attaching.....	M. T. Hancock.....	510,537	Dec. 12	1181	284	65	1646
Horses. Trip for releasing.....	C. C. Drake.....	502,487	Aug. 1	407	96	64	640
Horseshoe.....	J. R. Anderson.....	511,489	Dec. 26	2846	688	65	1978
Horseshoe.....	E. Bouchard.....	490,063	Jan. 17	1702	444	62	379
Horseshoe.....	J. B. Burr.....	507,525	Oct. 31	2953	724	65	606
Horseshoe.....	J. Curtin.....	494,250	Mar. 28	2415	609	62	1869
Horseshoe.....	L. Dietrich.....	501,562	July 18	1637	409	64	330
Horseshoe.....	J. Eckart.....	511,010	Dec. 19	2039	{ 503 504 }	65	1815
Horseshoe.....	W. C. Edge.....	508,607	Nov. 14	1032	254	65	966
Horseshoe.....	R. de Eicken.....	502,354	Aug. 1	177	41	64	598
Horseshoe.....	A. Fechner.....	499,976	June 20	2042	495	63	1775
Horseshoe.....	D. Gingold.....	500,881	July 4	552	143	64	100
Horseshoe.....	C. C. Jerome.....	507,272	Oct. 24	2520	621	65	509
Horseshoe.....	S. B. Jerome.....	506,820	Oct. 17	1743	439	65	356
Horseshoe.....	J. W. Johnson.....	511,020	Dec. 19	2050	507	65	1817
Horseshoe.....	G. C. Kline.....	507,276	Oct. 24	2526	623	65	510
Horseshoe.....	M. A. Liebert.....	508,142	Nov. 7	273	68	65	808
Horseshoe.....	J. McHarrie.....	500,150	June 27	2354	569	63	1841
Horseshoe.....	T. W. Murphy.....	508,114	Nov. 7	224	58	65	800
Horseshoe.....	A. E. Ogden.....	511,093	Dec. 19	2164	534	65	1840
Horseshoe.....	C. D. Shepherd.....	507,637	Oct. 31	3162	775	65	645
Horseshoe.....	A. B. Tracy.....	496,760	May 2	584	156	63	724
Horseshoe and pad.....	M. Hallanan.....	503,849	Aug. 22	2649	663	64	1097
Horseshoe and quarter-boot.....	J. D. Munsey.....	503,869	Aug. 22	2673	670	64	1101
Horseshoe-blank-bending machine.....	J. D. Billings.....	498,838	June 6	154	37, 38	63	1419
Horseshoe-blank-forming machine.....	J. D. Billings.....	498,839	June 6	157	38	63	1420
Horseshoe-blank-rolling machine.....	H. R. Williams.....	489,061	Jan. 3	121	33	62	30
Horseshoe-calk.....	P. H. Guyton.....	505,898	Oct. 3	155	40	65	31

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Horseshoe-calk	S. Robinson	504,943	Sept. 12	1045	268	64	1481
Horseshoe-calk sharpener	S. R. Brooks	504,553	Sept. 5	405	103	64	1345
Horseshoe-calk sharpener	F. F. Gokey	508,903	Nov. 14	1505	368	65	1052
Horseshoe. Calked	O. McQuillen	502,985	Aug. 8	1271	311	64	813
Horseshoe. Compound	M. L. Chamberlain	510,403	Dec. 12	929	223 224	65	1601
Horseshoe. Elastic	M. Hallanan	503,848	Aug. 22	2648	663	64	1096
Horseshoe. Elastic-tread	G. W. Savage	501,167	July 11	1020	258	64	200
Horseshoe-fastening	I. W. Allyn	503,397	Aug. 15	1932	480	64	948
Horseshoe-fastening	E. T. Covell	490,270	Jan. 24	2057	538	62	461
Horseshoe-fastening. Nailless	D. L. Mayow	492,691	Feb. 28	2599	643	62	1315
Horseshoe-heels. Swage-block for	C. H. Lutgen	497,329	May 16	1535	387	63	927
Horseshoe-machine	J. Roberts	494,166	Mar. 28	2282	578 579	62	1844
Horseshoe-making machine	J. Roberts	501,298	July 11	1212	306 307	64	235
Horseshoe-nail	W. W. Miner	490,613	Jan. 24	2596	669	62	568
Horseshoe-nail machine	W. H. Dayton	497,493	May 16	1802	453 454	63	974
Horseshoe-nail machine	C. H. Yarrington	495,606	Apr. 18	1741	439	63	358
Horseshoe-nail machines. Feeding mechanism for	W. W. Miner	490,397	Jan. 24	2259	587	62	502
Horseshoe-nails. Die for the manufacture of	W. W. Miner	490,395	Jan. 24	2257	586	62	502
Horseshoe-nails. Making	W. W. Miner	490,392	Jan. 24	2252	586	62	502
Horseshoe-nails. Making	W. W. Miner	490,393	Jan. 24	2254	586	62	502
Horseshoe-nails. Making	W. W. Miner	490,396	Jan. 24	2258	587	62	502
Horseshoe-nails. Manufacturing	W. W. Miner	490,394	Jan. 24	2255	586	62	502
Horseshoe-nails. Manufacturing	W. W. Miner	491,368	Feb. 7	514	132	62	846
Horseshoe. Nailless	C. W. Crannell	492,460	Feb. 28	2327	557	62	1240
Horseshoe. Nailless	C. W. Crannell	492,481	Feb. 28	2258	564	62	1245
Horseshoe. Nailless	R. D'Anvers	507,420	Oct. 24	2768	678	65	558
Horseshoe. Nailless	C. B. Dickens	496,351	Apr. 25	2913	728	63	589
Horseshoe. Nailless	J. Greimann	506,688	Oct. 17	1512	3-0	65	313
Horseshoe. Nailless	S. Pruden	500,946	July 4	634	167	64	116
Horseshoe-removing tool	P. Amelotte	503,935	Aug. 29	2779	697	64	1139
Horseshoe. Rope-tread	T. Doyle	492,665	Feb. 28	2367	635	62	1308
Horseshoe. Rubber-tread	M. L. Chamberlain	510,402	Dec. 12	928	223	65	1601
Horseshoe-sharpener	J. W. Rapp	490,499	Jan. 24	2425	626	62	535
Horseshoe toe-calks. Machine for making	T. B. Huestis	508,544	Nov. 14	931	229	65	946
Horseshoe. Two-part	W. G. Clahasey	502,848	Aug. 8	1028	252	64	770
Horseshoe with auxiliary flanges	J. Gutmann	491,643	Feb. 14	956	240	62	956
Horseshoes. Die for making	J. Benfield	490,734	Jan. 31	2812	721 722	62	625
Horseshoes. Machine for punching and forming calks on	W. N. Brickey	494,623	Apr. 4	156	37	63	32
Horseshoeing-stock	E. B. Bradford	505,565	Sept. 26	2108	535	64	1707
Hose	J. E. Hopkinson	489,478	Jan. 10	770	203	62	177
Hose-band	I. S. Goldman	499,985	June 20	2056	498	63	1777
Hose-bridge	F. Kruckeberg	504,530	Sept. 5	366	92	64	1338
Hose-carriage	L. M. Johnson	497,882	May 23	2418	603	63	1101
Hose-carriage	W. T. Y. Schenck	504,624	Sept. 5	501	129	64	1364
Hose-clamp	J. Nase	492,165	Feb. 21	1763	440	62	1132
Hose-clamp	H. B. Sherman	499,760	June 20	1703	408	63	1715
Hose-clamp	F. T. Weidaw	492,855	Mar. 7	125	32	62	1382
Hose-coupling	S. M. Beery	494,316	Mar. 28	2516	634	62	1889
Hose-coupling	P. H. Dencer	499,100	June 6	605	145	63	1496
Hose-coupling	R. K. Evans	494,918	Apr. 4	620	158	63	120
Hose-coupling	J. T. Hayden	503,370	Aug. 15	1898	470	64	941
Hose-coupling	A. W. Jackson	495,890	Apr. 18	2197	553	63	439
Hose-coupling	W. Kreider	496,363	Apr. 25	2939	734	63	594
Hose-coupling	G. Terlinden	508,448	Nov. 14	762	188	65	914
Hose-coupling. Air-brake	S. M. Beery	509,114	Nov. 21	1863	457	65	1139
Hose-coupling and steam-trap. Combined	J. Q. C. Searle and E. W. Jenks	505,727	Sept. 26	2388	604	64	1757
Hose-coupling. Electric	H. Sargent	499,254	June 13	838	200	63	1550
Hose-coupling. Electric	J. B. Strauss	500,822	July 4	459	121	64	85
Hose. Electric signaling device for	G. L. Barnard	511,188	Dec. 19	2327	570	65	1870
Hose-couplings. Manufacture of	E. L. Townsend	493,316	Mar. 14	867	221	62	1543
Hose-fastener	R. Franken	498,780	June 6	46	10	63	1396
Hose-hanger	G. A. Tower	508,786	Nov. 14	1287	321	65	1016
Hose-holder	L. F. Pearson	491,443	Feb. 7	627	157	62	868
Hose-mender	O. H. Still	509,458	Nov. 28	2498	603	65	1271
Hose-nozzle	W. Leggett	490,445	Jan. 24	2325	604	62	514
Hose-nozzle	E. J. Norton	505,952	Oct. 3	230	60	65	45
Hose-nozzle	J. J. Parker and W. M. Moffit	494,646	Apr. 4	185	46, 47	63	38
Hose-nozzle	P. Wiberg	501,125	July 11	953	243	64	188
Hose-nozzle support	G. R. Unkefer	509,187	Nov. 21	1981	482	65	1163
Hose or pipe coupling	W. C. Gebhardt	503,282	Aug. 15	1741	430	64	913
Hose-patch	J. D. Otis and J. M. Harper	492,047	Feb. 21	1576	392	62	1093
Hose-pipe coupling	C. A. G. Storz	489,106	Jan. 3	195	52	62	45
Hose-pipe coupling	C. A. G. Storz	489,107	Jan. 3	196	52	62	46
Hose-pliers	P. W. Allen	507,872	Oct. 31	3540	870	65	716
Hose-reel	E. M. Birdsall	495,720	Apr. 18	1933	486 487	63	390
Hose-reel	W. A. Kirby	492,024	Feb. 21	1545	385	62	1087
Hose-reel	J. Lucia	507,019	Oct. 17	2060	508	65	416
Hose-reel guide-support	W. F. Bowers	501,489	July 18	1521	382	64	308
Hose-sleeve	J. G. Hallas	511,138	Dec. 19	2244	551	65	1855
Hose-strap fastener	B. W. McKenzie	500,029	June 20	2128	515	63	1790
Hose-supporter	E. L. Hanlon	511,015	Dec. 19	2044	505	65	1816
Hose-washer	J. E. Taber	491,821	Feb. 14	1225	307	62	1009
Hosiery	J. Black, Jr.	490,241	Jan. 17	1998	523	62	438
Hot-air apparatus	R. H. Yeoman	491,627	Feb. 14	933	234	62	951
Hot-air apparatus	R. H. Yeoman	491,628	Feb. 14	934	234	62	951
Hot-air furnace	C. M. Bridges	505,697	Sept. 26	2343	593	64	1750

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Di-g.	Vol.	Page.
Hot-air furnace	P. F. Dickinson	505,510	Sept. 26	1986	509	64	1682
Hot-air furnace	A. J. Erwin	505,096	Sept. 19	1308	337	64	1544
Hot-air furnace	J. Evans	496,193	Apr. 25	2643	665	63	538
Hot-air furnace	C. A. Larson	499,926	June 20	1971	479	63	1763
Hot-air furnace	T. E. Martin	489,192	Jan. 3	323	89	62	73
Hot-air furnace	W. J. Owens	499,573	June 13	1394	333	63	1648
Hot-air furnace	J. H. Putnam	505,177	Sept. 19	1432	369	64	1566
Hot-air furnace	W. H. Rogers	497,345	May 16	1563	393	63	931
Hot-air furnace	C. C. Soffeiss	500,821	July 4	457	120 121	64	84
Hot-air furnace	E. R. Stasch	489,994	Jan. 17	1580	413	62	355
Hot-air furnace	F. G. Ward	498,701	May 30	3763	928	63	1352
Hot-air pipe	A. Miller	490,579	Jan. 24	2534	652	62	556
Hot-air pipe	J. P. Schaffer	499,854	June 20	1862	452	63	1712
Hot-air register	F. Burmeister	491,524	Feb. 14	762	194	62	915
Hot-air register	W. M. Dyas	504,469	Sept. 5	256	66, 67	64	1318
Hot-air register	L. Ewald	511,296	Dec. 19	2509	611	65	1903
Hot-air register	J. H. Reese	492,233	Feb. 21	1872	467	62	1154
Hot-air registers. Moistening attachment for	J. Ewig	489,299	Jan. 3	479	132	62	104
Hot-box detector	R. C. Kerr and P. Hardman	496,656	May 2	430	115	63	697
Hot-water appliance	D. M. Small	507,519	Oct. 24	2940	721	65	590
Hot-water boiler	M. E. Herbert	489,807	Jan. 10	1261	331	62	276
Hot-water boiler	M. E. Herbert	492,289	Feb. 21	1947	487	62	1171
Hot-water circulating system	J. C. Norton	500,268	June 27	2539	621	63	1874
Hot-water furnace	T. Brooks	498,531	May 30	3470	859 860	63	1302
Hot-water heater	F. K. Caswell	494,323	Mar. 28	2528	637	62	1892
Hot-water heater	H. B. Clarke	492,538	Feb. 28	2363	586	62	1268
Hot-water heater	J. H. McCormack	509,669	Nov. 28	2833	684 685	65	1335
Hot-water heater	H. T. Nye	492,695	Feb. 28	2605	644 645	62	1316
Hot-water heater	J. Thorp	504,852	Sept. 12	899	231 232	64	1454
Hot-water heater	W. Vanderman	501,974	July 25	2297	574	64	462
Hot-water heater for cars, &c	G. T. Brewer	489,141	Jan. 3	240	66	62	55
Hot-water heater. Mantel	T. Holland	491,108	Feb. 7	72	20	62	762
Hot-water or steam heater	G. H. Hersey	494,676	Apr. 4	232	58, 59	63	47
Hot-water tanks. Device for preventing noise in	F. B. Phillips	505,722	Sept. 26	2380	601	64	1756
Hotel-alarm. Electric	J. McMurrow, Jr.	492,694	Feb. 28	2603	644	62	1316
House: See Chicken-house. Portable house. Feeding-house. Sanitary house.							
House.	J. I. Comly. (Reissue)	11,304	Feb. 7	732	185 186	62	889
House or tent. Portable	A. C. Lauber	490,205	Jan. 17	1937	508	62	426
House safety attachment	C. Zimmermann	490,780	Jan. 31	2894	742	62	640
Household implement	O. Avery	491,919	Feb. 14	1378	344	62	1040
Hub.	A. Peel	501,158	July 11	1008	256	64	197
Hub-attaching device	C. F. Carlson	490,136	Jan. 17	1826	477	62	406
Hub-attaching device	H. C. Lord	496,265	Apr. 25	2762	691	63	559
Hub-attaching device for vehicle-axles	H. Wecker	509,009	Nov. 21	1684	415	65	1105
Hub-attaching device. Vehicle	L. Harris	493,771	Mar. 21	1614	411	62	1705
Hub attachment. Wheel	J. T. Bressler	493,474	Mar. 14	1107	285	62	1590
Hub-boring machine	J. Zimmermann	499,772	June 20	1718	412 413 414	63	1718
Hub box. Wheel	S. S. Arnold	510,229	Dec. 5	659	156	65	1535
Hub. Cycle.	A. Perkins	494,076	Mar. 21	2122	541	62	1200
Hub-protector	E. F. Ryder	492,436	Feb. 28	2182	546	62	1230
Hub sand-band	M. Keech	497,183	May 9	1267	321	63	864
Hub. Vehicle	O. B. Bannister	495,290	Apr. 11	1245	311	63	248
Hub. Vehicle	J. T. Hart	491,925	Feb. 14	1390	347	62	1042
Hub. Vehicle	H. E. Moebus	502,406	Aug. 1	261	61, 62	64	613
Hub. Vehicle	R. G. Petway	495,367	Apr. 11	1356	339	63	269
Hub. Vehicle	P. F. Rachal	495,707	Apr. 18	1910	481	63	385
Hub. Vehicle	M. B. Southerland	496,704	May 2	495	132	63	709
Hub. Vehicle	A. P. Taylor	490,089	Jan. 17	1744	454	62	388
Hub. Vehicle-wheel	L. C. Labady	493,097	Mar. 7	503	126	62	1459
Hub. Vehicle-wheel	J. Ragoucy	510,519	Dec. 12	1117	270	65	1636
Hub. Vehicle-wheel	Z. T. Wilson	505,740	Sept. 26	2407	609	64	1761
Hub. Wheel	J. S. Copeland	491,937	Feb. 14	1410	352	62	1046
Hub. Wheel	J. G. Roseboom	503,114	Aug. 8	1463	359	64	849
Hubs. Dust and mud cap for vehicle	J. Maris	489,257	Jan. 3	429	119	62	95
Huller: See Almond or walnut huller.							
Huller and scourer. Combined	A. F. Hinz	495,803	Apr. 18	2058	521	63	413
Hulling coffee, rice, &c. Machine for and mode of	L. A. Riester	509,606	Nov. 28	2732	660	65	1316
Husking-machine	C. H. Taylor	490,727	Jan. 31	2804	719	62	624
Husking-machine for rice, &c	J. Winter	509,011	Nov. 21	1686	415 416	65	1105
Husking-pin	S. M. Halvardsgaard	490,559	Jan. 24	2511	646	62	551
Hydrant	W. H. Bootman	504,662	Sept. 5	555	142	64	1375
Hydrant	R. A. Brooks	494,318	Mar. 28	2519	635	62	1889
Hydrant	D. A. Decrow	505,596	Sept. 26	2164	547	64	1717
Hydrant	J. Knickerbacker	504,594	Sept. 5	462	117	64	1356
Hydrant	F. H. Richards	490,601	Jan. 24	2573	663	62	564
Hydrant	A. Scheid	490,311	Jan. 24	2129	554	62	476
Hydrant	A. Scheid	495,711	Apr. 18	1917	482	63	387
Hydrant and faucet	W. B. Cornog	502,349	Aug. 1	167	39	64	597
Hydrant-caps. Retaining device for	S. F. Rosse	489,329	Jan. 3	527	143	62	114
Hydrant. Water-main	P. Elev	507,651	Oct. 31	3189	781	65	650
Hydrants. Valve-rod guide for	F. H. Richards	495,431	Apr. 11	1460	368	63	288
Hydraulic accumulator	W. Krutzsch	503,091	Aug. 2	1419	350	64	841

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hydraulic elevator.	C. H. M. Atkins	508,159	Nov. 7	297	74	65	813
Hydraulic elevator.	T. W. Eaton	508,470	Nov. 14	799	197	65	921
Hydraulic elevator.	S. A. Worcester	499,276	June 13	871	211 212	63	1556
Hydraulic elevator. Electrically-operated.	E. Marshall	502,981	Aug. 8	1263	309	64	812
Hydraulic engine. Double-acting	F. Bernardi	507,405	Oct. 24	2743	673	65	554
Hydraulic jack.	A. E. Seaton	511,096	Dec. 19	2173	535	65	1842
Hydraulic motor.	H. Aiken	502,244	Aug. 8	1021	249 250	64	769
Hydraulic motor.	F. B. Cole	504,331	Sept. 5	31	9	64	1277
Hydraulic motor.	N. E. Harris	506,876	Oct. 17	1825	457	65	370
Hydraulic motor.	E. W. Kirk and J. F. Hazel	510,270	Dec. 5	719	174	65	1546
Hydraulic motor.	O. F. Teed	503,015	Aug. 8	1308	320	64	820
Hydraulic press.	F. Blomberg	506,464	Oct. 10	1164	288 289	65	235
Hydraulic press, &c.	A. Kampf	501,426	July 11	1429	358	64	274
Hydrocarbon-burner.	J. O. Beazley	504,297	Aug. 29	3380	845	64	1251
Hydrocarbon-burner.	W. M. Carner and J. G. Rozelle	497,565	May 16	1914	482	63	994
Hydrocarbon-burner.	W. H. Clarke.	499,968	June 20	2029	492	63	1773
Hydrocarbon-burner.	J. Darby	499,720	June 20	1619	391	63	1701
Hydrocarbon-burner.	V. C. Dillmann	508,923	Nov. 21	1552	380	65	1079
Hydrocarbon-burner.	B. N. Hawes	492,466	Feb. 28	2234	559	62	1241
Hydrocarbon-burner.	J. A. Lannert and W. R. Jeavons	499,300	June 13	917	222	63	1564
Hydrocarbon-burner.	W. L. Miller	493,555	Mar. 14	1255	322	62	1618
Hydrocarbon-burner.	W. A. Minter	498,671	May 30	3706	916	63	1343
Hydrocarbon-burner.	E. G. Mummary	503,548	Aug. 15	2169	542	64	990
Hydrocarbon-burner.	H. W. Parker	508,045	Nov. 7	96	27, 28	65	776
Hydrocarbon-burner.	F. M. Reed	496,282	Apr. 25	2787	697	63	565
Hydrocarbon-burner.	A. Schafer	505,374	Sept. 19	1745	452 453	64	1624
Hydrocarbon-burner.	G. A. Sheley	496,911	May 9	860	227	63	793
Hydrocarbon-burner and means for supplying fuel thereto.	J. D. Blakeley and L. Bowser	495,295	Apr. 11	1251	312	63	250
Hydrocarbon-burner for stoves, furnaces, &c.	W. S. Chilton	504,667	Sept. 5	569	144	64	1377
Hydrocarbon-burner tank.	J. H. Mathews	496,661	May 2	433	116	63	697
Hydrocarbon-burners. Cleaning device for.	C. W. Claybourne	508,369	Nov. 7	634	156	65	875
Hydrocarbon-engine.	A. Gray	504,723	Sept. 12	669	170 171	64	1409
Hydrocarbon-furnace.	R. Ferguson	502,710	Aug. 8	809	996	64	729
Hydrocarbon generator and burner. Combined.	F. M. Reed	498,730	May 30	3831	944 945	63	1364
Hydrocarbon incinerating-furnace.	N. Dowling	501,458	July 11	1475	371	64	284
Hydrocarbon-motor.	W. Seek	509,830	Nov. 28	3089	746	65	1384
Hydrocarbon or gas furnace.	S. H. Brown	497,750	May 16	2193	549	63	1046
Hydrocarbon-vapor burner.	C. Fabricius	501,496	July 18	1530	384	64	309
Hydrocarbon-vapor burner.	H. Ruppel	497,459	May 16	1738	438 439	63	963
Hydrocarbons from bituminous rocks. Method of and means for extracting.	G. Archbold	503,028	Aug. 8	1327	326	64	825
Hydrocarbons mixed with air and superheated steam. Apparatus for burning.	J. Burns	490,470	Jan. 24	2372	614	62	524
Hydropneumatic motor.	W. Cooper	504,670	Sept. 5	577	145 146 147 148 149	64	1379
Hygienic device.	J. F. Corker	496,816	May 2	682	180	63	740
Hygienic purposes. Application of electricity to pianos or other keyed instruments for.	W. Willeringhaus	507,298	Oct. 24	2558	630 631	65	516
Hygienic vapor and hot-air renovator.	H. I. Blits	510,235	Dec. 5	666	152	65	1536
Ice and apparatus therefor. Manufacture of.	F. B. Hill	507,005	Oct. 17	2034	503	65	411
Ice-boat. Oar-propelled.	G. H. Thacher	500,826	July 4	466	123	64	86
Ice breaking and clearing apparatus.	J. A. Krusbrink and J. J. van Leeuwen.	499,296	June 13	911	221	63	1563
Ice-breaking apparatus.	E. J. Weedermann	508,260	Nov. 7	468	113	65	844
Ice-can filler. Automatic self-arrester.	F. Bauer	501,398	July 11	1392	349	64	267
Ice-cistern covers. Fastening for.	A. M. Tippner	511,475	Dec. 26	2224	683	65	1974
Ice-cream, &c. Apparatus for cutting.	W. Prigge	502,863	Aug. 8	1052	258 259	64	775
Ice-cream can.	G. A. Thurston	489,998	Jan. 17	1585	414	62	356
Ice-cream cooler and freezer.	F. W. Merrill	501,894	July 18	2173	539	64	423
Ice-cream freezer.	H. W. Atwater	511,319	Dec. 26	2545	621	65	1923
Ice-cream freezer.	T. H. Bease	493,906	Mar. 21	1824	465	62	1744
Ice-cream freezer.	J. W. Bowley	493,966	Mar. 21	1942	495	62	1766
Ice-cream freezer.	E. L. Drake. (Reissue)	11,328	Apr. 25	2982	745	63	603
Ice-cream freezer.	J. Foster	498,163	May 23	2839	710	63	1175
Ice-cream freezer.	C. E. Frick	488,995	Jan. 3	30	9	62	8
Ice-cream freezer.	J. M. Hart	491,104	Feb. 7	66	18	62	761
Ice-cream freezer.	J. W. MacDonald	489,565	Jan. 10	909	237	62	205
Ice-cream freezer.	L. C. Martin and J. G. Meredith.	497,054	May 9	1063	272	63	828
Ice-cream freezer.	J. K. Patterson	504,363	Sept. 5	73	19	64	1284
Ice-cream freezer.	L. and H. G. Roberts.	511,252	Dec. 19	2425	591	65	1888
Ice-cream freezer.	W. S. Rolston	507,329	Oct. 24	2620	645	65	529
Ice-cream freezer.	A. J. Rudell	510,489	Dec. 12	1070	257	65	1627
Ice-cream freezer.	J. O. Spong	505,731	Sept. 26	2395	605	64	1758
Ice-cream freezer.	E. M. Thompson	491,930	Feb. 14	1397	348	62	1043
Ice-cream freezer and packer.	J. Joralemon	491,650	Feb. 14	963	242 243	62	957
Ice-creeper.	J. Carr	504,708	Sept. 12	652	165	64	1405
Ice-creeper.	J. F. Comfort	492,272	Feb. 21	1928	481	62	1166
Ice-creeper.	J. E. Scott	502,324	Aug. 1	121	28	64	587
Ice-cutter.	H. Bodenstein	505,971	Oct. 3	264	70	65	52
Ice-cutting machine.	D. R. and F. M. Woodsum	509,420	Nov. 28	2406	583	65	1252

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Ice from freezing-cans. Apparatus for removing cakes of	H. Mock	508,145	Nov. 7	276	68, 69	65	809
Ice-holder	R. H. Galbreath	490,902	Jan. 31	3096	794	62	680
Ice-lowering apparatus	C. I. Foster	506,777	Oct. 17	1671	421	65	343
Ice-machine	G. F. Knox	501,045	July 4	804	209	64	146
Ice-machine	J. Kurtz	504,966	Sept. 12	1124	288	64	1496
Ice-machine	J. A. Muller	489,387	Jan. 3	619	167	62	133
Ice-machine. Absorption	B. Thoens and A. Gerdes	494,906	Apr. 4	604	153	63	117
Ice-machine freezing-can	E. Butler	511,120	Dec. 19	2216	543	65	1850
Ice-making apparatus	E. C. Fuchs	497,650	May 16	2039	508	63	1017
Ice-making apparatus	L. Pusey	491,225	Feb. 7	267	67	62	799
Ice-making machines. Congealer for	J. F. Behn and G. A. Wegner	505,588	Sept. 26	2153	544 545	64	1715
Ice-making machinery	D. L. Holden	490,475	Jan. 24	2381	616	62	525
Ice-making plants. Signaling and registering device for	A. J. McArthur	508,737	Nov. 14	1218	303 304	65	1003
Ice manufacture. Brine-tank for artificial	L. Block	501,316	July 11	1239	312	64	240
Ice. Means for cutting	L. Daft	508,819	Nov. 14	1340	332	65	1025
Ice-plow tooth-fastening	J. G. Bodenstein	491,332	Feb. 7	450	116	62	834
Ice-runway	J. Patterson, Jr.	501,659	July 18	1793	447	64	358
Ice-scraper	A. S. Washburn	497,463	May 16	1746	440	63	964
Ice shredder or shaver	T. Mabbett	500,923	July 4	608	158	64	111
Ice-splitter	C. R. Day	499,286	June 13	892	216	63	1559
Ice-tongs	S. A. Harness	496,649	May 2	412	111	63	694
Ice-tongs	T. B. Henkle	496,158	Apr. 25	2596	653	63	529
Ice-tongs and weighing-scales. Combined	T. Glynn	503,042	Aug. 8	1348	333	64	829
Ice-tongs. Making	J. S. Field	491,540	Feb. 14	783	200	62	919
Igniting material	C. H. Wolf	497,699	May 16	2122	530	63	1032
Illuminating or heating. Manufacture of inflammable aeriform substances for	F. D. Moses	507,663	Oct. 31	3207	785	65	653
Illusion apparatus	A. Lake	508,227	Nov. 7	405	98	65	834
Illusion apparatus	A. Lake	510,803	Dec. 12	1630	405	65	1730
Images. Construction of	S. M. Schwab, Jr.	502,589	Aug. 1	568	136	64	670
Implement. Combination pocket	A. A. Low	491,780	Feb. 14	1167	292	62	997
Incandescent-light bracket	C. M. Berry	510,317	Dec. 5	791	191	65	1560
Incrustation device	J. J. Monahan	490,671	Jan. 31	2721	700	62	607
Incubator	E. W. Andrews	508,857	Nov. 14	1404	349	65	1038
Incubator	E. J. Bray	508,808	Nov. 14	1322	328	65	1022
Incubator	F. Frey	488,994	Jan. 3	27	8	62	8
Incubator	J. B. Halpin	499,989	June 20	2060	499	63	1778
Incubator	A. N. Jewett	509,035	Nov. 21	1719	425	65	1112
Incubator	H. J. Maxwell	511,153	Dec. 19	2268	556	65	1859
Incubator	F. Minter	490,298	Jan. 24	2101	547	62	470
Incubator	G. New and A. Mittelsteadt	509,389	Nov. 28	2341	567	65	1241
Incubator	C. D. Purvis	511,546	Dec. 26	2930	713 714	65	1994
Incubator	C. W. Robinson	499,396	June 13	1095	264	63	1596
Incubator	H. M. Sheer	501,735	July 18	1914	476	64	379
Incubator	J. M. H. Spooner	508,492	Nov. 14	842	208	65	930
Incubator	D. Wheat	492,079	Feb. 21	1630	402	62	1103
Incubator and brooder. Combined	J. W. Atkinson	508,900	Aug. 8	1115	274	64	787
Incubator heat-regulator	F. Minter	505,604	Sept. 26	2174	550	64	1719
Incubator-heater	E. P. Alexander	502,899	Aug. 8	1114	274	61	786
Index	L. L. Dennick	494,466	Mar. 28	2756	691	62	1932
Index	J. E. Heppenstall	495,155	Apr. 11	1036	256	63	208
Index	J. F. Laning	493,552	Mar. 14	1240	317 318	62	1615
Index	J. Thorne	506,566	Oct. 10	1325	331 332	65	266
Index and balance-indicator for account-books. Combined	J. H. Rand	493,841	Mar. 21	1723	439 440	62	1725
Index and file. Book	A. J. Rudolph	499,442	June 13	1181	282	63	1611
Index device. Combination	S. F. Baker	489,599	Jan. 10	960	250	62	214
Index-holder for books	J. W. Hays	501,508	July 18	1552	390	64	313
Index. Ledger	F. A. Ransom	506,074	Oct. 3	427	111	65	83
Index. Mechanical	A. E. Carlson	492,269	Feb. 21	1924	460	62	1165
Index. Parliamentary	J. H. Gore	509,891	Dec. 5	76	19	85	1424
Index. Rotating	R. N. Brooks	499,960	June 20	2016	489	63	1770
Index-tab	O. J. Deckelmann	508,289	Nov. 7	507	123	65	852
Index. Telephone	F. S. Blanchard	498,503	May 30	3423	849	63	1294
Indicating system	S. D. Thurston	509,459	Nov. 28	2499	603 604	65	1271
Indicator:							
See Alarm-indicator.	Low-water indicator.						
Barrel-indicator.	Note-indicator.						
Brake-piston indicator.	Potential-indicator.						
	Pressure-indicator.						
Car-indicator.	Railway-indicator.						
Carriage-indicator.	Range-indicator.						
Cash-indicator.	Route-indicator.						
Door-indicator.	Speed-indicator.						
Electric indicator.	Station-indicator.						
Electrical indicator.	Station potential-indicator.						
Elevator-indicator.							
Engine recording-indicator.	Street or station indicator.						
Fare-indicator.	Synchronism-indicator.						
Filling-indicator.	Temperature-indicator.						
Lamp-filling indicator.	Thermometric indicator.						
	Truing-up-indicator.						
Indicator	E. Tabbert	506,835	Oct. 17	1762	443	65	360
Indicator	A. Utzinger	500,359	June 27	2694	661	63	1901
Indicator	J. H. Wilhelm	489,060	Jan. 3	120	33	62	30

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Indicator-float	F. T. Williams	505,619	Sept. 26	2195	555	64	1723
Indicator-lock	W. F. Beasley	499,500	June 13	1276	302	63	1628
Indicator-lock	W. F. Beasley	499,501	June 13	1279	303	63	1628
Indicator-lock	W. D. Doremus and F. W. Brooks	497,640	May 16	2022	504	63	1014
Indicator-lock	W. F. Littell	506,647	Oct. 10	1440	361 362	65	289
Induction apparatus	M. R. Ruble	509,400	Nov. 28	2376	576	65	1246
Induction-coil. Adjustable	E. M. Senseney	507,458	Oct. 24	2825	691	65	570
Induction-coil. Coin-operated	W. R. Pope	500,776	July 4	390	103	64	73
Induction-coil systems. Safety connection for	E. Thomson	496,918	May 9	869	229	63	794
Indurating and waterproofing articles	S. E. Bradley	506,623	Oct. 10	1404	—	65	282
Influence-machine	H. E. Waite	497,226	May 9	1328	338	63	876
Ingot molds. Bottom plate for steel	B. Talbot	509,701	Nov. 28	2875	695	65	1343
Ingot-molds. Construction of	C. Hodgson	496,736	May 2	551	142	63	718
Inhaler	J. F. Chesebro	496,776	May 2	612	163	63	729
Inhaler	F. A. Dietrich	509,465	Nov. 28	2509	606	65	1273
Inhaler	J. E. Lee	491,778	Feb. 14	1165	291	62	996
Inhaler	R. E. Woodward	490,008	Jan. 17	1599	418	62	359
Inhaler and spirometer. Combined	W. A. Shepard	492,973	Mar. 7	319	81	62	1422
Inhaling apparatus	O. E. O. Hoell	406,368	Oct. 10	990	246	65	200
Injector	F. Brunbauer	495,778	Apr. 18	2023	512	63	407
Injector	F. Brunbauer	509,752	July 4	349	92, 93	64	65
Injector	T. M. Eynon	497,269	May 9	1401	354 355	63	888
Injector	F. Funke	501,271	July 11	1172	297	64	259
Injector	L. O. Harmon and W. E. Rhodes	495,486	Apr. 18	1555	391	63	326
Injector	T. J. Hart	492,921	Mar. 7	241	60, 61	62	1406
Injector	L. E. Hogue	495,336	Apr. 11	1309	329	63	261
Injector	P. P. Hogue	501,422	July 11	1425	357	64	273
Injector	H. Hopkinson	489,812	Jan. 10	1269	333	62	278
Injector	H. Hopkinson	489,813	Jan. 10	1270	333	62	278
Injector	S. L. Kneass	501,464	July 11	1421	372	64	285
Injector	E. Korting	496,977	May 9	949	249	63	808
Injector	I. R. Laux	501,569	July 18	1645	412	64	332
Injector	G. W. Mason	504,068	Aug. 29	2998	749	64	1179
Injector	A. Simpson and M. Speicher	490,590	Jan. 24	2552	657	62	559
Injector	J. W. Stanley	500,677	July 4	236	62	64	45
Injector and exhauster. Combined air	S. R. Earle	504,334	Sept. 5	35	11	64	1278
Injector-burner. Automatic	S. C. North	494,591	Apr. 4	105	25	63	22
Injector for steam-boilers. Cleansing-material	E. Jones and D. W. Collins	506,045	Oct. 3	378	100	65	74
Injector. Locomotive	S. M. Vauclair	499,063	June 6	556	131	63	1488
Injector. Locomotive	E. J. Young	495,286	Apr. 11	1239	309 310	63	247
Injector. Oil	F. H. Cornell	506,418	Oct. 10	1085	269	65	219
Injector overflow attachment	H. Monk	499,640	June 13	1196	359	63	1666
Injector. Steam and air	S. R. Earle	493,257	Mar. 14	760	194	62	1525
Ink-bottle attachment	B. Ramsay	508,340	Nov. 7	582	143	65	866
Ink-well	J. F. Lash	498,174	May 23	2259	714	63	1179
Ink-well	W. E. Lewis	509,917	Dec. 5	120	27	65	1432
Ink-well. Water-sealed	H. S. Newberry	497,889	May 23	2431	605	63	1103
Inks. Machine for grinding printing and lithographic	L. Dorn	511,292	Dec. 19	2503	610	65	1902
Inking-pad cushion	J. R. Keatinge	503,267	Aug. 15	1719	424	64	910
Inkstand	C. C. Algeo	497,087	May 9	1119	287	63	838
Inkstand	E. Davis	491,640	Feb. 14	948	238	62	954
Inkstand	H. S. Hele-Shaw	503,852	Aug. 22	2652	664	64	1097
Inkstand	A. Hillgren	489,636	Jan. 10	1004	261	62	224
Inkstand	P. D. Horton	495,459	Apr. 11	1504	377	63	296
Inkstand	P. D. Horton	495,460	Apr. 11	1506	377	63	296
Inkstand	P. B. Myers	499,140	June 6	665	160	63	1507
Inkstand	J. S. Ross	511,549	Dec. 26	2933	715	65	1995
Inkstand and attachments	W. C. Eldridge	506,480	Oct. 10	1199	298	65	241
Inkstand. Automatically-feeding	T. Sweesy	494,448	Mar. 28	2731	684	62	1927
Inkstand-base	H. C. Freyer	496,196	Apr. 25	2650	666	63	539
Inkstand. Fountain	E. C. Mayloy	500,690	July 4	252	68	64	48
Inner sole	H. A. Sawyer	492,994	Mar. 7	351	82	62	1422
Inseam-gage. Tailor's	H. M. Cloud	496,150	Apr. 25	2582	650	63	527
Inseam-trimming machine	C. P. Perkins	492,991	Mar. 7	346	87, 88	62	1427
Insect-powder distributor	A. S. Hotchkiss	493,587	Mar. 14	1306	333	62	1629
Insect-screen or dust-arrester	L. F. Stutz and J. A. Durnbaugh	505,494	Sept. 26	1938	500	64	1675
Insect-trap	W. Jenisch	495,091	Apr. 11	891	225	63	186
Insects. Apparatus for distributing solutions for destroying	J. Schreck	502,766	Aug. 8	888	218	64	744
Insects. Destroying	W. T. Yandow	497,937	May 23	2504	624	63	1115
Insecticide	J. Brown	496,110	Apr. 25	2528	—	63	516
Insecticide	W. E., M. Z., and J. Bryant	501,323	July 11	1259	—	64	242
Insecticide	E. and E. H. Schloesing	498,819	June 6	118	—	63	1412
Insecticide	D. Smith	490,688	Jan. 31	2748	—	62	612
Insecticide-applying device	M. A. Hawley	507,615	Oct. 31	3121	763	65	638
Insole	G. Gambino	507,490	Oct. 24	2874	705	65	579
Inspirator	W. R. Park and B. T. Williston	492,944	Mar. 7	271	69	62	1412
Insulated binding-post	R. H. Rich	498,407	May 30	3360	8	62	1365
Insulated conductor	T. F. Attix	498,757	June 6	8	2	63	1390
Insulated electric conductor	L. F. Requa	506,830	Oct. 17	1757	442	65	359
Insulated electric wires. Cleat for holding	E. W. Buffinton	505,912	Oct. 3	176	45	65	34
Insulated electric wires. Cleat for holding a plurality of	E. W. Buffinton	505,215	Sept. 19	1490	389	64	1577
Insulated magnetic coil	T. E. Morford	491,491	Feb. 7	701	177	62	883
Insulated pipe joint or coupling	T. J. Pierce	495,513	Apr. 18	1595	401	63	333
Insulated wire	H. H. Brown	507,257	Oct. 24	2493	614	65	505
Insulated-wire cleat	E. H. Clarke	502,614	Aug. 1	611	146	64	678
Insulating composition	E. Thomson	508,653	Nov. 14	1104	272	65	981
Insulating compound	M. H. Devey	490,641	Jan. 31	2666	—	62	597
Insulating compound	J. J. Fanning	507,678	Oct. 31	3226	—	65	657

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Insulating compound and manufacturing the same.	J. Hoffman	505,916	Oct. 3	180		65	35
Insulating compound for printing presses	H. Haynes	508,107	Nov. 7	211		65	797
Insulating conduit. Electrical	C. W. Jefferson	491,707	Feb. 14	1052	266	62	976
Insulating coupling	E. Ballet	493,883	Mar. 21	1787	456	62	1738
Insulating coupling	L. McCarthy	501,021	July 4	761	200	64	139
Insulating device for preventing electric currents in pipes.	S. D. Gratiaa	500,488	June 27	2877	708	63	1933
Insulating electric conductors	T. E. Morford. (Reissue)	11,303	Feb. 7	731	185	62	889
Insulating joint	S. W. Burtchaell	506,034	Oct. 3	355	94	65	69
Insulating plates. Making mica	C. W. Jefferson	497,324	May 16	1528	385	63	925
Insulating support for metallic circuits	A. C. Cousens	506,002	Oct. 3	314	82	65	61
Insulating tape	W. R. Patterson	497,336	May 16	1546	389	63	929
Insulation for underground wires	P. Wright	497,852	May 23	2361	592	63	1091
Insulation of dynamo-armatures	T. E. Morford	491,490	Feb. 7	700	177	62	883
Insulation of dynamo-electric machines. Protection for the	E. Thomson	508,649	Nov. 14	1095	270	65	980
Insulator	G. W. Blackburn	504,059	Aug. 29	2987	746	64	1176
Insulator	T. H. Brady	497,515	May 16	1835	463	63	980
Insulator	C. N. Hammond	511,611	Dec. 26	3043	742	65	2013
Insulator	C. N. Hammond	511,612	Dec. 26	3044	742	65	2014
Insulator	A. J. Haury	490,560	Jan. 24	2512	647	62	551
Insulator	L. Hills	495,552	Apr. 18	1655	417	63	343
Insulator	A. L. Johnston	491,890	Feb. 14	1337	331	62	1031
Insulator	A. R. Lane	491,362	Feb. 7	507	130	62	845
Insulator	L. McCarthy	490,302	Jan. 24	2106	548	62	472
Insulator	L. McCarthy	491,729	Feb. 14	1083	273	62	981
Insulator	L. McCarthy	502,677	Aug. 1	733	176	64	700
Insulator	L. McCarthy	503,549	Aug. 15	2171	542	64	990
Insulator	J. F. Wright	496,081	Apr. 25	2481	627	63	577
Insulator-bracket	W. N. Eichberg	492,394	Feb. 28	2118	528	62	1217
Insulator-clip	W. H. Edmunds	491,208	Feb. 7	238	60	62	793
Insulator. Conduit railway	G. E. Noyes	500,937	July 4	624	164	64	114
Insulator. Electric-wire	W. D. Trimble	503,778	Aug. 22	2555	636	64	1077
Insulator for heating pipes, tubes, or flues	S. D. Stauffer	509,963	Dec. 5	193	45	65	1446
Insulator-pin	F. M. Locke	493,434	Mar. 14	1037	268	62	1578
Insulator-pin	F. M. Locke	510,809	Dec. 12	1639	407	65	1731
Insulator-pin	J. J. O'Neill	505,123	Sept. 19	1349	347	64	1552
Insulator pin and bracket machine	C. A. Eisenhart	505,309	Sept. 19	1646	426	64	1606
Insulator. Section	L. McCarthy	503,749	Aug. 22	2514	625	64	1070
Insulator. Strain	C. H. Dey	509,614	Nov. 28	2746	662	65	1319
Insulator. Strain	L. McCarthy	489,658	Jan. 10	1030	269	62	229
Insulator. Telegraph-wire	R. G. Hemingway and J. C. Gill	496,652	May 2	421	113	63	695
Insulator. Trolley-wire	M. H. Hathaway and J. Kelleher	493,713	Mar. 21	1507	385	62	1683
Insulator. Trolley-wire	L. McCarthy	502,826	Aug. 8	996	242	64	764
Insulator. Trolley-wire	M. S. Williams	507,299	Oct. 24	2559	631	65	517
Interfering-strap	E. F. Palmer	500,209	June 27	2454	598	63	1859
Interlocking switch and signal	C. A. Christofferson	489,581	Jan. 10	930	241	62	208
Intersecting miter	M. Gates	500,570	July 4	51	15	64	11
Intrenching-tool	W. H. Bell	506,091	Oct. 3	451	118	65	88
Invalid-moving apparatus	S. P. H. Hale	505,654	Sept. 26	2265	574	64	1736
Invoice-holder	S. Bing	506,808	Oct. 17	1717	432	65	351
Iron:							
See Crimping-iron.	Hat-iron.						
Curling-iron.	Sad-iron.						
Flat-iron.	Smoothing-iron.						
Gridiron.	Soldering-iron.						
Iron-albumen preparation and making same	P. Marfori and O. Schniedeberg	505,986	Oct. 3	290		65	56
Iron and apparatus used therefor. Refining	H. Höfer	502,492	Aug. 1	414	98	64	643
Iron and loading same into wagons. Machinery for breaking pig	E. P. Martin and E. James	498,805	June 6	85	21, 22	63	1404
Iron. Apparatus for the purification of cast-	A. P. G. Roilet	491,508	Feb. 7	729	184	62	889
Iron. Box-pile for making bar-	J. B. Baugh	510,763	Dec. 12	1568	391	65	1718
Iron from rust. Protecting	S. Raundnitz	507,082	Oct. 17	2162		65	433
Iron into steel. Converting	J. A. Hunter	498,062	May 23	2697		63	1149
Iron, &c. Machine for straightening scrap	J. Shipway	494,603	Apr. 4	122	29	63	26
Iron. Making	A. Dauber	502,482	Aug. 1	390	93	64	638
Iron. Manufacture of glazed	J. W. Kidwell	503,423	Aug. 15	1969		64	954
Iron. Manufacturing sheet	W. D. Wood	490,236	Jan. 17	1982		62	436
Iron-melting apparatus	S. Shaw	504,282	Aug. 29	3354	838	64	1246
Iron or iron ore. Apparatus for melting	S. Shaw	504,308	Aug. 29	3397	851	64	1254
Iron or steel. Apparatus for the manufacture of sheet	S. A. Sague	505,132	Sept. 19	1364	350	64	1554
Iron or steel. Converting	J. A. Hunter	498,061	May 23	2696		63	1149
Iron. Treating malleable	J. H. Ladd	504,841	Sept. 12	884		64	1451
Ironing-board	R. L. Armstrong	510,876	Dec. 19	1809	447	65	1773
Ironing-board	F. P. Hamlet	497,787	May 23	2263	568	63	1074
Ironing-board	A. J. Harksen	507,221	Oct. 24	2437	601	65	495
Ironing-board	E. Orewiler	497,007	May 9	999	257	63	816
Ironing-board	A. C. Pfohl	511,250	Dec. 19	2423	590	65	1888
Ironing-board	E. F. Ring	507,847	Oct. 31	3505	862	65	709
Ironing-board	J. E. Tracy and A. N. Graham	506,283	Oct. 10	847	209	65	173
Ironing board or cylinder for ironing-machines	S. Barrett	508,595	Nov. 14	1016	250	65	963
Ironing board or table attachment	F. N. Lewis	511,151	Dec. 19	2266	555	65	1859
Ironing collar-tips. Machine for	A. W. Cummings	509,513	Nov. 28	2586	625	65	1288
Ironing-machine	G. Binder	506,660	Oct. 17	1466	369	65	305
Ironing-machine	C. L. Braley and J. C. Stewart	491,634	Feb. 14	940	236	62	952
Ironing-machine	J. G. Crawford	495,310	Apr. 11	1271	317	63	253
Ironing-machine	H. L. Gee	506,428	Oct. 10	1105	273	65	223
Ironing-machine	A. R. Gustafson	490,113	Jan. 17	1781	463	62	396

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Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Ironing-machine deflector.....	S. M. Brundage.....	509,510	Nov. 28	2583	625	65	1287
Ironing-table.....	G. A. Bowen.....	496,183	Apr. 25	2627	662	63	535
Ironing-table.....	J. Mooers.....	495,680	Apr. 18	1862	466	63	378
Ironing-table.....	J. T. W. S. and W. F. Smith.....	502,591	Aug. 1	570	137	64	671
Ironing-table.....	M. M. Smith.....	494,654	Apr. 4	199	50	63	41
Ironing-table and washing-machine. Combined.....	W. Hilton.....	496,655	May 2	425	113	63	696
Irrigating apparatus.....	R. F. Dockery.....	499,524	June 13	1317	310	63	1635
Irrigating system.....	B. O. Clark.....	496,187	Apr. 25	2635	663	63	536
Irrigating system Land.....	J. Etien.....	501,245	July 11	1132	287	64	221
Irrigation. Apparatus for distributing water for.....	F. W. Barkhaus, Jr.....	494,455	Mar. 23	2741	687	62	1929
Irrigation-ditches. Rotary meter for.....	T. Woollens, Jr.....	497,155	May 9	1229	313	63	857
Ivory. Mold for the manufacture of solid balls of artificial	A. and S. de Pont.....	502,013	July 25	2355	590	64	473
Jack:							
See Bicycle-jack. Lifting-jack.							
Boot-jack. Lumber-loading jack.							
Boot or shoe jack. Pegging-jack.							
Builder's jack. Railway-track jack.							
Burnishing-machine. Screw-jack.							
jack. Shoemaker's jack.							
Car-jack. Smoke-jack.							
Flooring or ceiling. Track-jack.							
jack. Wagon-jack.							
Hydraulic jack. Window-jack.							
Jack and truck. Combined.....	W. Beckert.....	493,811	Mar. 21	1688	430	62	1718
Jacket. Chest-protecting.....	C. P. Jaynes.....	489,681	Jan. 10	1066	278	62	237
Jacketed can.....	M. A. Marzynski.....	509,440	Nov. 28	2459	591	65	1264
Jacquard cards from patterns. Apparatus for reading and punching.....	F. Wilkinson.....	507,954	Oct. 31	3670	908 909 910 911 912	65	740
Jacquard mechanism.....	H. Hardwick.....	490,350	Jan. 24	2193	571	62	490
Jacquard mechanism. Lingo for.....	M. Frisen.....	496,972	May 9	943	247	63	807
Jacquard mechanism. Rise-and-fall.....	W. Evans.....	498,912	June 6	293	67	63	1444
Jail-bolt.....	C. D. Hudgens.....	498,059	May 23	2692	674	63	1148
Jail. Electric.....	C. H. Sparks.....	502,325	Aug. 1	122	28	64	588
Jail lattice or opening.....	W. S. Hull.....	494,924	Apr. 4	628	159	63	121
Jar:							
See Battery-jar. Fruit-jar.							
Jar-closure.....	F. H. Palmer.....	495,364	Apr. 11	1352	339	63	268
Jar-closure.....	F. H. Palmer.....	497,812	May 23	2293	576	63	1079
Jar-closure.....	F. H. Palmer.....	510,045	Dec. 5	347	78	65	1475
Jar-cover.....	T. E. Ogram.....	490,720	Jan. 31	2794	717	62	632
Jar-fastener.....	C. C. Dilts.....	492,391	Feb. 28	2116	528	62	1217
Jar-holder.....	A. L. Dickinson.....	497,775	May 23	2249	564	63	1071
Jar-lid fastener.....	F. Guilleaume and E. Goltstein.....	501,418	July 11	1420	356	64	273
Jar or bottle receiver.....	R. Good.....	508,697	Nov. 14	1164	287	65	992
Jar protector. Glass-fruit.....	M. E. Clark.....	502,951	Aug. 8	1206	297	64	802
Jar stopper-fastener. Fruit.....	J. H. Forrest.....	493,698	Mar. 21	1488	381	62	1680
Jars. Flexible sealing-joint for fruit.....	G. B. Howell.....	509,223	Nov. 21	2054	495	65	1176
Jars or bottles. Fastening for covers of.....	H. Schammel.....	497,077	May 9	1105	284	63	836
Jars or cans. Removable thumb-piece for.....	C. T. Braut.....	495,196	Apr. 11	1091	271	63	321
Jewel and pivot gage.....	J. E. Adcox.....	502,648	Aug. 1	666	162	64	689
Jewel-setter.....	J. J. Johnston.....	506,697	Oct. 17	1526	382	65	316
Jewel-setting.....	A. Bippart and J. H. Theberath.....	506,621	Oct. 10	1402	352	65	281
Jewel-setting machine.....	W. Rundquist.....	500,954	July 4	652	173 174	64	119
Jeweler's roll.....	J. C. Rocheleau.....	503,218	Aug. 15	1645	403	64	896
Jeweler's turk's-head roll.....	F. Mossberg. (Reissue).....	11,344	June 13	1576	379	63	1679
Jewelry.....	J. L. Remlinger.....	496,796	May 2	647	172	63	734
Jewelry and making same.....	H. T. Regnell, J. A. Bigney, and C. O. Sweet.....	501,232	July 11	1112	282	64	218
Jewelry and making same. Plated wire stock for.....	J. S. Palmer.....	501,157	July 11	1007	256	64	197
Jewelry-case.....	W. Heatley.....	502,001	July 25	2337	585	64	470
Jewelry-holder.....	A. W. Turton.....	511,223	Dec. 19	2381	580	65	1880
Jewelry. Means for securing detachable ornaments in articles of.....	J. W. L. Rohde.....	501,365	July 11	1340	335	64	257
Jewelry or plate. Article of.....	W. W. Bradley.....	502,026	July 25	2385	599	64	478
Jewelry-pins, &c. Fastening for.....	A. Luthy.....	494,583	Apr. 4	86	21	63	18
Jewelry. Plated stock for manufacture of.....	J. S. Palmer.....	503,983	Aug. 29	2866	719	64	1155
Joint:							
See Board-siding joint. Pipe-joint.							
Carriage-top joint. Rail-joint.							
Clamp-joint. Railway-joint.							
Conduit-joint. Railway fish-joint.							
Expansion-joint. Railway-rail joint.							
Fence-joint. Stovepipe-joint.							
Furniture-joint. Swing-joint.							
Insulated pipe-joint. Union-joint.							
Limb-joint. Universal joint.							
Lock-joint. Wood-joint.							
Machine-joint.....							
Joint.....	C. C. Merrill.....	499,135	June 6	660	158	63	1506
Joint for bar structures.....	J. W. Campbell.....	494,733	Apr. 4	327	83	63	64
Joints. Construction of glass or porcelain lined.....	H. Dudley-Cooper.....	494,671	Apr. 4	225	56	63	46
Joints in cylinders. Machine for forming rolled longitudinal.....	W. S. Shippe.....	508,350	Nov. 7	599	147 148	65	869
Joints. Mold for making plumbers'.....	F. Tyers.....	502,893	Aug. 8	1099	270	64	783
Joints. Mold for making plumbers'.....	F. Tyers and O. Barnsdale.....	504,005	Aug. 29	2910	729	64	1162
Joists. Bridging for flooring.....	F. H. Moore.....	503,245	Aug. 15	1685	414	64	903
Journal and boxing and bearing therefor.....	I. Metzger.....	509,178	Nov. 21	1962	478	65	1159
Journal. Barrow.....	A. E. Morey.....	502,082	July 25	2474	621	64	495
Journal-bearing.....	D. W. Copeland.....	496,347	Apr. 25	2905	726	63	587

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Journal-bearing.....	J. N. Kailor.....	496,482	May 2	139	39	63	644
Journal-bearing.....	W. S. Livengood.....	510,807	Dec. 12	1635	406	65	1730
Journal-bearing.....	T. A. Richards.....	494,594	Apr. 4	111	26	63	23
Journal-bearing.....	O. B. Shallenberger.....	499,334	June 13	971	234	63	1573
Journal-bearing.....	W. Small, Jr.....	511,656	Dec. 26	3110	759	65	2026
Journal-bearing.....	A. C. Stiles.....	495,919	Apr. 18	2239	564	63	447
Journal-bearing. Antifriction.....	J. A. Cameron.....	501,868	July 18	2119	524	64	414
Journal-bearing. Antifriction.....	M. B. Jones.....	503,143	Aug. 15	1521	374	64	873
Journal-bearing. Antifriction.....	F. G. Susemihl.....	503,296	Aug. 15	1770	437	64	918
Journal-bearing. Antifrictional.....	C. F. Paige.....	490,267	Jan. 31	3017	775	62	666
Journal-bearing. Self-lubricating.....	J. J. Wood.....	493,742	Mar. 21	1573	400	62	1697
Journal-bearing. Car.....	L. Porter.....	495,188	Apr. 11	1079	267	63	218
Journal-bearings. Composition for.....	J. T. Richards.....	492,750	Feb. 28	2688		62	1332
Journal-bearing dust-guard.....	B. Beaupre.....	498,736	May 30	3841	947	63	1366
Journal-bearing for car-trucks.....	L. Porter.....	495,189	Apr. 11	1081	267	63	219
Journal-bearing. Self-oiling antifriction-roller.....	A. Morrison.....	496,888	May 9	816	215	63	784
Journal-box.....	G. W. M. Bowen.....	500,794	July 4	421	111	64	78
Journal-box.....	D. W. Copeland.....	496,345	Apr. 25	2900	726	63	586
Journal-box.....	H. Deck.....	497,017	May 9	1014	260	63	819
Journal-box.....	W. I. Gong.....	508,217	Nov. 7	393	96	65	831
Journal-box.....	I. Metzger.....	511,445	Dec. 26	2778	672	65	1964
Journal-box.....	S. T. F. Sterick.....	496,174	Apr. 25	2619	660	63	533
Journal-box.....	H. J. Thompson.....	493,665	Mar. 21	1437	366	62	1669
Journal-box. Antifriction.....	G. Spencer.....	494,392	Mar. 28	2654	665	62	1913
Journal-box. Compensating.....	A. B. Landis.....	501,726	July 18	1900	472	64	379
Journal-box dust-guard.....	J. J. Busenbenz.....	503,715	Aug. 22	2456	611	64	1054
Journal-box dust-guard.....	J. J. Busenbenz.....	504,197	Aug. 29	3222	802	64	1221
Journal-box for shafting.....	H. P. Humphrey.....	499,429	June 13	1161	278	63	1607
Journal-box. Self-oiling.....	H. W. Hill.....	511,144	Dec. 19	2255	553	65	1857
Journal-boxes. Means for supporting.....	J. F. Hey.....	493,499	Mar. 14	1150	294	62	1597
Journal lubricator. Car.....	S. Walker.....	503,018	Aug. 8	1311	321	64	821
Jumper and apron. Combined.....	T. R. Chambers.....	502,113	July 25	2522	632	64	504
Jumper-drill. Electrically-operated.....	C. Hoffmann.....	509,373	Nov. 28	2309	559	65	1235
Junction-box.....	E. J. McEvoy.....	502,083	July 25	2474	621	64	495
Junction-box.....	J. J. Powers and R. Van Buren.....	497,601	May 16	1966	493	63	1003
Junction-box.....	W. B. Sayers.....	501,445	July 11	1456	365	64	280
Keg or tool rack.....	W. E. Pierce.....	493,896	Mar. 21	1808	460	62	1741
Keg. Paint.....	T. A. Shaw.....	501,171	July 11	1026	260	64	201
Kettle.....	T. Cascaden.....	493,974	Mar. 21	1957	499	62	1769
Kettle.....	W. J. Plecker.....	493,782	Mar. 21	1630	415	62	1708
Kettle.....	J. R. Wilkinson.....	497,935	May 23	2502	624	63	1115
Kettle-lid lifting attachment.....	C. J. Hafey.....	491,552	Feb. 14	804	204	62	924
Kettle-lifter.....	I. E. Koons.....	503,862	Aug. 22	2663	668	64	1099
Kettle. Rendering.....	C. A. Gloekler and R. Munroe, Jr.....	502,714	Aug. 8	815	197	64	730
Kettles. Joining spouts to metallic.....	C. D. Milne and A. R. Fritchard.....	502,046	July 25	2415	608	64	484
Kettles. Machine for and process of manufacturing.....	F. Olejnik.....	496,439	May 2	82	24	63	633
Key.....							
See Watch-key.....							
Key.....	S. C. Bole.....	507,408	Oct. 24	2747	675	65	554
Key and knob fastening device.....	E. V. Reynolds.....	509,489	Nov. 28	2547	614	65	1281
Key-blanks. Manufacture of.....	G. B. Cowles.....	505,440	Sept. 26	1862	479	64	1660
Keyboard. Transposing.....	J. Casey and M. S. Chism.....	490,194	Jan. 17	1913	498	62	422
Key-fastener.....	T. W. Doyle.....	494,555	Apr. 4	30	7	63	8
Key-holder.....	G. S. Roberts.....	508,244	Nov. 7	432	105	65	838
Keyhole-guard.....	W. F. Beasley.....	499,502	June 13	1281	303	63	1628
Keyhole-guard.....	W. F. Beasley.....	499,504	June 13	1287	304	63	1630
Keyhole-guard.....	O. J. Davidson.....	511,592	Dec. 26	3007	732	65	2008
Keyhole-guard.....	G. Hisgen.....	504,583	Sept. 5	447	113	64	1353
Keyhole-guard.....	E. Riley.....	495,517	Apr. 18	1602	403	63	334
Keyhole-guard.....	L. Schneider.....	505,299	Sept. 19	1631	422	64	1604
Keyhole-guard and alarm.....	R. E. Davis.....	496,299	Apr. 25	2816	704	63	570
Keyhole-guide.....	C. Taylor.....	500,977	July 4	700	183	64	127
Key-leveling device.....	H. Lehr and J. Diehl.....	509,915	Dec. 5	118	26	65	1432
Key-opening can.....	J. Zimmerman.....	511,487	Dec. 26	2841	687	65	1977
Key-pouch.....	B. French.....	493,069	Mar. 7	461	116	62	1450
Key-ring.....	A. W. Engel.....	510,247	Dec. 5	681	162	65	1539
Key-ring.....	J. M. Matthews.....	510,220	Dec. 5	737	179	65	1549
Key-ring.....	L. Mauch.....	505,882	Oct. 3	129	33	65	26
Keyway-cutting machine.....	G. F. Grotz.....	489,904	Jan. 3	493	136	62	107
Kiln:							
See Brick-kiln. Limestone-burning kiln.							
Brick or tile kiln. Lumber-drying kiln.							
Continuous kiln. Muffle-kiln.							
Dry-kiln. Ore-roasting kiln.							
Drying-kiln. Pottery-kiln.							
Glass-annealing kiln. Regenerative kiln.							
Limekiln. Wood-drying kiln.							
Kiln.....	A. Knacker.....	511,704	Dec. 26	3183	779	65	2039
Kiln.....	W. and J. Oakes.....	511,026	Dec. 19	2055	509	65	1818
Kiln for burning lime or cement rock.....	T. K. Nickerson.....	509,550	Nov. 28	2643	639	65	1298
Kiln-furnace.....	W. Hassall.....	508,136	Nov. 7	264	65	65	807
Kitchen and grocery cabinet. Combined air-valve.....	A. N. Rooks.....	507,933	Oct. 31	3635	893	65	733
Kitchen and ironing table. Combined.....	J. Voos.....	502,597	Aug. 1	583	140	64	673
Kitchen article.....	S. C. Caldwell.....	501,823	July 18	2057	507	64	403

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Kitchen-cabinet.	T. R. Chambers	500,054	June 20	2168	527	63	1797
Kitchen-cabinet.	F. Coleman	509,653	Nov. 28	2800	674	65	1329
Kitchen-cabinet.	D. R. Cotner	494,124	Mar. 28	2218	565	62	1833
Kitchen-cabinet.	J. M. Curtice	510,678	Dec. 12	1428	352	65	1691
Kitchen-cabinet.	C. H. Ferriss	509,466	Nov. 28	2511	606	65	1274
Kitchen-cabinet.	J. P. Gage	508,932	Nov. 21	1564	383	65	1081
Kitchen-cabinet.	I. S. Hartsock	489,951	Jan. 17	1509	394	62	341
Kitchen-cabinet.	G. Thompson	511,002	Dec. 19	2027	501	65	1812
Kitchen-cabinet.	P. B. Thompson	511,176	Dec. 19	2310	565	65	1867
Kitchen-cabinet and sifter therefor	C. P. Staton	497,461	May 16	1741	439	63	964
Kitchen-table	J. A. De La Porte	494,191	Mar. 28	2321	588	62	1853
Kitchen-table and cabinet	D. Harkinson	498,974	June 6	401	94	63	1462
Kitchen-table and flour-sifter.	I. P. Morrill	502,630	Aug. 1	639	153	64	684
Kitchen-table and ironing-board. Combined	J. H. Grossman	499,674	June 13	1543	371	63	1674
Kitchen utensil	E. A. Backman	497,162	May 9	1239	315	63	859
Kitchen utensil	E. Hisher	508,711	Nov. 14	1185	292	65	996
Kitchen utensil	J. M. Tilman	504,376	Sept. 5	104	26	64	1290
Kite	J. W. Davis	490,949	Jan. 31	3166	811	62	694
Kite	W. C. Vandegrift	497,393	May 16	1633	413	63	945
Knapsack	H. C. Merriam	494,216	Mar. 28	2364	598	62	1861
Knapsack	F. Zbinden	504,101	Aug. 29	3059	765	64	1191
Kneader. Dough	L. Durand	493,074	Mar. 7	466	118	62	1451
Kneading and cooling board	C. Bingham	491,977	Feb. 21	1469	366	62	1072
Kneading-machine	G. S. Baker	502,392	Aug. 1	239	57	64	609
Kneading-machine	W. Woolcott	490,182	Jan. 17	1896	493	62	419
Knife:							
See Bread-knife.	Mold-forming knife.						
Budding-knife.	Molding-knife.						
Chopping-knife.	Orange-knife.						
Excelsior-knife.	Pocket-knife.						
Grafting-knife.	Putty-knife.						
Hay-knife.	Veneer-cutting knife.						
Mitering-knife.							
Knife	R. J. Christy	508,916	Nov. 21	1540	375	65	1076
Knife	M. L. Hawks	495,699	Apr. 18	1896	476	63	383
Knife	M. L. Hawks	501,682	July 18	1832	456	64	364
Knife	F. Hayes and and F. J. Lewis	495,110	Apr. 11	930	235	63	193
Knife	I. W. Low	496,521	May 2	204	54	63	656
Knife	J. May	492,409	Feb. 28	2147	536	62	1223
Knife	J. Oefinger	504,889	Sept. 12	953	246	64	1464
Knife and pencil and eraser holder. Combined	J. G. F. Flake	501,225	July 11	1104	281	64	217
Knife-blades. Making	T. Shaw	489,719	Jan. 10	1126	290	62	249
Knife-block for shaping cones. Revolving	J. Haindl	503,317	Aug. 15	1813	449	64	925
Knife-cleaning apparatus	A. H. Storey	496,213	Apr. 25	2681	673	63	545
Knife for cutting or scoring pasteboard	E. Saltzkorn and L. Nicolai. (Reissue.)	11,365	Sept. 12	1285	331	64	1526
Knife-handle	A. Pauls	509,762	Nov. 28	2974	720	65	1361
Knife or fork scourer	S. R. and H. Hackman	499,884	June 20	1913	464	63	1752
Knife polisher and sharpener	J. A. Ward	511,181	Dec. 19	2315	567	65	1668
Knives, &c. Sharpener for	C. K. Bradford	501,267	July 11	1167	296	64	257
Knit garment	S. B. and F. F. Lewis	508,429	Nov. 14	735	181	65	908
Knit garment and manufacturing same	J. Holmes	504,108	Aug. 29	3073	769	64	1193
Knitted garment and making same	W. A. O'Brien	500,269	June 27	2540	621	63	1-74
Knitted garment and manufacturing same	J. Holmes	507,907	Oct. 31	3592	886	65	725
Knitted garment. Combination	G. O'Brien	505,953	Oct. 3	231	60, 61	65	45
Knitted-garment sleeve	R. W. Scott	493,324	Mar. 7	701	179	62	1196
Knitted undergarment. Combination	G. O'Brien	491,950	Feb. 14	1428	356	63	1049
Knitted work. Transferring mechanism for	R. W. King	506,852	Oct. 17	1789	449	65	364
Knitting	S. Condé	510,959	Dec. 19	1955	478	65	1801
Knitting fabrics	W. Ziock	491,460	Feb. 7	661	165	62	874
Knitting fashioned webbing. Method of and machine for	H. J. Griswold	499,729	June 20	1636	394	63	1704
Knitting-frame Straight-bar	G. Heidler	490,351	Jan. 24	2195	571	62	490
Knitting-machine	A. Auwarter	510,760	Dec. 12	1564	390	65	1718
Knitting-machine	J. Bennor	499,648	June 13	1508	362	63	1668
Knitting-machine	J. A. Burleigh	497,118	May 9	1166	299	63	847
Knitting-machine	W. Diebel	492,539	Feb. 28	2364	587	62	1268
Knitting-machine	E. J. Franck	500,121	June 27	2292	557	63	1829
Knitting-machine	J. Frelloehr	489,801	Jan. 10	1252	327	62	274
Knitting-machine	L. N. D. Williams	503,920	Aug. 22	2751	690	64	1117
Knitting-machine	L. N. D. Williams	503,921	Aug. 22	2753	690	64	1117
Knitting-machine	L. N. D. Williams	503,922	Aug. 22	2754	691	64	1117
Knitting machine. Automatic rib-	A. McMichael and F. B. Wildman	500,151	June 27	2354	569	63	1841
Knitting-machine cam-cylinder	R. Kirkpatrick	491,118	Feb. 7	86	24	62	765
Knitting-machine cam-guard	G. H. Coburn	493,909	Mar. 21	1827	465	62	1745
Knitting-machine. Circular	C. J. Appleton	510,829	Dec. 12	1679	417	65	1739
Knitting-machine. Circular	E. R. Branson	493,575	Mar. 14	1289	329	62	1625
Knitting-machine. Circular	F. Buckhalter	510,401	Dec. 12	927	223	65	1600
Knitting machine. Circular	E. Franck	504,417	Sept. 5	170	44	64	1302
Knitting machine. Circular	E. J. Franck	502,292	Aug. 1	52	13	64	576

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Knitting machine. Circular.....	E. J. Franck	508,512	Nov. 14	871	{ 215 216 217 218	65	935
Knitting machine. Circular.....	A. P. Griffith and T. N. Caswell	493,924	Mar. 21	1856	{ 473 474 627		
Knitting machine. Circular.....	J. B. Hipwell.....	511,335	Dec. 26	2578	{ 628 629	65	1929
Knitting machine. Circular.....	H. A. Houseman.....	489,957	Jan. 17	1516	396	62	342
Knitting machine. Circular.....	A. McMichael and F. B. Wildman.....	508,965	Nov. 21	1613	397	65	1091
Knitting machine. Circular.....	G. E. Nye	498,139	May 23	2807	702	63	1169
Knitting machine. Circular.....	J. A. Ricard	507,560	Oct. 31	3010	{ 739 740 741	65	617
Knitting machine. Circular.....	A. Roscher	494,229	Mar. 28	2384	602	62	1864
Knitting machine. Circular.....	N. W. Westcott	502,688	Aug. 1	752	181	64	704
Knitting-machine electric stop mechanism.....	F. Hammond	499,921	June 20	1866	{ 477 478	63	1762
Knitting-machine feed	S. Condé.....	510,958	Dec. 19	1952	{ 477 478		
Knitting-machine needle	R. Kirkpatrick	491,117	Feb. 7	85	24	62	765
Knitting-machine sinker or web-holder	S. S. Cook	504,967	Sept. 12	1088	278	64	1490
Knitting-machine stop mechanism	F. Crawford	510,839	Dec. 12	1692	{ 420 421	65	1741
Knitting-machine stop mechanism	E. M. Smith and J. W. Cassidy. (Reissue.)	11,366	Sept. 19	1844	474		
Knitting-machine stop mechanism	D. F. Sullivan and E. F. Staples	490,758	Jan. 31	2854	732	62	632
Knitting-machine stop-motion	H. S. Becker.....	509,223	Nov. 21	2145	{ 515 516	65	1192
Knitting-machine stop-motion	G. J. Manderfield.....	494,258	Mar. 28	2431	612	62	1872
Knitting-machine stop-motion	A. McMichael and F. B. Wildman.....	498,076	May 23	2714	679	63	1152
Knitting-machine stop-motion	H. P. Snyder and M. J. Fisher.....	495,068	Apr. 11	842	214	63	176
Knitting-machine stop-motion attachment	C. J. Sibbald	489,420	Jan. 3	664	180	62	143
Knitting-machine stop-motion device	R. Morley	499,138	June 6	663	{ 159 160	63	1506
Knitting machine. Straight.....	J. G. Powell.....	496,062	Apr. 25	2458	620		
Knitting machine. Straight.....	W. T. Rowlett	500,953	July 4	646	{ 169 170 171 172 173	64	118
Knitting-machine striping attachment. Circular.....	J. A. Parr	509,243	Nov. 21	2080	502	65	1181
Knitting-machine take-up	J. M. Boyer.....	506,000	Oct. 3	310	80, 81	65	60
Knitting-machine thread-carrier	W. and R. Pringle	507,929	Oct. 31	3627	897	65	731
Knitting-machine thread-controlling mechanism.....	E. J. Franck	500,123	June 27	2307	559	63	1833
Knitting-machine thread-splicing mechanism.....	G. H. Coburn and A. W. Stone	506,205	Nov. 7	372	91	65	827
Knitting-machine transfer appliance	E. J. Franck	500,122	June 27	2304	558	63	1833
Knitting-machine yarn-feeding device	E. Buxtorf.....	495,472	Apr. 18	1535	{ 384 385 386	63	322
Knitting-machines. Adjustable support for the cloth-wheels and burr-wheels of rotary	E. Vermilyea	508,452	Nov. 14	768	{ 189 190		
Knitting-machines. Automatic controlling mechanism for circular.....	G. Reid and C. Stevenson.....	500,351	June 27	2682	658	63	1899
Knitting-machines. Automatic controlling mechanism for circular.....	G. Reid and C. Stevenson. (Reissue.)	11,378	Nov. 7	675	{ 165 166	65	883
Knitting-machines. Automatic feed-stop for	G. W. Snyder.....	501,582	July 18	1664	416	64	336
Knitting-machines. Dial-cam-operating device for	L. N. D. Williams	491,911	Feb. 14	1366	340	62	1037
Knitting-machines. Electric stop-motion for	W. M. Bell	491,004	Jan. 31	3249	831	62	710
Knitting-machines. Electrical stop-motion for	G. J. Manderfield.....	496,060	Apr. 25	2456	620	63	502
Knitting-machines. Extra-thread-feeding device for	L. N. D. Williams	491,327	Feb. 7	443	{ 114 115	62	832
Knitting machines. Needle-cylinder for circular.....	R. W. Gormly	499,382	June 13	1065	259		
Knitting-machines. Needle-depressing slide for	E. J. Peaslee.....	498,023	May 23	2640	660	63	1139
Knitting machines. Needle-picking device for circular.....	W. Diebel	491,089	Feb. 7	41	11	62	756
Knitting-machines. Needle-picking mechanism for automatic.....	J. G. Powell.....	510,935	Dec. 19	1909	467	65	1792
Knitting-machines. Thickening-thread mechanism for	G. E. Frink	497,315	May 16	1514	381	63	923
Knitting machines. Thickening-thread mechanism for circular.....	L. C. Huse.....	495,973	Apr. 25	2315	584	63	476
Knitting-machines. Web-holder-actuating mechanism for automatic.....	J. G. Powell.....	510,934	Dec. 19	1907	{ 466 467	65	1792
Knitting machines. Yarn-carrier for circular.....	J. W. Dewees	501,876	July 18	2139	531	64	417
Knitting machines. Yarn-guiding device for	S. Wright and W. A. Hermon.....	501,128	July 11	955	244	64	188
Knob and spindle lock	R. F. Carty	509,194	Nov. 21	1992	484	65	1165
Knob attachment	J. Anspach and C. Rebstock	511,185	Dec. 19	2320	568	65	1869
Knob attachment	M. M. Brophy	503,228	Aug. 15	1659	407	64	899
Knob attachment	C. M. Burgess	503,450	Aug. 15	2005	497	64	960
Knob attachment	D. Clark	506,388	Oct. 10	1026	256	65	208
Knob attachment	W. E. Deibert	498,244	May 30	2990	745	63	1216
Knob attachment	C. F. Doebler	503,199	Aug. 15	1611	396	64	890
Knob attachment	C. F. Doebler	503,200	Aug. 15	1612	396	64	890
Knob attachment	C. F. Doebler	503,201	Aug. 15	1614	396	64	891
Knob attachment	C. F. Doebler	503,202	Aug. 15	1615	396	64	891
Knob attachment	C. F. Doebler	503,204	Aug. 15	1618	397	64	891
Knob attachment	C. F. Doebler and C. K. Bryant.....	494,554	Apr. 4	29	7	63	7
Knob attachment	C. F. Doebler and C. K. Bryant.....	503,198	Aug. 15	1610	395	64	890
Knob attachment	C. F. Doebler and C. K. Bryant.....	503,203	Aug. 15	1617	397	64	891
Knob attachment	W. H. Gonne	510,968	Dec. 19	1972	484	65	1803
Knob attachment	I. P. Humphrey	499,834	June 20	1826	444	63	1737

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Knob attachment	J. P. Magney and R. L. Cate	496,576	May 2	290	78	63	672
Knob attachment	W. Schilling	490,685	Jan. 31	2743	706	62	611
Knob attachment	T. E. Wardwell	499,900	June 20	1935	469	63	1756
Knob attachment	H. J. P. Whipple	508,195	Nov. 7	357	87	65	824
Knob. Sheet-metal	W. A. Turner	511,178	Dec. 19	2312	566	65	1867
Knockdown box or crate	J. C. Meem	494,215	Mar. 28	2363	597	62	1861
Knockdown chair	F. D. O'Keefe	499,798	June 20	1760	426	63	1725
Knob-catching and thread or yarn clearing device	R. H. Cook	497,633	May 16	2015	502	63	1012
Knob-tying device	T. McVeigh	498,185	May 23	2878	718	63	1182
Knob-tying machine	W. H. Borden	493,205	Mar. 7	666	{ 170 171 }	62	1489
Knurling-fixture	G. E. Witherell	504,769	Sept. 12	766	193	64	1427
Kola powder. Preparing	H. Hoffmann	508,015	Nov. 7	56	.....	65	768
Kraut-cutter	R. L. Dorsey	503,697	Aug. 22	2427	604	64	1052
Label	W. A. Duesbury	496,554	May 2	357	68	63	666
Label	H. J. Tibbals	492,641	Feb. 28	2526	626	62	1301
Label-case. Metallic	R. D. S. Tyler	490,759	Jan. 31	2856	733	62	632
Label cutting and packing machine	W. L. Zimmer	494,616	Apr. 4	146	34	63	30
Label-holder	W. W. Evans	496,931	May 9	888	233	63	798
Label-holder	H. B. Presby	505,924	Oct. 3	192	48	65	38
Label-holder	J. Ready	490,164	Jan. 17	1866	486	62	413
Label-holder	J. H. Shaffer and E. Horovsky	511,167	Dec. 19	2288	559	65	1863
Label-holder	J. S. Smith	490,687	Jan. 31	2746	707	62	612
Label-holder	F. D. Thomson	507,393	Oct. 24	2726	668	65	550
Label-holder. Druggist's spring	A. C. Dempsey	493,154	Mar. 7	595	149	62	1476
Label-holder for sheet-metal vessels	C. H. Hasker	505,312	Sept. 19	1652	427	64	1607
Label or card holder	G. J. Ward	505,997	Oct. 3	305	79	65	60
Labels, &c. Apparatus for pasting or gumming	E. H. Friedlander	509,213	Nov. 21	2020	490	65	1170
Labeling-machine	A. M. Donally	491,969	Feb. 21	1486	371	62	1075
Labeling-machine	H. H. Leister	507,372	Oct. 24	2695	662	65	544
Labeling-machine	J. C. McBean, G. J. McLaughlin, H. R. Corkhill, Jr., and G. Baxter.	502,311	Aug. 1	89	21, 22	64	582
Labeling machine. Bottle-	A. L. Stevens	511,281	Dec. 19	2481	{ 604 605 }	65	1898
Labeling or mailing machine	J. C. Lodor	502,045	July 25	2413	608	64	483
Labyrinth	E. Guth	496,604	May 2	329	90, 91	63	679
Lace-fastener	A. Klinger	500,396	June 27	2746	675	63	1910
Lace-fastener	J. Walden	505,909	Oct. 3	173	44	65	34
Lace fastener. Shoe	J. A. Doherty	499,376	June 13	1056	256	63	1590
Lace fastener. Shoe	A. R. Drake and F. A. Higgins	504,568	Sept. 5	427	108	64	1349
Lace fastener. Shoe	C. D. Griffen	497,094	May 9	1133	290	63	840
Lace fastener. Shoe	C. F. Hathaway	500,497	June 27	2890	711	63	1936
Lace fastener. Shoe	W. H. Mason	502,422	Aug. 1	293	70	64	620
Lace fastener. Shoe	F. H. Smith	502,694	Aug. 8	762	185	64	721
Lace fastener. Shoe	W. T. Timmerman	490,997	Jan. 31	3242	828	62	709
Lace fastener. Shoe	F. Van Patten and L. Parmelee	494,766	Apr. 4	374	94	63	74
Lace-fastening hook	C. Moschel and F. Koch	494,821	Apr. 4	478	120	63	92
Lace fastening. Shoe	D. H. Abney	493,202	Mar. 7	663	169	62	1489
Lace pointing and punching machine. Shoe	J. Wills	494,311	Mar. 28	2508	633	62	1888
Lace. Shoe	C. Goldthwait	492,793	Mar. 7	34	8	62	1366
Lace, veiling, or ribbon holder	J. M. Schlesinger	509,691	Nov. 28	2860	691	65	1340
Laces. Apparatus for pointing and punching shoe	P. Goldstein. (Reissue)	11,385	Nov. 14	1507	369	65	1052
Lacing-hook	W. B. H. Dowse	500,565	July 4	45	13	64	10
Lacing-hook-setting machine	W. Halkyard	509,733	Nov. 28	2929	708	65	1352
Lacing-hook-setting machine	W. Halkyard	509,734	Nov. 28	2931	709	65	1353
Lacing-hooks. Machine for setting	J. J. Norwell	506,333	Oct. 10	928	{ 230 231 }	65	189
Lacing-stud	P. A. Raymond	494,084	Mar. 21	2135	546	62	1803
Lacing-studs, eyelets, &c. Setting	C. E. Van Norman	502,894	Aug. 8	1101	{ 270 271 272 }	64	784
Lacing studs or hooks. Machine for setting	R. F. Barry	504,295	Aug. 29	3379	845	64	1251
Lactyl-paraphenetidid and making it	F. Geromont	503,743	Aug. 22	2504	.....	64	1068
Ladder	T. B. Bennett	506,411	Oct. 10	1069	266	65	216
Ladder	E. Blasberg	503,120	Aug. 15	1484	365	64	866
Ladder	C. V. Childs	493,977	Mar. 21	1962	501	62	1769
Ladder	G. R. Congdon	507,784	Oct. 31	3395	832	65	688
Ladder	L. D. Craig	508,816	Nov. 14	1336	331	65	1025
Ladder	R. D. Hetrick, W. T. Wilson, and E. Rowe	502,967	Aug. 8	1234	303	64	807
Ladder	E. A. Messer and F. J. Cox	499,887	June 20	1917	465	63	1753
Ladder	E. M. Murray	499,028	June 6	502	118	63	1478
Ladder	W. E. Richards	501,694	July 18	1849	460	64	367
Ladder	J. Splann	501,378	July 11	1367	341	64	261
Ladder	T. A. Strohman	495,920	Apr. 18	2240	564	63	447
Ladder. Adjustable fireman's	R. Brayton	501,403	July 11	1401	351	64	268
Ladder. Adjustable pitch-roof	E. A. Austin	505,343	Sept. 19	1691	435	64	1614
Ladder and bench. Combined step	E. B. Stebbins	500,439	June 27	2811	693	63	1922
Ladder and ironing-board. Combined step	A. J. Iden	493,092	Mar. 7	497	124	62	1457
Ladder and truck	M. Roessler, Jr.	497,131	May 9	1190	304	63	851
Ladder and window-platform. Convertible step	J. La Burt	490,664	Jan. 31	2709	697	62	605
Ladder apparatus	A. K. Goodwin	509,598	Nov. 28	2716	{ 657 658 }	65	1313
Ladder. Collapsible	A. Leo	501,950	July 25	2263	566	64	456
Ladder. Combination step	G. A. Lake	502,367	Aug. 1	197	47	64	602
Ladder. Extension	I. T. Cross	494,270	Mar. 28	2449	617	62	1876
Ladder. Extension	A. M. Feargason	502,290	Aug. 1	45	11, 12	64	575
Ladder. Extension	H. Kniphals	502,403	Aug. 1	256	61	64	613
Ladder. Extension	H. S. Minot	506,709	Oct. 17	1547	366	65	320
Ladder. Extension	W. J. Osborne	509,673	Nov. 28	2839	686	65	1336
Ladder. Extension	L. C. Tiesel	505,072	Sept. 12	1266	325	64	1523
Ladder. Extension-brace	A. D. Webster	504,008	Aug. 29	2814	731	64	1163
Ladder. Extension fire	D. H. Crews	495,108	Apr. 11	927	234	63	192
Ladder. Extension fire	L. Dederick	502,484	Aug. 1	395	94, 95	64	639

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Ladder. Extension step	C. T. Campbell	501,406	July 11	1407	352	64	270
Ladder. Extension step	P. Poertner	492,992	Mar. 7	348	88	62	1458
Ladder. Extension step	P. and E. C. Poertner	499,751	June 20	1691	405	63	1713
Ladder. Fire	F. A. Biehn	503,362	Aug. 15	1886	467	64	939
Ladder. Fire	F. A. Biehn	510,111	Dec. 5	452	101	65	1495
Ladder. Fire	J. W. Blake and G. E. Gilhaus	497,262	May 9	1384	351	63	886
Ladder. Fire	R. Colletet	489,628	Jan. 10	994	259	62	222
Ladder. Fire	J. M. Wallace	493,345	Mar. 14	906	232	62	1551
Ladder. Fire	O. Witzel	494,452	Mar. 28	2737	687	62	1928
Ladder. Folding or extension fire	L. Dederick	502,485	Aug. 1	400	95	64	640
Ladder. Hatchway	J. J. Nagle	506,063	Oct. 3	407	107	65	79
Ladder-hook	C. A. Stone	495,279	Apr. 11	1227	306	63	245
Ladder or scaffold support. Swinging step	T. Kelly	494,868	Apr. 4	552	139	63	107
Ladder. Ornamental step	A. Dormitzer	488,990	Jan. 3	22	6	62	7
Ladder. Railway step	A. H. Fisher	508,099	Nov. 7	198	53	65	795
Ladder. Safety	A. Necker	494,073	Mar. 21	2119	540	62	1800
Ladder. Step	A. Barr	510,108	Dec. 5	448	100	65	1494
Ladder. Step	J. T. Eichelberger	497,712	May 16	2138	534	63	1035
Ladder. Step	B. J. Harrison	497,096	May 9	1135	290	63	841
Ladder. Step	R. F. Porch	490,042	Jan. 17	1672	435	62	373
Ladder. Step	C. Rivers	503,165	Aug. 15	1560	384	64	880
Ladder. Step	S. R. Smith	490,991	Jan. 31	3235	826	62	707
Ladder. Step	W. P. Stubbs	491,820	Feb. 14	1223	306	62	1009
Ladder. Step	L. A. Wieland	489,059	Jan. 3	119	32	62	30
Ladder. Store-service	H. Fresh	493,861	Mar. 21	1756	447	62	1732
Ladders. Antifriction attachment for bicycle step	G. H. Cram	510,471	Dec. 12	1045	250	65	1622
Ladle for handling molten steel, &c	F. Morris	506,328	Oct. 10	922	229	65	178
Lamp	L. J. Atwood	495,289	Apr. 11	1243	310	63	248
Lamp	C. M. Cass	500,470	June 27	2849	701	63	1929
Lamp	M. M. Deem	509,206	Nov. 21	2011	488	65	1168
Lamp	W. H. Edsall	502,880	Aug. 8	1076	265	64	779
Lamp	T. Hipwell	501,275	July 11	1180	299	64	230
Lamp	G. P. Kato, Jr.	503,266	Aug. 15	1717	424	64	909
Lamp	C. W. Kempel	511,337	Dec. 26	2583	629	65	1930
Lamp	B. J. M. Menge	489,488	Jan. 10	788	208	62	181
Lamp	D. D. Pinkham and F. E. Lewis	505,326	Sept. 19	1669	430	64	1610
Lamp	J. H. Purdy	493,341	Mar. 14	900	231	62	1549
Lamp	R. Reid, R. Hanna, T. Holroyd, and H. A. Wheat	490,415	Jan. 24	2285	594	62	507
Lamp	P. Robertson	507,754	Oct. 31	3333	816	65	677
Lamp. Arc electric	J. C. Wray	497,438	May 16	1707	431	63	958
Lamp. Argand	W. C. Homan	491,965	Feb. 14	1449	360	62	1054
Lamp. Argand	F. T. Williams	499,273	June 13	867	210	63	1555
Lamp. Bicycle	W. Bown and J. H. Hughes	495,661	Apr. 18	1837	459	63	374
Lamp-bracket	F. O. Tarbox	510,147	Dec. 5	515	119	65	1507
Lamp-bracket. Adjustable	J. Faumgarten-Frauenstein	502,011	July 25	2353	590	64	472
Lamp-bracket. Miner's	J. R. Watts	493,137	Mar. 7	568	142	62	1471
Lamp-burner	R. T. Barton	499,499	June 13	1275	302	63	1627
Lamp-burner	G. A. Burtner	504,554	Sept. 5	405	103	64	1345
Lamp-burner	J. B. Colt	502,704	Aug. 8	802	193	64	727
Lamp-burner	J. J. Donovan	507,795	Oct. 31	3411	836	65	692
Lamp-burner	J. Jauch	508,572	Nov. 14	981	241	65	956
Lamp-burner	B. P. Luce	501,284	July 11	1191	301	64	232
Lamp-burner	F. Rhind	497,605	May 16	1974	494	63	1005
Lamp-burner	F. Rhind	505,959	Oct. 3	240	64, 65	65	47
Lamp-burner	H. E. Shaffer	503,007	Aug. 8	1298	317	64	819
Lamp-burner	C. A. Taplin	503,755	Aug. 22	2523	627	54	1072
Lamp-burner attachment	W. H. Robbins	500,255	June 27	2520	615	63	1871
Lamp-burner gallery	W. H. Edsall and H. C. H. Walsh	502,284	Aug. 1	32	7	64	572
Lamp. Car	E. Boesch	492,953	Mar. 7	285	73	62	1415
Lamp. Car	E. Boesch	492,954	Mar. 7	287	73, 74	62	1416
Lamp carbon-holder. Arc	S. Bergmann	502,273	Aug. 1	14	4	64	569
Lamp. Carbureting	N. Finck	502,251	July 25	2757	697	64	549
Lamp casing. Electric-arc	P. Federmann	508,926	Nov. 21	1556	381	65	1080
Lamp. Central-draft	W. C. Homan	494,862	Apr. 4	541	137	63	105
Lamp. Central-draft	W. C. Homan	496,657	May 2	428	114	63	696
Lamp. Central-draft	J. F. Place	509,324	Nov. 21	2221	536	65	1207
Lamp. Central-draft	F. Rhind	501,025	July 4	767	201	64	140
Lamp. Chandelier car	E. Boesch	511,398	Dec. 26	2698	654	65	1951
Lamp-chimney	E. Hammond	503,720	Aug. 22	2466	613	64	1060
Lamp-chimney attachment	K. N. Hollister	499,548	June 13	1355	321	63	1642
Lamp-chimney attachment for medical vaporizing and heating purposes	J. E. Wenman	491,827	Feb. 14	1233	308	62	1011
Lamp-chimney cleaner	M. F. Hotham	510,791	Dec. 12	1614	402	65	1727
Lamp-chimney cleaner	A. Rink and C. Ruppenthal	508,761	Nov. 14	1254	312	65	1010
Lamp-chimney. Composite	J. Schwartz	506,734	Oct. 17	1599	403	65	329
Lamp-chimney heating attachment	G. W. Ives	502,364	Aug. 1	190	45	64	601
Lamp-chimney holder	W. H. Soper	499,695	Jan. 10	1090	282	62	242
Lamp-chimneys. Notching	W. E. Mayo	507,626	Oct. 31	3138	767	65	640
Lamp-collar	F. A. Flanegin	508,296	Nov. 7	516	125	65	854
Lamp. Cooking	L. Wojdtkow	493,803	Mar. 21	1673	426	62	1716
Lamp-cord fire-guard	E. E. Angell and S. Porter	511,720	Dec. 26	3214	788	65	2045
Lamp cut-out. Arc	C. E. Scribner	491,605	Feb. 14	901	226	62	943
Lamp cut-out. Incandescent-electric	T. A. Edison	491,992	Feb. 21	1490	372	62	1076

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Lamp. Cycle.....	H. Salsbury	506,135	Oct. 3	530	137	65	103
Lamp-draft regulator	J. W. Lawson	511,052	Dec. 19	2094	518	65	1825
Lamp. Duplex electric-arc	C. E. Scribner	491,251	Feb. 7	303	77	62	807
Lamp. Duplex electric-arc	C. E. Scribner	491,603	Feb. 14	898	225	62	942
Lamp. Duplex electric-arc	C. E. Scribner	501,170	July 11	1025	259	64	201
Lamp. Duplex electric-arc	B. B. Ward	492,124	Feb. 21	1690	421	62	1116
Lamp. Electric	T. Hudson	495,676	Apr. 18	1859	465	63	377
Lamp. Electric	J. Waring	497,038	May 9	1044	267	63	825
Lamp. Electric	A. Zobel	511,229	Dec. 19	2389	582	65	1882
Lamp. Electric-arc	B. Adair and C. H. Klewor	508,392	Nov. 7	674	165	65	883
Lamp. Electric-arc	C. F. Adams	495,649	Apr. 18	1817	455	63	370
Lamp. Electric-arc	W. H. Akester	491,915	Feb. 14	1372	342	62	1038
Lamp. Electric-arc	W. H. Akester	491,916	Feb. 14	1373	342	62	1039
Lamp. Electric-arc	W. H. Akester	496,366	Apr. 25	2979	743	63	602
Lamp. Electric-arc	W. H. Akester	496,387	Apr. 25	2980	744	63	602
Lamp. Electric-arc	H. Alexander	498,604	May 30	3583	887 888	63	1322
Lamp. Electric-arc	A. S. Atwater	505,183	Sept. 19	1440	371	64	1567
Lamp. Electric-arc	H. P. Ball	509,014	Nov. 21	1689	416	65	1106
Lamp. Electric-arc	P. J. Barrett	502,166	July 25	2609	657	64	521
Lamp. Electric-arc	E. E. and L. C. Beauvalet	495,772	Apr. 18	2016	510	63	405
Lamp. Electric-arc	R. Belfield	511,495	Dec. 26	2854	690	65	1979
Lamp. Electric-arc	S. Bergmann	501,757	July 18	1967	486	64	387
Lamp. Electric-arc	S. Bergmann	505,383	Sept. 19	1766	457	64	1628
Lamp. Electric-arc	L. H. Buchanan	502,948	Aug. 8	1202	296	64	802
Lamp. Electric-arc	E. P. Clark	509,842	Nov. 28	3107	751	65	1387
Lamp. Electric-arc	J. T. Dempster	501,768	July 18	1982	490	64	390
Lamp. Electric-arc	J. Einstein	497,494	May 16	1808	454 455	63	975
Lamp. Electric-arc	W. E. Freeman	491,095	Feb. 7	49	13	62	758
Lamp. Electric-arc	F. D. Gould	491,548	Feb. 14	798	202	62	922
Lamp. Electric-arc	F. D. Gould	498,387	May 30	3233	804	63	1259
Lamp. Electric-arc	F. Hansen	496,409	May 2	29	8, 9	63	624
Lamp. Electric-arc	H. Harper	492,200	Feb. 21	1811	453	62	1143
Lamp. Electric-arc	H. Harper	492,201	Feb. 21	1812	453 454	62	1143
Lamp. Electric-arc	C. Hoffmann	506,503	Oct. 10	1233	306 307	65	248
Lamp. Electric-arc	A. Hornel and G. S. Junginger	511,049	Dec. 19	2089	517	65	1825
Lamp. Electric-arc	L. E. Howard	503,538	Aug. 15	2145	538	64	986
Lamp. Electric-arc	L. E. Howard	503,539	Aug. 15	2148	539	64	986
Lamp. Electric-arc	L. Hills	498,269	May 30	3034	755	63	1224
Lamp. Electric-arc	R. M. Hunter	493,359	Mar. 14	925	238	62	1555
Lamp. Electric-arc	R. M. Hunter	493,360	Mar. 14	930	238	62	1557
Lamp. Electric-arc	R. M. Hunter	497,450	May 16	1725	435	63	961
Lamp. Electric-arc	R. M. Hunter	499,676	June 13	1546	372	63	1674
Lamp. Electric-arc	R. M. Hunter	500,657	July 4	202	53	64	39
Lamp. Electric-arc	R. M. Hunter	504,271	Aug. 29	3340	835	64	1243
Lamp. Electric-arc	R. M. Hunter	509,167	Nov. 21	1942	475	65	1154
Lamp. Electric-arc	R. M. Hunter	509,168	Nov. 21	1945	476	65	1155
Lamp. Electric-arc	J. Jergle	501,074	July 11	850	220	64	170
Lamp. Electric-arc	J. F. Kester	510,605	Dec. 12	1300	316	65	1668
Lamp. Electric-arc	G. Kirkegaard	501,080	July 11	860	223	64	172
Lamp. Electric-arc	G. Kirkegaard	501,081	July 11	861	224	64	172
Lamp. Electric-arc	W. H. Klees	501,884	July 18	2156	535	64	421
Lamp. Electric-arc	M. Kruegar	496,882	May 9	805	212	63	782
Lamp. Electric-arc	W. B. Luce	505,051	Sept. 12	1222	315	64	1514
Lamp. Electric-arc	W. B. Luce	507,916	Oct. 31	3606	889	65	1271
Lamp. Electric-arc	C. K. MacFadden	492,815	Mar. 7	69	16, 17	62	1371
Lamp. Electric-arc	W. Mathiesen	500,341	June 27	2664	653	63	1896
Lamp. Electric-arc	W. W. Millard	503,799	Aug. 22	2582	643	64	1083
Lamp. Electric-arc	P. Nordmann	498,566	May 30	3527	873	63	1312
Lamp. Electric-arc	C. A. Pfluger	500,422	June 27	2782	685	63	1916
Lamp. Electric-arc	W. A. Phillips	504,277	Aug. 29	3348	837	64	1245
Lamp. Electric-arc	J. F. and S. J. Sanders	496,702	May 2	492	131 132	63	708
Lamp. Electric-arc	C. Schmid	505,233	Sept. 19	1513	395	64	1581
Lamp. Electric-arc	F. T. Schmidt	495,601	Apr. 18	1735	437	63	357
Lamp. Electric-arc	C. E. Scribner	491,604	Feb. 14	900	226	62	943
Lamp. Electric-arc	C. E. Scribner	502,471	Aug. 1	371	89	64	634
Lamp. Electric-arc	C. E. Scribner	502,536	Aug. 1	485	116	64	656
Lamp. Electric-arc	C. T. Snedeker	504,760	Sept. 12	743	185	64	1424
Lamp. Electric-arc	J. Sugden and W. J. L. Sandy	490,992	Jan. 31	3236	826	62	707
Lamp. Electric-arc	F. H. Thompson	497,558	May 16	1898	478	63	991
Lamp. Electric-arc	J. Thompson	492,312	Feb. 21	1986	494	62	1179
Lamp. Electric-arc	E. Thomson	489,046	Jan. 3	102	28	62	26
Lamp. Electric-arc	E. Thomson	493,739	Mar. 21	1566	399	62	1696
Lamp. Electric-arc	E. Thomson	508,656	Nov. 14	1107	273	65	982
Lamp. Electric-arc	W. A. Turbayne	495,643	Apr. 18	1808	454	63	369
Lamp. Electric-arc	W. A. Turbayne	500,829	July 4	476	124	64	87
Lamp. Electric-arc	A. Utzinger	506,890	Oct. 17	1857	463	65	376
Lamp. Electric-arc	B. B. Ward	509,188	Nov. 21	1982	482	65	1163
Lamp. Electric-arc	A. G. Waterhouse	495,077	Apr. 11	857	219	63	179
Lamp. Electric-arc	W. P. Wiemann	492,650	Feb. 28	2542	629 630	62	1304
Lamp. Electric-arc	H. Wilbrant	507,867	Oct. 31	3533	869	65	715
Lamp. Electric bicycle	G. Mayr	508,482	Nov. 14	827	206	65	927
Lamp. Electric glow	E. A. Colby	498,929	June 6	320	75	63	1449
Lamp. Electric head	W. Main	491,713	Feb. 14	1060	268	62	977
Lamp. Electric incandescent	H. D. Burnett and S. E. Doane	500,849	July 4	500	130	64	91
Lamp. Electric incandescent	P. Scharf	502,322	Aug. 1	119	27	64	587
Lamp electrode. Arc	J. F. and S. J. Sanders	496,701	May 2	490	131	63	708
Lamp electrode. Arc	A. C. Seibold	498,141	May 23	2810	703	63	1170
Lamp electrode. Electric-arc	S. Heimann	498,915	June 6	298	68	63	1445

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Lamp. Engineer's	W. Rowe	510,711	Dec. 12	1479	365	65	1702
Lamp-extinguisher	E. P. Goodrich	496,646	May 2	406	110	63	693
Lamp-extinguisher	W. P. Quentell	509,943	Dec. 5	160	37	65	1439
Lamp-extinguisher and wick-trimmer	C. Shoettle	499,398	June 13	1098	265	63	1597
Lamp-extinguisher, Automatic	J. T. and J. Paul	494,935	Apr. 4	640	164	63	123
Lamp filament. Incandescent	A. de Lodyguine	494,151	Mar. 28	2260		62	1840
Lamp filament. Incandescent-electric	J. Criggal	500,279	June 27	2556	624	63	1877
Lamp-filler	I. W. Lord	511,054	Dec. 19	2097	519	65	1826
Lamp-filler	L. R. Oakes	492,528	Mar. 7	87	21	62	1375
Lamp-filler	J. H. Paig	497,075	May 9	1103	283	63	836
Lamp-filling can	B. L. Brinton	506,153	Oct. 3	559	145	65	108
Lamp-filling device	A. Goldsmith	502,622	Aug. 1	626	150	64	681
Lamp-filling indicator	T. W. Bartholomew	505,186	Sept. 19	1444	372	64	1568
Lamp filling-indicator	T. W. Bartholomew	510,311	Dec. 5	783	190	65	1558
Lamp fixture. Incandescent	A. T. Gifford	501,502	July 18	1539	388	64	311
Lamp fixture or bracket. Electric	J. T. Robb	491,596	Feb. 14	887	223	62	940
Lamp. Flash	N. H. Brown	501,556	July 18	1629	403	64	329
Lamp. Flash	B. Smith	505,780	Sept. 26	2473	624	64	1774
Lamp. Flash or signal	E. Wenig	500,449	June 27	2624	696	63	1925
Lamp for beer-vats. Safety	M. and P. Borlinghausen	504,702	Sept. 12	644	164	64	1404
Lamp-founts. Cap for filling-nipples of	J. Jauch	502,926	Aug. 8	1166	288	64	796
Lamp frame. Arc	A. Weber	502,687	Aug. 1	751	181	64	704
Lamp. Gas	C. Kalkkuhl	502,123	July 25	2535	636	64	507
Lamp. Gas	T. C. J. Thomas	495,280	Apr. 11	1227	307	63	245
Lamp globe. Incandescent	T. B. Atterbury	500,841	July 4	491	128	64	90
Lamp-guard	E. Gahlau	502,458	Aug. 1	352	84	64	631
Lamp-hanger. Adjustable	N. Jenkins	492,808	Mar. 7	57	14	62	1369
Lamp hanger. Electric	G. P. Hiler	507,364	Oct. 24	2680	659	65	541
Lamp hanger. Electric	C. S. Hume	489,815	Jan. 10	1271	333	62	279
Lamp hanger. Electric-incandescent	S. O. Larkins	492,215	Feb. 21	1843	461	62	1149
Lamp. Hanging	J. E. Bohner	492,321	Feb. 21	1999	498	62	1181
Lamp-heater	C. Hemje	495,199	Apr. 11	1094	272	63	221
Lamp-heater	W. Masters	495,559	Apr. 18	1668	421	63	346
Lamp. Heating	J. House	504,982	Sept. 12	1114	285	64	1494
Lamp holder. Incandescent-electric	L. C. Whitney, Jr.	495,951	Apr. 18	2281	575	63	455
Lamp-holding ring	T. Hipwell	499,386	June 13	1073	261	63	1592
Lamp. Incandescent	G. H. Benjamin	495,240	Apr. 11	1160	290	63	233
Lamp. Incandescent	G. A. Frei	497,956	May 23	2533	632	63	1120
Lamp. Incandescent	H. Green	495,467	Apr. 11	1524	381	63	301
Lamp. Incandescent	J. von der Kammer	492,809	Mar. 7	59	14	62	1370
Lamp. Incandescent electric	E. W. Applegate	495,620	Apr. 18	1766	445	63	362
Lamp. Incandescent electric	C. R. Arnold	507,978	Nov. 7	1	1	65	759
Lamp. Incandescent electric	J. H. Bates	503,108	Aug. 8	1453	358	64	848
Lamp. Incandescent electric	E. E. Cary	500,053	June 20	2168	527	63	1797
Lamp. Incandescent electric	E. E. Cary	501,491	July 18	1524	382	64	308
Lamp. Incandescent electric	E. E. Cary and W. E. Nickerson	503,650	Aug. 22	2352	587	64	1038
Lamp. Incandescent electric	G. A. Frei	497,957	May 23	2534	633	63	1120
Lamp. Incandescent electric	H. Green	510,018	Dec. 5	306	68	65	1467
Lamp. Incandescent electric	A. de Lodyguine	498,901	June 6	276	64	63	1441
Lamp. Incandescent electric	W. E. Nickerson	500,075	June 20	2199	536	63	1802
Lamp. Incandescent electric	W. E. Nickerson	500,076	June 20	2200	536	63	1802
Lamp. Incandescent electric	W. E. Nickerson	500,078	June 20	2201	537	63	1803
Lamp. Incandescent electric	W. E. Nickerson	500,079	June 20	2201	537	63	1803
Lamp. Incandescent electric	W. E. Nickerson	500,671	July 4	229	60	64	43
Lamp. Incandescent electric	W. E. Nickerson	501,531	July 18	1584	399	64	319
Lamp. Incandescent electric	W. E. Nickerson	503,669	Aug. 22	2381	594	64	1043
Lamp. Incandescent electric	W. E. Nickerson	503,670	Aug. 22	2382	594	64	1044
Lamp. Incandescent electric	W. E. Nickerson	503,671	Aug. 22	2383	594	64	1044
Lamp. Incandescent electric	W. E. Nickerson	503,770	Aug. 22	2542	632	64	1075
Lamp. Incandescent electric	W. E. Nickerson	507,554	Oct. 31	3003	737	65	615
Lamp. Incandescent electric	W. E. Nickerson	507,555	Oct. 31	3004	737	65	616
Lamp. Incandescent electric	W. E. Nickerson	507,556	Oct. 31	3005	738	65	616
Lamp. Incandescent electric	W. E. Nickerson	507,557	Oct. 31	3006	738	65	616
Lamp. Incandescent electric	W. E. Nickerson	507,558	Oct. 31	3007	738	65	617
Lamp. Incandescent electric	W. E. Nickerson and E. E. Cary	500,077	June 20	2200	537	63	1802
Lamp. Incandescent electric	W. E. Nickerson and E. E. Cary	500,670	July 4	228	60	64	43
Lamp. Incandescent electric	W. E. Nickerson and E. E. Cary	501,529	July 18	1582	398	64	319
Lamp. Incandescent electric	W. E. Nickerson and E. E. Cary	501,530	July 18	1583	398	64	319
Lamp. Incandescent gas	J. G. Jackson and A. L. Daniels	492,295	Feb. 21	1957	488	62	1173
Lamp light-varying attachment	B. F. Dunn	490,644	Jan. 31	2668	687	62	598
Lamp-lighter	R. H. Jolly	492,685	Feb. 28	2591	641	62	1313
Lamp-lighter. Electric	J. C. Chambers	492,913	Mar. 7	228	57	62	1403
Lamp-lighting device	E. R. Michaelis	496,662	May 2	434	116	63	698
Lamp. Miner's safety	H. Hübner	499,117	June 6	636	153	63	1502
Lamp. Miner's safety	C. H. Wolf	509,418	Nov. 28	2403	582	65	1251
Lamp. Oil	J. H. Ross and E. E. Atkins	494,230	Mar. 28	2387	603	62	1864
Lamp or burner	G. Barthel	506,201	Oct. 10	689	174	65	141
Lamp or lantern. Signal	L. G. Huntington and R. J. Armour	490,770	Jan. 31	2872	737	62	636
Lamp. Plumber's	L. Charron	506,871	Oct. 17	1820	456	65	369
Lamp. Pocket	G. C. Card	506,307	Oct. 10	877	216	65	179
Lamp. Pocket	J. H. Farrel. (Reissue)	11,299	Jan. 10	1414	366	62	306
Lamp. Pocket	W. R. Fearn	491,963	Feb. 14	1446	360	62	1053
Lamp-post	Z. T. Hobbs	498,792	June 6	62	15	63	1400
Lamp. Regenerative	A. J. English	489,582	Jan. 10	933	241 242	62	209
Lamp shade and holder. Electric	A. S. Marten	507,714	Oct. 31	3280	802	65	667
Lamp shade. Electric	G. F. Seavey	510,095	Dec. 5	428	95	65	1490
Lamp shade-holder. Electric	C. Remhof	499,470	June 13	1223	292	63	1619
Lamp-socket	H. P. Ball and A. Metzger	493,609	Mar. 14	1349	343	62	1637
Lamp-socket	E. R. Elliott	491,268	Feb. 7	328	83	62	811
Lamp-socket	A. Metzger	489,682	Jan. 10	1067	278	62	238
Lamp-socket and key-holder therefor	H. P. Ball and A. Metzger	498,758	June 6	8	3	63	1390
Lamp socket and tap. Electric	A. F. Vetter	490,605	Jan. 24	2578	665	62	565
Lamp socket. Electric	W. C. Bryant	509,297	Nov. 21	2173	522	65	1198

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Lamp socket. Electric.....	J. M. Gardner, Jr.....	505,422	Sept. 19	1834	471	64	1641
Lamp socket. Electric.....	G. Sachs.....	501,580	July 18	1661	415	64	335
Lamp socket. Incandescent.....	H. P. Ball.....	501,485	July 18	1515	381	64	307
Lamp socket. Incandescent.....	A. Ekström.....	501,205	July 11	1072	272	64	211
Lamp socket. Incandescent.....	G. C. H. Foster.....	489,158	Jan. 3	266	74	62	62
Lamp socket. Incandescent.....	J. Hutchinson.....	491,561	Feb. 14	821	208	62	928
Lamp socket. Incandescent.....	C. T. Lee.....	503,349	Aug. 15	1861	460	64	934
Lamp socket. Incandescent.....	J. F. McLaughlin.....	493,109	Mar. 7	526	132	62	1463
Lamp socket. Incandescent-electric.....	W. C. Bryant.....	502,655	Aug. 1	684	164	64	691
Lamp socket. Incandescent-electric.....	I. Goldkind. (Reissue).....	11,341	May 23	2946	733	63	1193
Lamp socket. Incandescent-electric.....	C. G. Perkins.....	504,743	Sept. 12	718	179	64	1419
Lamp-sockets. Adapter for.....	H. P. Ball.....	498,374	May 30	3217	800	63	1256
Lamp sockets. Bushing for incandescent.....	C. A. B. Halvorson.....	491,682	Feb. 14	1012	255	62	968
Lamp. Spray.....	A. Shedlock.....	496,450	May 2	98	28	63	636
Lamp-stand.....	G. H. Burke.....	499,016	Apr. 11	762	194	63	161
Lamp-stand. Electric.....	J. Cathrein.....	499,908	June 20	1949	473	63	1759
Lamp-standard. Extensible.....	M. M. Deem.....	510,243	Dec. 5	676	161	65	1538
Lamp. Street.....	C. Bergener.....	506,968	Oct. 17	1977	489 } 490 }	65	400
Lamp. Street.....	C. W. Bodkin.....	492,320	Feb. 21	1997	497	62	1181
Lamp-support.....	J. R. McGregor.....	497,196	May 9	1281	326	63	867
Lamp-support.....	C. N. Wilcox.....	489,172	Jan. 3	287	80	62	66
Lamp support and connection. Arc.....	L. E. Thompson.....	510,303	Dec. 5	771	187	65	1555
Lamp support. Electric.....	J. Nortney and F. Schefold.....	497,200	May 9	1286	327 } 328 }	63	868
Lamp support. Electric.....	J. R. Protzman.....	493,446	Mar. 14	1061	273	62	1582
Lamp support. Electric.....	J. J. Renehan.....	510,486	Dec. 12	1063	256	65	1626
Lamp support. Electric.....	C. E. Richardson.....	494,348	Mar. 28	2573	648	62	1900
Lamp support. Portable electric.....	N. T. Mills.....	505,060	Sept. 12	1237	318	64	1517
Lamp supporter. Electric.....	A. G. De Witt.....	493,578	Mar. 14	1296	331	62	1627
Lamp-suspending device.....	J. Barber.....	494,116	Mar. 28	2198	561	62	1829
Lamp suspension device. Electric.....	J. J. Renehan.....	498,570	May 30	3532	874	63	1313
Lamp. Vapor-burning.....	F. Rhind.....	494,938	Apr. 4	644	165	63	124
Lamp vibrator-regulator. Electric.....	D. M. Moore.....	494,531	Mar. 28	2872	718	62	1953
Lamps. Adjustable supporter for electric or other.....	O. C. White.....	505,585	Sept. 26	2147	543	64	1714
Lamps. Apparatus for treating filaments for incandescent electric.....	H. D. Burnett and S. E. Doane.....	508,678	Nov. 14	1133	280	65	987
Lamps. Automatic thermal cut-out for incandescent electric.....	E. H. Johnson.....	509,036	Nov. 21	1720	425	65	1112
Lamps. Burner attachment for lighting.....	J. H. Flood.....	504,471	Sept. 5	261	68	64	1319
Lamps. Carbon-holder for electric-arc.....	S. Bergmann.....	501,758	July 18	1968	486	64	388
Lamps. Carbon-holder for electric-arc.....	S. Bergmann.....	501,911	July 25	2211	551	64	446
Lamps. Carbon-holder for electric-arc.....	F. D. Hazelton.....	501,938	July 25	2250	561	64	453
Lamps. Circuit-controlling mechanism for arc.....	C. E. Scribner.....	502,535	Aug. 1	482	116	64	655
Lamps. Coating conductors for incandescent.....	T. A. Edison.....	492,150	Feb. 21	1740	433	62	1127
Lamps. Cut-out for Brush.....	B. Adair and C. H. Klewer.....	494,995	Apr. 4	726	184	63	139
Lamps. Dioptric appliance for street.....	A. Nieuwenhuys.....	506,332	Oct. 10	927	230	65	189
Lamps. Draft-tube for central-draft.....	W. C. Homan.....	494,863	Apr. 4	542	137	63	105
Lamps. Electrode-shield for arc.....	C. E. Scribner.....	497,898	May 23	2444	610	63	1106
Lamps. Globe-holder for electric-arc.....	W. A. Turbayne.....	494,499	Mar. 28	2815	706	62	1943
Lamps. Hanger-board for electric-arc.....	J. J. Wood.....	507,343	Oct. 24	2641	650	65	534
Lamps. Hanging device for electric-arc.....	C. A. Pfluger.....	500,421	June 27	2781	685	63	1916
Lamps. Leading-in wire for incandescent.....	E. Thomson.....	508,659	Nov. 14	1111	274	65	982
Lamps, &c. Lighting attachment for.....	E. Whipple and A. Gudmunson.....	509,563	Nov. 28	2665	645	65	1303
Lamps. Manufacture of electric.....	H. and F. G. A. Schulze-Berge.....	506,733	Oct. 17	1598	402	65	329
Lamps. Manufacture of incandescent electric.....	E. Thomson.....	501,172	July 11	1027	260	64	201
Lamps. Manufacturing filaments for incandescent.....	A. de Lodyguine.....	494,149	Mar. 28	2256	574	62	1840
Lamps. Manufacturing filaments for incandescent.....	A. de Lodyguine.....	494,150	Mar. 28	2258		62	1840
Lamps. Means for protecting the carbon-holders of electric-arc.....	J. F. Mehren.....	502,465	Aug. 1	359	87	64	632
Lamps. Mode of and means for renewing the filaments of electric incandescent.....	G. A. Frei.....	499,916	June 20	1960	476	63	1761
Lamps. Pole-standard for arc.....	F. D. Gould.....	492,008	Feb. 21	1515	378	62	1080
Lamps. Socket-switch for incandescent electric.....	L. Henry and L. N. Dalysson.....	489,739	Jan. 10	1161	302	62	256
Lamps. Spring-holder for vehicle.....	C. F. Billig.....	501,401	July 11	1398	350	64	268
Lamps. Stand for testing electric-arc.....	E. R. Knowles.....	508,623	Nov. 14	1050	259	65	970
Lamps. Temporary circuit-connector for incandescent electric.....	G. A. Frei.....	497,955	May 23	2531	632	63	1120
Lamps. Thermal cut-out for electric.....	H. Lemp and M. J. Wightman.....	493,629	Mar. 21	1383	351	62	1659
Lamps. Wall-socket for incandescent.....	H. C. Wirt.....	497,849	May 23	2355	590	63	1089
Lamps. Wick-carrier for central-draft.....	W. A. Penfield.....	492,585	Feb. 28	2432	606	62	1283
Lamps. Windlass for lowering or raising street electric.....	C. R. Eddy.....	491,412	Feb. 7	580	146	62	859
Lampblack-machine.....	G. L. Ester.....	507,220	Oct. 24	2436	601	65	494
Lampblack-machine.....	S. L. Rhodes.....	497,686	May 16	2096	524	63	1027
Lampblack. Manufacture of.....	G. L. Cabot.....	491,923	Feb. 14	1385	346 } 347 }	62	1041
Land. Machine for working stubble.....	E. Hovey.....	497,576	May 16	1925	484	63	996
Landmark.....	D. P. Marum.....	504,987	Sept. 12	1126	289	64	1496
Land-roller.....	C. L. Barrett.....	488,980	Jan. 3	10	3	62	5
Land-roller.....	E. W. Farr.....	495,933	Apr. 18	2257	568	63	450
Land-roller.....	G. A. Farrall.....	498,252	May 30	3001	748	63	1218
Land-roller.....	D. A. Grant.....	510,785	Dec. 12	1600	398 } 399 }	65	1724
Land-roller.....	G. C. Holcomb.....	497,243	May 9	1360	345	63	882
Land-roller.....	E. Kime.....	489,587	Jan. 10	940	244	62	210
Land-roller.....	C. I. and E. Williamson.....	511,389	Dec. 26	2685	651	65	1949
Land-roller.....	W. C. Wilson.....	508,157	Nov. 7	292	73	65	812
Land-roller and harrow.....	C. Storla.....	495,848	Apr. 18	2129	535	63	426
Land-roller and manure-distributor. Combined.....	J. W. Sharp.....	508,123	Nov. 7	240	61	65	803
Land roller and pulverizer.....	E. Kime.....	502,301	Aug. 1	76	17	64	580
Lantern.....	C. Bergener.....	507,706	Oct. 31	3267	799	65	665
Lantern.....	C. W. Dobelin.....	501,877	July 18	2141	531	64	418
Lantern.....	J. Funck.....	493,495	Mar. 14	1140	292	62	1586
Lantern.....	C. T. Ham.....	499,107	June 6	615	147	63	1498

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				Spec.	Dr. g.	Vol.	Page.
Lantern.....	C. T. Ham.....	511,421	Dec. 26	2741	663	65	1958
Lantern.....	E. O. Keef.....	502,080	July 25	2470	620	64	494
Lantern.....	J. T. and J. Paul.....	507,838	Oct. 31	3488	858	65	706
Lantern.....	A. Söhner.....	492,896	Mar. 7	195	48	62	1397
Lantern.....	A. S. Veazie and J. H. Bevan.....	489,999	Jan. 17	1586	415	62	356
Lantern.....	F. Whiting.....	508,496	Nov. 14	848	210	65	931
Lantern.....	F. K. Wright.....	498,416	May 30	3271	815	63	1267
Lantern.....	A. Zimmermann.....	503,780	Aug. 22	2557	637	64	1078
Lantern. Bicycle.....	F. Rhind.....	499,440	June 13	1177	281	63	1610
Lantern. Electric.....	A. Keil.....	489,150	Jan. 3	256	71	62	60
Lantern for vessels, &c. Signaling.....	E. H. L. Petersen.....	508,972	Nov. 21	1625	399	65	1094
Lantern-holder.....	C. L. Halstead.....	501,833	July 18	2069	510	64	406
Lantern-holder.....	C. J. Sonnema.....	508,491	Nov. 14	841	208	65	929
Lantern holder. Signal.....	F. K. Wright.....	496,470	May 2	126	34	63	641
Lantern lens. Magic.....	C. Goodyear, Jr.....	494,855	Apr. 4	532	134	63	103
Lantern. Magic.....	C. Goodyear, Jr.....	494,854	Apr. 4	529	133	63	103
Lantern-pinion.....	A. Junghans.....	508,886	Nov. 14	1447	358	65	1045
Lantern. Railway.....	L. R. Thomas.....	495,530	Apr. 18	1623	408	63	338
Lantern. Reflector.....	F. A. Smith.....	508,776	Nov. 14	1275	317	65	1014
Lantern. Signal.....	W. J. Fellheimer.....	489,798	Jan. 10	1248	327	62	274
Lantern. Signal.....	C. H. Smith.....	509,696	Nov. 28	2866	692	65	1341
Lantern. Tubular.....	L. F. Betts.....	498,420	May 30	3278	817	63	1268
Lantern. Tubular.....	F. Dietz.....	500,361	June 27	2726	670	63	1907
Lantern. Tubular.....	F. K. Wright.....	498,045	May 23	2672	668	63	1145
Lantern weather-guard attachment.....	J. P. Warner.....	490,003	Jan. 17	1592	416	62	357
Lanterns. Lens attachment for tubular.....	A. L. France.....	494,135	Mar. 28	2232	568	62	1836
Lanterns. Lime-jet and hood for magic.....	C. Goodyear, Jr.....	494,853	Apr. 4	528	133	63	103
Lanterns. Manufacture of bull's-eye.....	A. D. Seamon and A. Wilson.....	507,849	Oct. 31	3507	863	65	709
Lanterns. Means for holding globes in.....	W. C. Winfield.....	510,058	Dec. 5	369	82	65	1479
Lap-ring.....	G. Bobb.....	493,543	Mar. 14	1225	314	62	1612
Lapping-machine.....	C. F. Ainsworth and J. Haydock.....	503,890	Aug. 22	2704	678	64	1107
Lard mixing and cooling machine.....	H. Sartorius.....	490,505	Jan. 24	2433	628	62	536
Lard or butter cutter.....	S. Murray and C. Epps.....	507,028	Oct. 17	2072	511	65	418
Larder. Window.....	J. Ponisi.....	499,037	June 6	513	120	63	1460
Lasso.....	E. Shaw.....	504,055	Aug. 29	2983	745	64	1176
Last.....	G. H. Clark.....	498,237	May 30	2978	742	63	1214
Last.....	G. H. Clark.....	498,238	May 30	2980	742	63	1214
Last.....	J. C. French.....	499,669	June 13	1538	370	63	1673
Last.....	W. Gordon.....	500,711	July 4	287	78	64	53
Last.....	C. H. Josselyn.....	496,785	May 2	626	167	63	731
Last.....	H. L. Larrabee.....	509,384	Nov. 28	2332	565	65	1239
Last.....	G. Meermann.....	498,478	May 30	3373	841	63	1286
Last.....	E. C. Moody.....	491,480	Feb. 7	699	177	62	883
Last.....	E. S. Morton and E. C. Woodard.....	497,591	May 16	1952	489	63	1000
Last.....	H. E. Silliman.....	492,114	Feb. 21	1675	417	62	1112
Last.....	H. Trinder.....	501,699	July 18	1858	462	64	369
Last.....	E. D. Woods.....	498,044	May 23	2671	668	63	1145
Last-block fastener.....	G. E. Belcher.....	493,394	Mar. 14	980	232	62	1567
Last-boring machinery.....	D. C. Rebhun.....	491,493	Feb. 7	703	178	62	884
Last-support.....	J. Grant.....	493,765	Mar. 21	1607	408	62	1703
Lasts for boots or shoes. Machine for manufacturing.....	W. H. Austin.....	503,893	Aug. 22	2708	679	64	1107
Lasts. Machine for manufacturing boot or shoe.....	W. H. Austin.....	494,771	Apr. 4	386	95, 96	63	76
Lasting and sole-laying machine.....	J. R. Wood.....	508,073	Nov. 7	145	41, 42	65	786
Lasting boots or shoes.....	B. A. Norwood.....	503,062	Aug. 8	1370	338	64	833
Lasting-machine.....	J. T. Avery.....	500,548	July 4	12	4	64	5
Lasting-machine.....	F. D. Butricks.....	507,782	Oct. 31	3392	830	65	688
Lasting-machine.....	J. E. Crisp and G. W. Copeland.....	501,873	July 18	2132	428	64	416
Lasting-machine.....	H. M. Goodhue.....	488,998	Jan. 3	33	9, 10	62	9
Lasting-machine.....	L. Lake.....	491,894	Feb. 14	1344	333	62	1032
Lasting-machine.....	S. W. Ladd.....	500,141	June 27	2340	565	63	1839
Lasting-machine.....	S. W. Ladd.....	510,973	Dec. 19	1978	487	65	1805
Lasting-machine.....	S. W. Ladd.....	510,974	Dec. 19	1983	488	65	1805
Lasting-machine.....	S. W. Ladd.....	510,975	Dec. 19	1984	489	65	1805
Lasting-machine.....	S. W. Ladd.....	510,977	Dec. 19	1988	490	65	1806
Lasting-machine.....	N. Lombard.....	507,550	Oct. 31	2992	734	65	613
Lasting-machine.....	N. Lombard.....	507,551	Oct. 31	2996	735	65	614
Lasting-machine.....	B. A. Norwood.....	505,671	Sept. 26	2234	581	64	1741
Lasting-machine.....	T. O'Bolger.....	489,031	Jan. 3	77	21, 22	62	20
Lasting-machine.....	A. F. Preston.....	502,236	July 25	2724	687	64	543
Lasting-machine.....	E. Whiffen, and D. and V. F. Lake.....	502,506	Aug. 1	432	103	64	646
Lasting machine. Boot or shoe.....	A. F. Preston.....	502,755	Aug. 8	868	212	64	741
Lasting-machine starting and stopping mechanism.....	S. W. Ladd.....	510,972	Dec. 19	1976	485	65	1804
Lasting-nippers.....	E. Whiffen, and D. and V. F. Lake.....	502,507	Aug. 1	437	105	64	647
Lasting-pinchers.....	P. J. Buckley.....	497,440	May 16	1711	432	63	959
Lasting-pinchers.....	B. A. Norwood.....	503,672	Aug. 22	2384	594	64	1044
Lasting. Preparing uppers for.....	P. Cunningham.....	495,455	Apr. 11	1498	376	63	295

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				Spec.	Dis.	Vol.	Page.
Latch	A. Adams	504,263	Aug. 29	3326	831	64	1241
Latch	J. E. Bozell	505,386	Sept. 19	1769	458	61	1629
Latch	J. Chandler	493,819	Mar. 21	1696	432	62	1720
Latch	O. Christian	497,863	May 23	2392	597	63	1096
Latch	J. K. Clark	506,978	Oct. 17	1996	494	65	403
Latch	J. M. Coffield	495,624	Apr. 18	1774	446	63	363
Latch	J. L. Dale	505,033	Sept. 12	1197	307	64	1510
Latch	C. L. Eades	490,645	Jan. 31	2671	688	62	598
Latch	I. J. Gray	508,541	Nov. 14	927	227 228	65	945
Latch	C. P. Herrmann	491,285	Feb. 7	361	90	62	817
Latch	S. P. Hodgen	503,085	Aug. 8	1409	348	61	840
Latch	M. Jackson	491,053	Jan. 31	3342	852	62	730
Latch	L. E. Jacobus	491,706	Feb. 14	1051	265	62	975
Latch	L. E. Jacobus	510,176	Dec. 5	565	131	65	1516
Latch	O. S. Lamberson	496,570	May 2	282	75	63	670
Latch	C. F. Pease	497,813	May 23	2294	577	63	1079
Latch	H. C. Piester	508,973	Nov. 21	1626	399	65	1094
Latch	P. Steuerwald and A. Cording	490,517	Jan. 24	2452	632	62	540
Latch	F. W. Tobey	498,413	May 30	3267	814	63	1266
Latch	F. W. Tobey	502,789	Aug. 8	933	227	64	752
Latch	E. S. Wheeler	511,669	Dec. 26	3130	765	65	2030
Latch	J. Wright	500,179	June 27	2406	585	63	1850
Latch and lock	J. E. Armstrong	491,793	Feb. 14	1188	297	62	1001
Latch and lock	J. E. Armstrong	508,267	Nov. 7	477	115	65	846
Latch and lock	J. A. Giese	492,494	Feb. 28	2293	570	62	1252
Latch and lock	G. H. Harris	495,971	Apr. 25	2312	584	63	476
Latch and lock	J. D. Perkins	491,742	Feb. 14	1103	279	62	985
Latch and lock. Combined	J. Adams	501,474	July 11	1495	376 377	64	288
Latch and lock combined	W. A. Justice	505,403	Sept. 19	1796	464	64	1634
Latch and lock combined	A. Linsmayer	508,890	Nov. 14	1451	360	65	1045
Latch and support. Gate	L. D. Latimer	507,231	Oct. 24	2452	604	65	497
Latch. Coin-freed	F. E. Zschernig	502,898	Aug. 8	1112	273 274	64	786
Latch. Door	H. C. Beardsley	510,397	Dec. 12	922	222	65	1599
Latch for dumping-car doors	J. M. Phillips	507,721	Oct. 31	3288	804	65	669
Latch for stove or other doors. Kicker	L. P. Kennedy	501,883	July 18	2155	535	64	420
Latch. Gate	B. Bernstein	489,918	Jan. 17	1446	379	62	329
Latch. Gate	T. J. Key and J. M. Marshall	495,093	Apr. 11	894	226	63	187
Latch. Gate	G. W. Mallory	510,181	Dec. 5	571	133	65	1518
Latch. Gate	A. Nell and T. J. Corcoran	507,155	Oct. 24	2316	569	65	463
Latch. Gate	J. W. Philips	504,050	Aug. 29	2975	744	64	1175
Latch. Gravity	F. O. Miller	495,824	Apr. 18	2087	526	63	418
Latch to prevent sagging	J. H. Currier, Jr., W. S. Hesp, and S. Crum.	489,220	Jan. 3	369	102	62	83
Latch. Wagon end-gate	A. R. Smith	509,960	Dec. 5	189	44, 45	65	1445
Lath	S. Toney	507,859	Oct. 31	3523	866	65	712
Lath machine. Sheathing	I. G. Jenkins	508,545	Nov. 14	932	230	65	947
Lath. Sheathing	A. Baldwin	501,397	July 11	1391	349	64	267
Lath. Sheathing	M. C. Nichols	495,906	Apr. 18	2220	559	63	443
Lathing-barness	J. A. Ward	497,363	May 16	1590	402	63	937
Lathing. Metallic	M. H. Crittenden and F. V. Emery	489,850	Jan. 10	1323	345	62	290
Lathing. Metallic	E. Hawes	493,714	Mar. 21	1510	386	62	1684
Lathing. Wooden	C. F. Darnell	502,551	Aug. 1	512	122	64	660
Lathe	A. Catchpole	491,236	Feb. 7	286	71	62	803
Lathe	E. Childs	490,426	Jan. 24	2301	597	62	510
Lathe	C. M. Conradson	490,864	Jan. 31	3009	772 773 774	62	665
Lathe	W. H. McKenna	490,918	Jan. 31	3116	799	62	685
Lathe	C. Seymour	501,470	July 11	1488	374 375	64	286
Lathe	S. L. Worsley	497,851	May 23	2358	591	63	1090
Lathe attachment	O. J. Beale	493,807	Mar. 21	1681	428	62	1717
Lathe attachment	C. B. Beardsley	493,008	Mar. 7	373	93	62	1432
Lathe attachment	W. Frasier	499,289	June 13	897	217	63	1560
Lathe attachment	F. S. Rechtsteiner	502,760	Aug. 8	882	216	64	743
Lathe attachment	J. E. Richards	500,722	July 4	309	83	64	58
Lathe attachment	J. D. Russ	501,469	July 11	1487	374	64	286
Lathe-center	W. C. Roe	493,119	Mar. 7	540	135	62	1465
Lathe clamping mechanism. Turret	F. H. Richards	496,001	Apr. 25	2356	595 596	63	484
Lathe. Clothes-pin	M. D. Lear	490,206	Jan. 17	1942	509	62	427
Lathe cutting-off attachment	E. Childs	490,427	Jan. 24	2303	597 598	62	510
Lathe-dog	E. C. Derby	510,412	Dec. 12	943	227	65	1603
Lathe-dog	G. Ehrhardt	497,517	May 16	1838	463	63	980
Lathe driving mechanism	F. H. Crafts	499,159	June 6	697	167	63	1512
Lathe. Engine	O. E. Perrigo	494,383	Mar. 28	2632	661	62	1910
Lathe. Engine	O. E. Perrigo	499,929	June 20	1976	480	63	1763
Lathe for dressing commutators	J. A. Mebane	505,838	Oct. 3	5	14, 15	65	13
Lathe-gearing	H. Binsse	504,657	Sept. 5	548	140	64	1373
Lathe-grinding attachment	W. B. Cannon	499,905	June 20	1943	471 472	63	1757
Lathe head-stock	C. M. Conradson	497,630	May 16	2010	501	63	1011
Lathe index dividing attachment	F. Wilkie	498,497	May 30	3413	847	63	1292
Lathe. Metal-turning	T. Coldwell	500,753	July 4	356	93	64	66
Lathe. Polygonal	L. G. Merritt	504,812	Sept. 12	832	211 212 213 214	64	1439
Lathe. Polyhedral	M. Rul	495,839	Apr. 18	2115	532 533	63	424

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				Spec.	Dr. g.	Vol.	Page.
Lathe. Pulley.....	M. C. Henley.....	506,398	Oct. 10	1044	{ 259 260	65	211
Lathe. Pulley.....	A. Streit.....	493,738	Mar. 21	1561	{ 398 109	62	1695
Lathe. Screw-cutting.....	J. H. Paterson.....	506,068	Oct. 3	414	{ 110 110	65	81
Lathe slide-rest.....	G. Strickland.....	507,047	Oct. 17	2111	{ 523 523	65	423
Lathe speed-regulating device.....	J. W. Boynton.....	495,296	Apr. 11	1252	{ 312 312	63	250
Lathe taper attachment.....	D. Currie.....	504,565	Sept. 5	421	{ 107 107	64	1348
Lathe taper attachment.....	J. Flather.....	509,212	Nov. 21	2019	{ 490 490	65	1170
Lathe taper attachment.....	M. P. Hodge.....	502,401	Aug. 1	251	{ 60 60	64	612
Lathe taper attachment.....	W. T. S. Johnson.....	503,088	Aug. 8	1414	{ 349 349	64	841
Lathe-tool and support.....	W. L. Cheney.....	491,256	Feb. 7	311	{ 78 78	62	808
Lathe tool-holder.....	W. Barraclough and A. Rhodes.....	495,576	Apr. 18	1700	{ 428 428	63	352
Lathe tool-rest.....	A. Muir.....	493,041	Mar. 7	423	{ 106 106	62	1442
Lathe tool-support.....	C. M. Conradson.....	497,769	May 23	2242	{ 562 562	63	1070
Lathe. Turning.....	M. W. Doty.....	489,248	Jan. 3	414	{ 115 116	62	92
Lathe. Turning.....	H. Dreses.....	493,018	Mar. 7	393	{ 98 98	62	1436
Lathe. Turning.....	W. von Pittler.....	507,283	Oct. 24	2539	{ 625 625	65	512
Lathe. Turret.....	H. Drysdale.....	493,019	Mar. 7	394	{ 98, 99 98, 99	62	1436
Lathe. Turret.....	F. H. Richards.....	497,212	May 9	1305	{ 332 333	63	872
Lathe. Wood-turning.....	L. L. Hill.....	491,941	Feb. 14	1414	{ 353 353	62	1047
Lathe. Wood-turning.....	J. Scott.....	492,112	Feb. 21	1672	{ 417 417	62	1112
Lathes. Rod-feeding device for turning.....	C. M. Conradson.....	497,631	May 16	2011	{ 501 501	63	1011
Lathes. Stop mechanism for turret.....	F. H. Richards.....	496,065	Apr. 25	2461	{ 621 622	63	503
Laundry-bench.....	E. A. Whiting.....	494,092	Mar. 21	2148	{ 548 548	62	1805
Laundry-drier.....	A. V. M. Sprague.....	500,625	July 4	141	{ 37, 38 37, 38	64	28
Laundry outfit. Combination.....	A. Armstrong.....	503,711	Aug. 22	2449	{ 609 609	64	1057
Laundry-tub.....	E. C. Brunner and W. J. Renkel.....	501,763	July 18	1975	{ 488 488	64	389
Lavatory apparatus.....	C. S. Hill.....	500,234	June 27	2490	{ 608 609	63	1865
Lavatory-standard.....	W. Scott.....	509,402	Nov. 28	2379	{ 576 576	65	1247
Lawn-rake.....	W. W. Carlisle.....	507,484	Oct. 24	2861	{ 702 702	65	576
Lawn-rake.....	L. Gibbs.....	489,672	Jan. 10	1049	{ 273 273	62	234
Lawn-rake.....	L. Gibbs.....	496,220	Apr. 25	2692	{ 675 675	63	547
Lawn-rake.....	J. Nase.....	492,166	Feb. 21	1764	{ 440 440	62	1132
Lawn-rake.....	J. Nase.....	492,167	Feb. 21	1765	{ 440 440	62	1133
Lawn-rake and grass-receiver.....	J. Knight.....	501,430	July 11	1434	{ 359 359	64	275
Lawn-sprinkler.....	C. Anderson.....	510,496	Dec. 12	1081	{ 261 261	65	1629
Lawn-sprinkler.....	S. S. Black.....	505,086	Sept. 19	1294	{ 334 334	64	1542
Lawn-sprinkler.....	R. P. Creed.....	494,847	Apr. 4	520	{ 131 131	63	101
Lawn-sprinkler.....	J. Jett.....	491,354	Feb. 7	495	{ 127 127	62	842
Lawn-sprinkler.....	G. H. Thoma.....	493,312	Mar. 14	861	{ 219 219	62	1542
Lawn-sprinkler.....	T. Scheen.....	502,641	Aug. 1	658	{ 160 160	64	688
Lawn-traverser and sprinkler.....	H. Schweim.....	492,843	Mar. 7	107	{ 26 26	62	1378
Leach-sprinkler.....	C. F. Wells.....	492,647	Feb. 28	2534	{ 629 629	62	1303
Lead and colored pigments. Manufacture of white.....	J. Noad.....	508,115	Nov. 7	226	{ 65 65	800	
Lead, crayon, or other holder.....	A. Forander.....	499,191	June 6	750	{ 178 178	63	1521
Lead from its ores. Extracting.....	B. Rösing.....	494,349	Mar. 28	2574	{ 648 648	62	1900
Lead. Making white.....	E. Waller.....	509,057	Nov. 21	1751	{ 65 65	1118	
Lead. Manufacture of white.....	A. J. Smith.....	501,377	July 11	1361	{ 340 341	64	261
Lead. Manufacture of white.....	E. Waller and B. C. Hinman.....	509,059	Nov. 21	1753	{ 433 433	65	1118
Lead. Manufacturing white.....	P. Bronner.....	491,635	Feb. 14	941	{ 62 62	952	
Lead. Manufacturing white.....	A. B. Browne.....	496,109	Apr. 25	2526	{ 638 638	63	516
Lead. Manufacturing white.....	A. Honman and V. Vulliez.....	495,490	Apr. 18	1564	{ 63 63	327	
Lead-packer.....	C. E. Dawson.....	494,979	Apr. 4	707	{ 180 180	63	135
Lead. Process and apparatus for the manufacture of white.....	A. Honman and V. Vulliez.....	489,254	Jan. 3	426	{ 118 119	62	95
Lead. Producing white.....	N. K. Morris and J. W. Bailey.....	493,106	Mar. 7	523	{ 131 131	62	1463
Lead salts and caustic alkali. Making basic.....	G. Lunge and C. H. M. Lyte.....	510,979	Dec. 19	1994	{ 65 65	1807	
Lead. White.....	N. K. Morris and J. W. Bailey.....	493,173	Mar. 7	624	{ 62 62	1481	
Leaf-holder.....	E. H. Kohr.....	505,771	Sept. 26	2460	{ 620 620	64	1771
Leaf-turner.....	J. B. Williamson.....	509,988	Dec. 5	248	{ 58 58	65	1456
Leaf turner. Book.....	C. W. Clark.....	511,122	Dec. 19	2218	{ 543 543	65	1850
Leak-alarm.....	C. H. Briggs.....	511,041	Dec. 19	2077	{ 514 514	65	1822
Leather-board-cutting machine.....	J. M. Watson.....	506,573	Oct. 10	1335	{ 335 335	65	268
Leather-coloring machine.....	C. H. and A. A. Lappe.....	504,224	Aug. 29	3262	{ 814 814	64	1228
Leasing device.....	J. M. Simoneau.....	495,436	Apr. 11	1469	{ 370 370	63	299
Leather-dressing machine.....	T. Dawson, C. R. and G. F. Schumacher.....	497,003	May 9	993	{ 256 256	63	815
Leather-dressing machine.....	W. Evans.....	507,314	Oct. 24	2600	{ 640 640	65	526
Leather-edge trimmer.....	J. Hook.....	503,348	Aug. 15	1860	{ 460 460	64	934
Leather-finishing machines. Means for lubricating rolls of.....	J. Palmer.....	501,657	July 18	1790	{ 446 446	64	358
Leather-folder.....	S. H. Randall.....	506,939	Oct. 17	1936	{ 479 480	65	392
Leather-frame.....	L. F. Cauffield.....	490,338	Jan. 24	2169	{ 565 565	62	485
Leather-frame.....	L. F. Cauffield.....	490,339	Jan. 24	2170	{ 566 566	62	485
Leather-hammering machine.....	P. W. Minor.....	494,259	Mar. 28	2433	{ 613 613	62	1872
Leather. Making artificial.....	J. Chase.....	507,213	Oct. 24	2430	{ 65 65	493	
Leather-marker.....	H. W. Gordon.....	509,576	Nov. 28	2685	{ 650 650	65	1307
Leather-shaving machine.....	F. C. Kimball.....	490,443	Jan. 24	2322	{ 603 603	62	514
Leather-skiving machine.....	A. J. Allen.....	500,838	July 4	456	{ 127 127	64	82
Leather stretching and softening machine.....	C. F. Stackpole.....	501,593	July 18	1620	{ 419 420	64	339
Leather-stretching machine.....	J. M. Charnock.....	501,920	July 25	2225	{ 555 556	64	448
Leather. Treatment of sole.....	F. Riegert.....	492,836	Mar. 7	96	{ 62 62	1376	
Leather-turning machine.....	Q. W. Booth.....	495,776	Apr. 18	2021	{ 511 511	63	466
Leather-working machine.....	A. Probst.....	489,641	Jan. 10	1010	{ 263 263	62	226
Ledger or similar account-book.....	J. W. Horne.....	494,717	Apr. 4	299	{ 75 75	63	60

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Leers or annealing-ovens. Receptacle for	M. J. Owens	506,719	Oct. 17	1570	392	65	324
Leg attachment. Artificial	R. E. McDuffie	492,583	Feb. 28	2430	605	62	1282
Leg for theatrical purposes. Artificial	M. Robson	497,215	May 9	1312	334	63	873
Leg-straightening device	H. Bayer	507,775	Oct. 31	3381	828	65	686
Leggin	B. Lyons	498,279	May 30	3048	758	63	1226
Leggin	E. B. Stimpson	495,172	Apr. 11	1054	263	63	213
Leggin	E. B. Stimpson	504,794	Sept. 12	800	203	64	1433
Leggins. Distending-spring for	E. B. Stimpson	505,906	Oct. 3	170	43	65	33
Lemon-juice extractor	J. Roberts	504,365	Sept. 5	85	21	64	1287
Lemon-squeezer	C. W. Barrett	492,259	Feb. 21	1907	476	62	1162
Lemon-squeezer	J. S. Dunham and E. D. Middlekauff	490,802	Jan. 31	2925	751	62	646
Lemon-squeezer	W. Schwendler	497,078	May 9	1106	284	63	836
Lens. Fluid	A. A. Ingram	509,379	Nov. 28	2324	562	65	1237
Letter and bread box. Combined	W. E. Hartmann	509,532	Nov. 28	2617	633	65	1293
Letter-box	J. L. Cherot and J. N. Clouse	494,976	Apr. 4	701	179	63	134
Letter-box	A. D. Cushing and A. Mitchell	491,533	Feb. 14	774	197	62	917
Letter-box	P. J. Fitzgerald	501,270	July 11	1170	297	64	259
Letter-box	F. G. Kollenberg	492,026	Feb. 21	1549	386	62	1087
Letter-box	F. H. McManigal	493,177	Mar. 7	630	159	62	1482
Letter-box	O. L. Mitchell	499,465	June 13	1217	290	63	1184
Letter-box	G. E. Siebler	509,254	Nov. 21	2100	506	65	1141
Letter-box	E. Wolf	507,950	Oct. 31	3675	913	65	741
Letter-box. House	G. E. Wilson	511,480	Dec. 26	2833	685	65	1975
Letter-box. House-door	H. E. Aldrich	491,509	Feb. 14	743	189	62	911
Letter-box. House-door	A. D. Cushing and A. Mitchell	491,534	Feb. 14	775	198	62	918
Letter-box. House-door	H. W. Libbey	502,673	Aug. 1	726	174	64	699
Letter-box. House-door	A. Smith	492,564	Feb. 28	2100	597	62	1276
Letter-box. House-door	A. H. Stewart	492,443	Feb. 28	2194	549	62	1233
Letter. Embossed sign	G. H. Maddin and G. Selman	510,980	Dec. 19	1996	493	65	1807
Letter. Glass	J. Ballance	503,937	Aug. 29	2782	697	64	1139
Letter-port cover and name-plate. Combined	J. J. Bisel	511,722	Dec. 26	3216	789	65	2046
Letter-press	G. E. Clarke	505,093	Sept. 19	1303	335	64	1543
Letter-press. Portable	C. R. Eberle	503,280	Aug. 15	1739	429	64	913
Letter. Sign	F. L. Gregory	498,430	May 30	3298	823	63	1271
Letter. Sign	F. K. Kennedy	489,905	Jan. 10	1412	365	62	306
Letter. Sign	C. Schwartz	503,620	Aug. 22	2310	576	64	1030
Letters. Making sign	J. J. Callow	497,303	May 16	1497	377	63	920
Levee and dam structure	G. P. Anderton	492,704	Feb. 28	2621	649	62	1320
Level	C. M. Bartlett	501,641	July 18	1763	439	64	353
Level and inclinometer. Spirit	J. P. Famous	508,294	Nov. 7	513	124	65	853
Level and plumb device. Adjustable spirit	W. R. Dorton	505,445	Sept. 26	1870	482	64	1662
Level. Builder's	W. Nisbett	500,031	June 20	2131	516	63	1790
Lever, &c. Compensating	H. Lindström	492,730	Feb. 28	2657	658	62	1327
Level guard attachment	J. Prickett	502,202	July 25	2667	673	64	532
Lever mechanism. Time trip	E. C. Waldurff	489,350	Jan. 3	564	153	62	121
Level. Plumb	J. Pettit	506,934	Oct. 17	1932	478	65	391
Level. Plumb	L. J. Rogers	498,084	May 23	2726	682	63	1155
Level. Plumb	J. E. Worrell	500,452	June 27	2828	696	63	1925
Level. Spirit	R. S. Brown	505,937	Oct. 3	206	52	65	41
Level. Spirit	L. Menz	506,855	Oct. 17	1794	451	65	365
Level. Spirit	H. O. Risse	508,762	Nov. 14	1255	313	65	1010
Level. Spirit	J. A. Traut	511,377	Dec. 26	2662	645	65	1945
Leveler. Land	W. Falconer	500,874	July 4	542	140	64	98
Leveling apparatus	B. G. Merrill	494,876	Apr. 4	563	142	63	109
Leveling-instrument. Hydrostatic	O. Y. Frykholm	505,269	Sept. 19	1568	400	64	1592
Leveling-rod. Surveyor's	G. B. Stowell	495,438	Apr. 11	1471	371	63	250
Lever and locking mechanism therefor	M. J. Todd	508,784	Nov. 14	1284	330	65	1016
Lever. Differential	R. Campbell	494,756	Apr. 4	364	92	63	72
Lever. Differential	R. Campbell	503,561	Aug. 15	2192	547	64	995
Lever, &c. Hand	E. Einfeldt	497,641	May 16	2028	505	63	1015
Lever. Reversing	J. Player	489,264	Jan. 3	441	122	62	97
Lever or clamp. Binding	S. C. Reed	506,254	Oct. 10	794	196	65	162
Lever. Reverse	J. T. Mundy	507,831	Oct. 31	3476	855	65	704
Licorice extract and making same	S. P. Sadtler and J. H. Grimm	495,271	Apr. 11	1212		63	242
Lid clamp. Kettle	M. E. Feeney	508,005	Nov. 7	41	13	65	765
Lid for vessels. Odor-arresting	W. Fowler	511,692	Dec. 26	3168	774	65	2037
Lid-holder	D. O'Leary	493,834	Mar. 21	1713	437	62	1723
Lid-holder	C. J. Peterson	498,569	May 30	3531	873	63	1312
Lid holder. Vessel	M. Murray	498,020	May 23	2631	658	63	1138
Lid. Vessel	F. E. R. Malke	510,354	Dec. 5	840	203	65	1569
Life-boat	J. A. Aniello	507,096	Oct. 24	2193	542	65	451
Life-boat	G. F. Klaffky	506,048	Oct. 3	383	101	65	75
Life-preserver	M. O'Hara	496,697	May 2	484	129	63	707
Life-preserving trunk	P. Krenkel	492,688	Feb. 28	2595	642	62	1314
Life-raft	G. B. Hussey	497,375	May 16	1606	406	63	941
Life-saving apparatus	H. A. Stevens	494,090	Mar. 21	2144	548	62	1805
Life-saving device or fender	W. E. Holmes	495,632	Apr. 18	1786	449	63	366
Life-saving grapnel	J. B. Noble and C. G. Thomson	508,234	Nov. 7	418	101	65	836
Life-saving vehicle	W. B. Beal	503,572	Aug. 22	2216	554	64	1014
Lifter							
See Box-lifter.	Pipe-lifter.						
Kettle-lifter.	Track-lifter.						
Mail-pouch lifter.	Transom-lifter.						
Pan-lifter.	Wagon-body lifter.						
Lifter or drainer	W. W. Olcott	504,237	Aug. 29	3285	820	64	1232
Lifting device	W. Blanc	501,051	July 11	817	213	64	164
Lifting device	W. L. Brown	493,061	Mar. 7	448	113	62	1448
Lifting device	J. W. Lickey	489,610	Jan. 10	974	253	62	218
Lifting-jack	A. P. Aiken	490,221	Jan. 17	1963	514	62	431
Lifting-jack	A. P. Aiken	509,565	Nov. 28	2667	646	65	1303

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Lifting-jack.....	C. W. Ball.....	510,230	Dec. 5	660	156	65	1535
Lifting-jack.....	J. B. Delong.....	498,246	May 30	2993	746	63	1217
Lifting-jack.....	L. J. Kelly.....	497,409	May 16	1659	419	63	950
Lifting-jack.....	G. W. La Baw.....	501,280	July 11	1186	300	64	231
Lifting-jack.....	W. S. Livengood.....	490,293	Jan. 24	2093	546	62	469
Lifting-jack.....	J. W. Mahaffey and A. F. Haldeman.....	500,689	July 4	251	67	64	47
Lifting-jack.....	R. Raby.....	507,038	Oct. 17	2095	519	65	421
Lifting-jack.....	H. Reichwein.....	497,604	May 16	1971	494	63	1004
Lifting-jack. Automatic.....	J. C. Hackett.....	498,546	May 30	3500	865	63	1307
Lifting-jack. Quick-return.....	J. A. Mead and C. Johnson.....	493,336	Mar. 14	895	229	62	1548
Lifting-machine or invalid-lifter.....	J. Tingley.....	503,105	Aug. 8	1448	357	64	847
Light:							
<i>See</i> Electric light. Search-light.							
Electric-arc light. Skylight.							
Electric search-light. Vault or floor light.							
Headlight.							
Light-fixtures. Canopy for.....	E. Gothberg.....	505,459	Sept. 26	1888	487	64	1665
Lights. Globe-holder for arc.....	T. H. Faben.....	495,318	Apr. 11	1220	320	63	255
Lighting and heating apparatus. Combined.....	C. W. Cropp.....	497,867	May 23	2397	598	63	1097
Lighting apparatus.....	A. B. Moore, G. W. Rue, C. D. Smith, F. H. Roebuck, J. F. Mills, and J. R. Kirk.....	502,573	Aug. 1	542	129	64	665
Lighting apparatus. Building.....	J. W. Davis.....	507,999	Nov. 7	30	10	65	764
Lighting circuits. Branch block for incandescent.....	A. Swan.....	508,644	Nov. 14	1066	269	65	978
Lighting device.....	J. E. Barlow.....	505,185	Sept. 19	1442	371	64	1568
Lighting device. Automatic time.....	A. Biaggi y Dias.....	489,428	Jan. 3	640	183	62	146
Lighting device. Hydrocarbon.....	F. A. Gody.....	508,812	Nov. 14	1328	330	65	1023
Lighting-fixtures. Device for supporting.....	H. Roth.....	505,120	Sept. 19	1357	349	64	1553
Lighting the interior of buildings. Apparatus for.....	H. N. H. Lugin.....	494,299	Mar. 28	2494	629	62	1884
Lighting. Apparatus for protecting buildings from.....	J. B. L. Bartlett.....	494,286	Mar. 28	2476	624	62	1880
Lightning-arrester.....	J. E. Browne.....	501,241	July 11	1125	285	64	219
Lightning-arrester.....	F. H. Doane.....	501,708	July 18	1876	467	64	372
Lightning-arrester.....	W. L. Emmet.....	503,788	Aug. 22	2567	639	64	1080
Lightning-arrester.....	H. O. Henneberg.....	493,926	Mar. 21	1870	474	62	1751
Lightning-arrester.....	C. F. Scott.....	492,544	Feb. 28	2370	588	62	1270
Lightning-arrester.....	E. Thomson.....	493,314	Mar. 14	864	220	62	1543
Lightning-arrester.....	E. Thomson.....	495,714	Apr. 18	1921	483	63	387
Lightning-arrester.....	E. Thomson.....	495,853	Apr. 18	2141	538	63	428
Lightning-arrester.....	E. Thomson.....	501,114	July 11	937	240	64	185
Lightning-arrester.....	E. Thomson.....	508,648	Nov. 14	1094	270	65	979
Lightning-arrester.....	W. A. Turbayne.....	500,828	July 4	475	124	64	86
Lightning-arrester.....	C. S. Van Nuis.....	500,726	July 4	314	84	64	59
Lightning-arrester.....	T. W. Wheatley.....	492,649	Feb. 28	2541	629	62	1303
Lightning-arrester.....	M. M. Wood.....	500,178	June 27	2405	585	63	1850
Lightning-arrester.....	W. Wurdack.....	500,454	June 27	2830	697	63	1926
Lightning-arrester.....	A. Wurts.....	492,548	Feb. 28	2381	591	62	1272
Lightning-arrester.....	A. Wurts.....	492,549	Feb. 28	2382	591	62	1272
Lightning-arrester.....	A. Wurts.....	494,186	Mar. 28	2314	566	62	1851
Lightning-arrester.....	A. Wurts.....	497,507	May 16	1826	460	63	978
Lightning-arrester.....	A. Wurts.....	497,508	May 16	1827	460	63	979
Lightning-arrester.....	A. Wurts.....	497,509	May 16	1828	461	63	979
Lightning-arrester.....	A. Wurts.....	509,783	Nov. 28	3011	722	65	1369
Lightning-arrester.....	A. Wurts and C. F. Scott.....	497,397	May 16	1638	415	63	946
Lightning-arrester. Universal non-arcng.....	A. Wurts.....	509,784	Nov. 28	3013	728	65	1369
Lightning-conductor.....	G. T. Walch.....	508,068	Nov. 7	136	38.39	65	784
Lightning conductor and arrester.....	A. B. Lyman.....	492,219	Feb. 21	1849	463	62	1150
Lightning-rod.....	N. D. C. Hodges.....	505,106	Sept. 19	1323	341	64	1547
Lightning-rod ball.....	E. K. Hum.....	492,512	Feb. 28	2323	576	62	1258
Lightning-rod ornament.....	J. J. Cole.....	510,837	Dec. 12	1690	420	65	1740
Limb. Artificial.....	A. Gault.....	496,645	May 2	404	110	63	693
Limb. Artificial.....	H. P. Judson.....	497,026	May 9	1028	262	63	822
Limb. Artificial.....	G. E. Marks.....	489,258	Jan. 3	430	120	62	95
Limb. Artificial.....	J. F. Read.....	507,453	Oct. 24	2818	690	65	568
Limb joint. Artificial.....	L. S. Gardner.....	509,157	Nov. 21	1928	471	65	1152
Limb joint. Artificial.....	J. B. Kreider.....	506,006	Oct. 3	321	84	65	63
Lime. Production of.....	J. F. Barrow.....	506,029	Oct. 3	350	93	65	68
Limekiln.....	P. Mc Loon.....	503,059	Aug. 8	1367	338	64	833
Limekiln.....	G. A. Mace.....	509,439	Nov. 28	2458	591	65	1264
Limekiln, cupola, or metallurgical furnace.....	E. J. Bird.....	507,204	Oct. 24	2406	593	65	469
Lime-slaking machine.....	A. R. Miller.....	490,612	Jan. 24	2594	669	62	568
Limestone-burning kiln.....	J. Briggs.....	507,411	Oct. 24	2751	675	65	555
Line-holder.....	J. R. Chamblin.....	507,418	Oct. 24	2766	678	65	558
Line holder and guide.....	J. H. Griswold.....	500,491	June 27	2882	709	63	1934
Link and pin coupling.....	T. Gaskins.....	498,643	May 30	3659	905	63	1335
Link for fastening cuffs, &c.....	A. J. H. C. and W. C. Needham.....	490,413	Jan. 24	2283	583	62	507
Linoieum. Apparatus for the manufacture of.....	D. N. Melvin.....	509,088	Nov. 21	1825	447	65	1132
Linoieum or oil floor-cloth. Manufacturing.....	J. C. Lyon.....	500,812	July 4	443	116	64	82
Linoieum or other floor-cloths. Machine for the man- ufacture of.....	J. S. Farmer, H. L. and I. H. Storey.....	508,925	Nov. 21	1555	380 381	65	1079
Linotype-making machine.....	C. Sears.....	489,503	Jan. 10	822	215 216	62	188
Liquid bodies. Separating the constituents of.....	A. Bornholdt.....	489,363	Jan. 3	582	157	62	155
Liquid-concentrating apparatus.....	O. Guttman.....	505,520	Sept. 26	2005	513	64	1666
Liquid-containing vessel.....	W. C. Wilson.....	507,055	Oct. 17	2121	527	65	425
Liquid-cooler.....	W. J. Fletcher.....	491,964	Feb. 14	1447	360	62	1053
Liquid-cooler.....	W. F. Kausen.....	504,590	Sept. 5	458	116	64	1355
Liquid-cooling apparatus. Bottled.....	I. J. Cobin and A. Hitt.....	507,996	Nov. 7	27	8.9	65	764
Liquid-dispensing apparatus.....	W. M. Fowler.....	507,316	Oct. 24	2603	640	65	526
Liquid-elevator.....	S. Jenkins.....	509,437	Nov. 28	2450	590 591	65	1263
Liquid goods. Receptacle for carrying.....	G. Perelli-Minetti.....	500,773	July 4	325	100 101	64	72
Liquid-meter.....	F. Shippen.....	508,774	Nov. 14	1273	317	65	1013
Liquid-meter. Oscillating.....	M. C. Greenbill.....	496,934	May 9	894	234	63	799

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Liquid-separator. Centrifugal	A. F. L. Bell.....	508,270	Nov. 7	481	{ 116 117	{ 65	847
Liquid-separator. Centrifugal	F. Hart	496,120	Apr. 25	2542	641	63	519
Liquid-separator. Centrifugal	C. D. Hellström	496,412	May 2	34	9, 10	63	625
Liquid-separator. Centrifugal	R. A. Lister and M. Pedersen	504,809	Sept. 12	828	{ 210 211	{ 64	1438
Liquid shaking and cooling machine	E. H. Gerrish	494,474	Mar. 28	2768	694	62	1934
Liquid-storage vessels. Device for removing sediment from bottoms of	J. E. Harder and J. H. Fox	500,742	July 4	336	89	64	63
Liquids. Apparatus for elevating and equalizing the supply of	W. M. Morgan.....	502,102	July 25	2501	628	64	500
Liquids. Device for handling	S. R. Mace	491,844	Feb. 14	1264	314	62	1017
Liquids. Device for handling fermented	F. C. C. Ishöy and H. P. Linderöth	490,565	Jan. 24	2518	648	62	553
Liquids, extracts, and solutions. Preparing fermented and distilled	C. Hornbostel	508,882	Nov. 14	1441	357	65	1044
Liquids from barrels. Apparatus for drawing	H. E. Bailey	504,512	Sept. 5	338	86	64	1333
Liquids from vegetable substances. Extracting or separating	A. Bornholdt	489,362	Jan. 3	580	157	62	125
Liquids from vessels. Device for discharging	W. L. Rowland.....	505,642	Sept. 26	2247	569	64	1733
Liquids. Method of and apparatus for charging	A. Werner.....	490,522	Jan. 24	2459	634	62	541
Liquids. Method of and apparatus for dispensing	J. P. Day	494,061	Mar. 21	2096	535	62	1796
Liquors. Method of and apparatus for purifying and softening	C. Heintz.....	492,542	Feb. 28	2366	588	62	1269
Liquors. Method of and apparatus for the manufacture and filling of	A. Werner.....	490,524	Jan. 24	2462	{ 634 635	{ 62	542
Liquors. Pasteurization of	H. Kropff.....	497,327	May 16	1532	386	63	926
Liquors. Slot-machine for delivering	J. H. Davis.....	509,119	Nov. 21	1871	458	65	1141
Liquor. Making alcoholic distilled	E. Bradley and E. N. Dickerson	504,074	Aug. 29	3007	.....	64	1180
Liquors by electrolysis. Apparatus for purifying	J. Becker	493,809	Mar. 21	1685	430	62	1718
Lister for sod-land	G. W. Scott	499,952	Dec. 5	174	41	65	1442
Lithographic drawings. Producing	F. F. Haggenmuller	494,850	Apr. 4	536	.....	63	104
Lithographic stones and plates. Composition for treating	E. and R. Arnold	504,772	Sept. 12	770	.....	64	1428
Lithographic transfers. Composition for forming	C. F. Habedank	502,964	Aug. 8	1231	.....	64	806
Load lifter and carrier	T. H. Butcher	508,866	Nov. 14	1424	353	65	1041
Loading apparatus	J. H. Runyan.....	493,343	Mar. 13	903	{ 231 232	{ 62	1550
Loading attachment. Cart	G. C. Haag	492,763	Feb. 28	2715	675	62	1338
Loading device	L. A. De Mayo	493,986	Mar. 21	1978	504	62	1773
Loading device	C. M. Furgason	504,976	Sept. 12	1103	282	61	1492
Loading device	C. W. Hays	500,328	June 27	2644	647	63	1892
Loading device. Wagon	A. Psota	493,598	Mar. 14	1334	340	62	1634
Loading machine. Earth	J. Oppold	503,250	Aug. 15	1689	{ 416 417	{ 64	904
Loading or piling machine	G. S. Kaime	504,589	Sept. 5	453	{ 115 116	{ 64	1354
Loading or unloading apparatus	E. Cardarelli	505,749	Sept. 26	2418	611	64	1763
Loading or unloading machine	G. W. King	494,813	Apr. 4	466	{ 116 117	{ 63	89
Loading-platform	H. Suer and A. Bobe	510,206	Dec. 5	609	143	65	1525
Lock:							
See Air-lock.	Oar-lock.						
Alarm-lock.	Padlock.						
Bicycle-lock.	Permutation-lock.						
Bicycle-chain lock.	Pin-lock.						
Brake-lock.	Puzzle-lock.						
Car-door lock.	Railway-switch lock.						
Coin-controlled lock.	Safe-lock.						
Combination-lock.	Sash-lock.						
Door-lock.	Seal-lock.						
Drawer-lock.	Stopper-lock.						
Electric lock.	Switch-lock.						
Elevator-lock.	Till-lock.						
Fence-lock.	Time-lock.						
Hasp-lock.	Trunk-lock.						
Indicator-lock.	Valve-lock.						
Magnetic lock.	Vehicle-seat lock.						
Nut-lock.	Whip-lock.						
Nut and bolt lock.							
Lock	M. Badoni.....	501,639	July 18	1760	438	64	352
Lock	M. Badoni.....	501,640	July 18	1761	439	64	353
Lock	M. Badoni.....	504,292	Aug. 29	3373	843	64	1250
Lock	W. F. Beasley	499,503	June 13	1224	303	63	1629
Lock	W. F. Beasley	499,505	June 13	1222	304	63	1630
Lock	J. T. Beatty	505,214	Sept. 19	1490	388	64	1577
Lock	G. A. Beckwith	506,461	Oct. 10	1158	287	65	234
Lock	J. D. Bowley	491,868	Feb. 14	1303	322	62	1024
Lock	A. Burbee	503,648	Aug. 22	2349	587	64	1037
Lock	W. Dreyer	491,991	Feb. 21	1489	372	62	1076
Lock	M. Higgins	491,352	Feb. 7	493	126	62	841
Lock	L. E. Jacobus	490,440	Jan. 24	2319	602	62	513
Lock	J. L. Jones	504,785	Sept. 12	789	199	64	1431
Lock	A. K. Leitch	491,779	Feb. 14	1166	291	62	996
Lock	H. L. Link	495,419	Apr. 11	1434	361	63	283
Lock	R. T. McKaig	511,738	Dec. 26	3239	795	65	2050
Lock	B. S. Miles	497,588	May 16	1943	488	63	999
Lock	W. J. Neidl	503,706	Aug. 22	2438	607	64	1054
Lock	C. P. Nixholm	506,792	Oct. 17	1689	425	65	346
Lock	A. O'Keefe	494,965	Apr. 4	686	176	63	131
Lock	G. Piddington	499,580	June 13	1403	335	63	1649
Lock	J. J. Ridgway	498,490	May 30	3391	844	63	1288
Lock	M. O. Royce	489,692	Jan. 10	1085	281	62	241
Lock	F. Simons	494,446	Mar. 28	2726	683	62	1927

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				Spec.	Disg.	Vol.	Page.
Lock.....	W. E. Sparks.....	502,937	Aug. 8	1185	292	64	767
Lock.....	H. Tracy and H. Noble.....	507,188	Oct. 24	2375	586	65	484
Lock.....	G. E. Tyson.....	489,049	Jan. 3	106	29	62	27
Lock.....	G. E. Tyson.....	500,696	July 4	262	71	64	49
Lock.....	J. Witt.....	499,771	June 20	1716	412	63	1718
Lock and check-clasp. Combined.....	H. J. Welch.....	497,972	May 23	2556	638	63	1124
Lock and latch.....	A. Burbee.....	502,276	Aug. 1	17	4	64	570
Lock and latch.....	A. Burbee.....	503,649	Aug. 22	2351	587	64	1038
Lock and latch.....	O. J. Brugman.....	509,016	Nov. 21	1680	417	65	1106
Lock and latch.....	J. D. Perkins.....	511,454	Dec. 26	2793	676	65	1968
Lock and latch.....	C. R. Uhlmann.....	496,497	May 2	164	47	63	649
Lock and latch combined.....	A. A. Page.....	499,469	June 13	1222	291	63	1619
Lock and latch combined.....	F. F. Swanson.....	504,482	Sept. 5	276	71	64	1322
Lock-brake.....	V. W. Mason.....	496,268	Apr. 25	2766	692	63	561
Lock-case.....	F. J. Biggs.....	503,400	Aug. 15	1936	481	64	948
Lock for metallic plates.....	W. H. Brooks.....	491,206	Feb. 7	236	59	62	792
Lock-joint.....	J. W. Coffeen, Jr.....	509,364	Nov. 28	2295	556	65	1232
Lock-nut.....	R. Kirkpatrick, G. S. Tiller, and W. O. Kirkpatrick.....	506,596	Oct. 10	1368	343	65	274
Lock-nut.....	G. C. Richards.....	491,814	Feb. 14	1217	304	62	1007
Lock or latch for elevator or other doors.....	F. A. Winslow.....	497,041	May 9	1047	268	63	825
Lock-snap.....	D. A. Jones.....	495,416	Apr. 11	1431	360	63	282
Lock-washer.....	F. W. Schroeder.....	497,348	May 16	1567	394	63	932
Locking device. Compound.....	H. A. Brinton.....	490,098	Jan. 17	1758	458	62	391
Locking device for drawers, doors, &c.....	L. Du Bois and M. Le Grand.....	497,406	May 16	1654	418	63	949
Locking device for suspending-lines.....	J. R. Fletcher.....	491,541	Feb. 14	784	200	62	919
Locomotive.....	C. Hagans.....	501,616	July 18	1723	429	64	346
Locomotive.....	W. J. Tripp.....	511,564	Dec. 26	2958	720 721	65	1999
Locomotive and tender housing.....	F. U. Adams.....	490,057	Jan. 17	1693	440 441	62	377
Locomotive ash-pan.....	A. and A. Welsh.....	490,332	Jan. 24	2162	564	62	383
Locomotive ash-pan.....	J. Williams.....	499,866	June 20	1878	456	63	1745
Locomotive attachment.....	G. H. Russell.....	505,851	Oct. 3	73	18	65	16
Locomotive-boiler.....	W. B. Mack.....	500,716	July 4	295	80	64	55
Locomotive-boiler.....	W. B. Mack.....	503,287	Aug. 15	1754	433	64	916
Locomotive-boiler.....	W. B. Mack.....	506,054	Oct. 3	395	103	65	77
Locomotive-boiler.....	J. T. McLeilan.....	493,232	Mar. 7	713	183	62	1498
Locomotive-boiler.....	J. S. Newlin.....	489,827	Jan. 10	1286	337	62	282
Locomotive-brake.....	A. E. Detro.....	506,104	Oct. 3	473	123	65	92
Locomotive-brake mechanism.....	T. H. Haberkorn.....	510,911	Dec. 19	1860	458	65	1782
Locomotive-cab.....	E. W. Mackenzie-Hughes.....	505,163	Sept. 19	1410	363	64	1562
Locomotive-crane.....	W. H. Morgan.....	496,428	May 2	58	17, 18	63	629
Locomotive. Compound.....	R. C. Wright.....	500,788	July 4	408	107	64	75
Locomotive-coupling.....	T. L. McKeen.....	491,903	Feb. 14	1356	337 338	62	1035
Locomotive-coupling.....	W. P. Prendergast.....	491,719	Feb. 14	1070	270	62	979
Locomotive coupling-bar.....	L. A. Briere.....	502,653	Aug. 1	679	163	64	691
Locomotive draft device.....	J. P. Serve.....	498,034	May 23	2654	663 664	63	1142
Locomotive draft device.....	T. Wise.....	498,097	May 23	2747	686	63	1159
Locomotive driving-gear.....	D. S. Patterson.....	499,034	June 6	509	119	63	1480
Locomotive. Electric.....	A. I. Ambler.....	504,484	Sept. 5	278	72	64	1322
Locomotive. Electric.....	E. M. Boynton.....	496,550	May 2	250	66, 67	63	664
Locomotive. Electric.....	J. F. S. Branth.....	506,358	Oct. 10	970	241	65	196
Locomotive. Electric.....	L. W. Case.....	500,851	July 4	504	131	64	92
Locomotive. Electric.....	J. I. Conklin.....	507,997	Nov. 7	29	9	65	764
Locomotive. Electric.....	T. A. Edison.....	493,425	Mar. 14	1020	263 264	62	1575
Locomotive. Electric.....	W. E. C. Eustis.....	501,246	July 11	1134	288	64	221
Locomotive. Electric.....	J. C. Henry.....	500,066	June 20	2186	532 533	63	1800
Locomotive. Electric.....	J. C. Henry.....	500,067	June 20	2188	533	63	1800
Locomotive. Electric.....	J. C. Henry.....	509,311	Nov. 21	2192	527 528	65	1202
Locomotive. Electric.....	R. M. Hunter.....	502,297	Aug. 1	66	15	64	578
Locomotive. Electric.....	H. W. Libbey.....	506,786	Oct. 17	1682	423 424	65	345
Locomotive. Electric.....	J. G. McCormick.....	511,448	Dec. 26	2785	674	65	1966
Locomotive. Electric.....	A. Philipsborn.....	493,942	Mar. 21	1890	481 482	62	1757
Locomotive. Electric.....	A. Philipsborn.....	493,943	Mar. 21	1893	482 483	62	1758
Locomotive. Electric.....	A. Philipsborn and M. Schiemann.....	490,307	Jan. 24	2123	552	62	475
Locomotive. Electric.....	F. B. Rae.....	491,857	Feb. 14	1284	318 319	62	1021
Locomotive. Electric.....	A. Schmid.....	498,577	May 30	3543	877 878	63	1314
Locomotive. Electric.....	S. H. Short.....	491,666	Feb. 14	986	249	62	961
Locomotive. Electric.....	E. A. Sperry.....	501,195	July 11	1059	268	64	207
Locomotive. Electric.....	E. A. Sperry.....	502,020	July 25	2373	596 597	64	476
Locomotive. Electric.....	F. M. Stevens.....	500,276	June 27	2550	623	63	1876
Locomotive. Electric.....	C. J. Van Depoele.....	496,330	Apr. 25	2873	718	63	581
Locomotive. Electric.....	J. T. Wilson.....	507,396	Oct. 24	2729	069	65	551
Locomotive. Electric.....	C. F. Winkler.....	510,947	Dec. 19	1934	472	65	1796
Locomotive-engine.....	F. W. Johnstone.....	493,776	Mar. 21	1620	412 413	62	1706
Locomotive-engine.....	R. Klein and R. Lindner.....	511,531	Dec. 26	2905	707 708	65	1990
Locomotive-engine.....	J. Richards.....	493,599	Mar. 14	1335	340	62	1634
Locomotive-engine.....	D. M. Shively.....	496,542	May 2	238	63	63	662
Locomotive-engine. Compound.....	F. W. Dean.....	507,353	Oct. 24	2660	654 655	65	537

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Locomotive-engine. Compound	W. H. Hansell	511,016	Dec. 19	2045	{ 505 506 }	65	1816
Locomotive-engine. Compound	S. M. Vauclain	499,065	June 6	557	132	63	1488
Locomotive-engine pilot	F. F. Mortimer and J. P. Coffin	489,330	Jan. 3	515	141	62	111
Locomotive-engine. Indicator for	S. G. Clark	494,189	Mar. 23	2319	587	62	1852
Locomotive exhaust-pipe	J. B. Hartigan	496,410	May 2	32	9	63	624
Locomotive fire-box	C. W. Hullings	490,629	Jan. 24	2647	{ 681 682 }	62	578
Locomotive fire-kindler	C. T. Smith	510,447	Dec. 12	1002	239	65	1614
Locomotive fire-kindling apparatus	J. McNaughton	508,739	Nov. 14	1222	304	65	1004
Locomotive jib-crane	W. H. Morgan	496,430	May 2	62	19	63	630
Locomotive link-movement	S. L. Branton	510,855	Dec. 19	1322	450	65	1775
Locomotive or other boiler	T. Fitzgerald and E. T. White	509,800	Nov. 28	3045	736	65	1375
Locomotive-pilot draw-bar coupling	W. P. Prendergast	506,724	Oct. 17	1578	395	65	325
Locomotive. Pneumatic hydraulic	W. Cooper	504,668	Sept. 5	570	145	64	1377
Locomotive. Pneumatic hydraulic	W. Cooper	504,669	Sept. 5	575	145	64	1378
Locomotive regulation. Electric	R. M. Hunter	494,705	Apr. 4	278	70, 71	63	56
Locomotive sand-box	T. F. O'Friel	504,609	Sept. 5	482	123	64	1360
Locomotive sand-box	L. T. Slaughter	492,038	Feb. 21	1589	395	62	1096
Locomotive sanding device. Railway	A. Brüggemann	496,149	Apr. 25	2581	649	63	526
Locomotive smoke-stacks. Draft-regulator for	F. Stratiner	492,246	Feb. 21	1887	471	62	1158
Locomotive stand pipe	R. H. White	489,245	Jan. 3	409	114	62	91
Locomotive-tenders. Water-supplying device for	H. R. Winkelmann	499,074	June 6	571	136	63	1490
Locomotive. Tramway	C. D. Scott	504,541	Sept. 5	382	96	64	1341
Locomotives. Apparatus for supplying purified water to	R. Learmonth	495,496	Apr. 18	1572	396	63	329
Locomotives. Automatic supply-tank for	R. G. Ward	502,152	July 25	2585	650	64	516
Locomotives. Machine for grinding links and link-blocks for valve-motions of	H. C. Smith	507,639	Oct. 31	3170	776	65	646
Locomotives. Regulating electric	J. B. Blood	501,488	July 18	1519	382	64	397
Locomotives. Safety-stop for	J. N. Launder	500,810	July 4	440	116	64	81
Locomotives. Variable exhaust for	G. B. Taylor	497,970	May 23	2553	637	63	1124
Locomotives. Variable exhaust-nozzle for	G. H. Watson	502,796	Aug. 8	946	230	64	755
Log-binder. Stake	G. A. Rooney	505,848	Oct. 3	69	17	65	16
Log-draw	C. W. and G. J. Reichert	494,263	Mar. 28	2438	614	62	1874
Log-kicker	G. A. Kelly	497,098	May 9	1138	291	63	841
Log-pulling apparatus	E. M. Ivens	498,655	May 30	3681	910	63	1339
Log-roller	W. A. Wilkinson	495,716	Apr. 18	1924	{ 483 484 }	63	388
Log-splitter	W. E. Hill	508,221	Nov. 7	398	96	65	832
Log-stop and loader	W. E. Hill	496,938	May 9	900	236	63	800
Log-unloader	W. E. Hill	505,829	Oct. 3	40	11	65	11
Log-turner	G. M. Hinkley	510,790	Dec. 12	1612	401	65	1796
Logs, &c. Means for guiding floating	J. Finney and G. Davidson	505,039	Sept. 12	1205	310	64	1511
Logs. Transporting	W. V. Allen	504,191	Aug. 29	3215	801	64	1220
Logwood-chips. Curing	P. T. Austen	494,237	Mar. 28	2399	62	62	1867
Loom	W. Britain, Jr.	506,467	Oct. 10	1170	{ 290 291 }	65	236
Loom	G. S. Cox	492,144	Feb. 21	1728	431	62	1124
Loom	W. F. Draper	491,044	Jan. 31	3328	849	62	726
Loom	D. Durkin	501,001	July 4	737	193	64	134
Loom	A. D. Emery	503,467	Aug. 15	2036	507	64	965
Loom	A. D. Emery and W. T. Donnelly	503,472	Aug. 15	2046	510	64	967
Loom	A. W. Fairweather	499,456	June 13	1205	{ 287 288 }	63	1616
Loom	H. E. Hamilton, N. Boisvert, and G. Champoux	496,480	May 2	137	38	63	644
Loom	L. W. Lombard	510,431	Dec. 12	976	233	65	1609
Loom	R. Rigby	507,328	Oct. 24	2618	644	65	529
Loom	O. W. Schaum	497,824	May 23	2315	581	63	1083
Loom	E. P. Woodward	502,024	July 25	2381	682	64	478
Loom	H. Wyman	490,238	Jan. 17	1990	522	62	437
Loom	H. Wyman	490,239	Jan. 17	1993	522	62	437
Loom. Circular	A. de Laski	502,231	July 25	2714	{ 685 686 }	64	542
Loom. Circular	A. de Laski	503,544	Aug. 15	2160	541	64	989
Loom. Circular	A. H. Soret, J. Hurtn, and V. Hautin.	491,324	Feb. 7	438	{ 113 114 }	62	831
Loom double tension device	A. D. Emery	503,456	Aug. 15	2013	{ 499 500 }	64	961
Loom for weaving bags	H. P. Hunter	494,204	Mar. 28	2345	{ 593 594 595 }	62	1857
Loom for weaving chenille strips	F. Watzlawik	502,920	Aug. 8	1154	{ 283 284 285 }	64	794
Loom for weaving cut pile fabrics	G. A. J. Schott	499,474	June 13	1228	293	63	1620
Loom for weaving double-faced pile fabrics	J. Coley	489,731	Jan. 10	1143	296	62	252
Loom for weaving endless or jointless fabrics	D. Fileppi	502,182	July 25	2632	664	64	526
Loom for weaving short wefts	A. W. Johnson	495,112	Apr. 11	936	{ 236 237 238 }	63	194
Loom for weaving tufted fabrics	H. Wyman and J. A. Clark	490,237	Jan. 17	1984	{ 520 521 522 523 524 }	62	436
Loom for weaving tufted fabrics	W. Youngjohns	510,755	Dec. 12	1548	{ 386 387 388 }	65	1715
Loom for weaving tufted fabrics	W. Youngjohns and W. Taylor	490,530	Jan. 24	2471	{ 636 637 }	62	544
Loom fringe attachment	K. Engsberg	491,305	Feb. 7	409	105	62	825
Loom harness-hook	J. Johnson	498,474	May 30	3369	839	63	1285
Loom-harness. Machine for making	E. Haast	500,653	July 4	192	50	64	38

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Loom-heddle-actuating mechanism.....	F. Buyck.....	500,112	June 27	2258	{ 549 550 }	63	1823
Loom-heddle and heddle-frame.....	J. Grob.....	489,631	Jan. 10	1000	260	62	223
Loom Jacquard mechanism.....	G. Bürkle.....	504,323	Sept. 5	17	5, 6	64	1274
Loom Jacquard mechanism.....	F. Charcot.....	500,852	July 4	505	131	64	92
Loom Jacquard mechanism.....	J. Gebbie.....	506,686	Oct. 17	1509	379	65	313
Loom Jacquard mechanism.....	H. Hardwick.....	497,022	May 9	1021	261	63	820
Loom Jacquard mechanism.....	H. Hardwick.....	497,277	May 9	1411	{ 357 358 359 }	63	890
Loom Jacquard mechanism.....	I. Hillas.....	497,879	May 23	2410	601	63	1100
Loom Jacquard mechanism.....	O. W. Schaum.....	507,635	Oct. 31	3157	{ 773 774 }	65	644
Loom Jacquard mechanism.....	G. W. Stafford.....	497,833	May 23	2328	584	63	1085
Loom Jacquard mechanism.....	J. Zimmermann.....	507,575	Oct. 31	3051	746	65	623
Loom let-off.....	P. Duffy.....	497,170	May 9	1248	317	63	861
Loom let-off mechanism.....	J. C. Bill.....	493,058	Mar. 7	443	112	62	1447
Loom let-off mechanism.....	A. D. Emery.....	503,462	Aug. 15	2027	{ 504 505 }	64	963
Loom let-off mechanism.....	A. D. Emery.....	503,468	Aug. 15	2039	508	64	965
Loom let-off mechanism.....	J. M. Linscott.....	501,518	July 18	1509	395	64	316
Loom let-off motion.....	R. Wilby.....	495,766	Apr. 18	2003	{ 507 508 }	63	403
Loom-lingo.....	G. W. Stafford.....	499,478	June 13	1233	294	63	1621
Loom pattern mechanism.....	T. J. Corcoran.....	495,453	Apr. 11	1494	376	63	294
Loom pattern mechanism.....	G. F. Hutchins.....	498,956	June 6	363	87	63	1456
Loom pattern mechanism.....	G. F. Hutchins.....	506,818	Oct. 17	1739	438	65	355
Loom pattern mechanism.....	W. Wattie.....	501,700	July 18	1859	{ 462 463 }	64	369
Loom pattern mechanism.....	H. Wyman.....	509,712	Nov. 28	2893	{ 700 701 }	65	1346
Loom pattern-reversing mechanism.....	W. Wattie.....	490,890	Jan. 31	3059	{ 785 786 }	62	674
Loom-picker.....	A. D. Emery.....	503,459	Aug. 15	2019	501	64	962
Loom-picker.....	A. D. Emery.....	503,464	Aug. 15	2031	505	64	964
Loom picker-cam.....	A. D. Emery.....	503,473	Aug. 15	2049	510	64	967
Loom picker-check.....	W. Kershaw.....	498,515	May 30	3439	853	63	1297
Loom picker-staff check.....	J. Turner.....	495,644	Apr. 18	1810	454	63	369
Loom picker-stick.....	J. Johnson.....	493,331	Mar. 14	889	228	62	1547
Loom picker-stick check.....	J. Johnson.....	502,970	Aug. 8	1249	306	64	809
Loom picker-strap holder.....	L. W. Milliken.....	508,550	Nov. 14	941	232	65	948
Loom picking-bands, &c. Apparatus for the manu- facture of.....	T. Clarke.....	510,500	Dec. 12	1088	262	65	1631
Loom picking mechanism.....	A. D. Emery.....	503,470	Aug. 15	2042	509	64	966
Loom picking-motion.....	J. and A. Moss.....	510,608	Dec. 12	1306	{ 318 319 }	65	1669
Loom pile-wire.....	K. W. Weiss.....	505,583	Sept. 26	2144	542	64	1713
Loom reed.....	L. F. Liotard.....	491,575	Feb. 14	844	214	62	932
Loom reversing mechanism.....	G. F. Hutchins.....	491,776	Feb. 14	1163	291	62	996
Loom shedding mechanism.....	A. D. Emery.....	503,460	Aug. 15	2020	{ 501 502 503 }	64	962
Loom shedding mechanism.....	A. D. Emery.....	503,469	Aug. 15	2040	{ 508 509 }	64	966
Loom shedding mechanism.....	C. Falvey.....	490,106	Jan. 17	1771	461	62	394
Loom shedding mechanism.....	E. Ingraham.....	503,375	Aug. 15	1904	472	64	942
Loom shedding mechanism.....	T. C. Orndorff.....	507,240	Oct. 24	2466	608	65	500
Loom shedding mechanism.....	O. W. Schaum.....	492,908	Mar. 7	221	55	62	1402
Loom shedding mechanism.....	J. H. Tschopp.....	510,657	Dec. 12	1392	{ 341 342 }	65	1685
Loom-shuttle.....	J. T. Ahrens.....	496,766	May 2	593	159	63	726
Loom-shuttle.....	S. M. Deen.....	490,010	Jan. 17	1606	419	62	361
Loom-shuttle.....	J. M. Hamblin.....	501,781	July 18	1998	493	64	393
Loom-shuttle.....	A. Isherwood.....	496,879	May 9	801	211	63	782
Loom-shuttle.....	J. W. Keeley.....	505,203	Sept. 19	1475	384	64	1574
Loom-shuttle.....	A. H. Steele.....	499,944	June 20	1994	484	63	1766
Loom-shuttle.....	G. C. Voigt.....	509,339	Nov. 21	2248	544	65	1212
Loom shuttle-binder.....	H. E. Hamilton.....	504,349	Sept. 5	55	15	64	1281
Loom shuttle-binder.....	R. Lund.....	494,719	Apr. 4	302	76	63	61
Loom shuttle-binder.....	T. E. Norman.....	505,574	Sept. 26	2127	539	64	1710
Loom shuttle-box-operating mechanism.....	J. Eastwood.....	509,615	Nov. 28	2747	663	65	1319
Loom shuttle-box-operating mechanism.....	G. Goodline.....	498,260	May 30	3016	{ 751 752 }	63	1221
Loom shuttle-box-operating mechanism.....	C. H. Knowlton and B. F. Meyer.....	503,542	Aug. 15	2154	{ 539 540 }	64	987
Loom shuttle-box-operating mechanism.....	C. H. Knowlton and B. F. Meyer.....	503,543	Aug. 15	2158	540	64	988
Loom shuttle-box-operating mechanism.....	H. Wyman.....	498,417	May 30	3272	{ 815 816 }	63	1267
Loom-shuttle check and binder.....	A. N. Reeves.....	509,945	Dec. 5	162	38	65	1440
Loom shuttle-motion.....	S. C. Bailey.....	510,830	Dec. 12	1681	418	65	1739
Loom shuttle-motion.....	H. Wyman.....	503,924	Aug. 22	2757	691	64	1118
Loom-shuttle. Self-threading.....	J. A. Gendron.....	499,784	June 20	1737	420	63	1721
Loom-shuttle. Self-threading.....	S. M. Hamblin.....	503,851	Aug. 22	2651	664	64	1097
Loom-shuttle. Self-threading.....	J. H. Nason.....	494,879	Apr. 4	567	142	63	110
Loom-shuttle tension device.....	E. Domenge.....	504,567	Sept. 5	425	108	64	1349
Loom-shuttle tension device.....	J. B. Faisant and J. Eicher.....	492,395	Feb. 28	2119	529	62	1218
Loom-shuttle thread-guide.....	R. Orr.....	499,308	June 13	926	224	63	1566
Loom stop-motion.....	H. Gaunt and S. E. Wild.....	504,832	Sept. 12	869	{ 223 224 }	64	1448
Loom stopping mechanism.....	A. D. Emery.....	503,461	Aug. 15	2024	{ 503 504 }	64	962
Loom stopping mechanism.....	H. E. Hamilton, N. Boisvert, and G. Champoux.....	498,881	June 6	236	55	63	1434
Loom stopping mechanism.....	A. Taplin.....	490,175	Jan. 17	1881	490	62	416

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Loom. Swivel.....	B. Haytock.....	491,425	Feb. 7	594	150	62	861
Loom. Swivel.....	G. F. Hutchins.....	497,428	May 16	1689	426 427	63	955
Loom. Swivel.....	O. W. Schaum.....	493,651	Mar. 21	1414	358 359	62	1665
Loom. Swivel.....	O. W. Schaum.....	493,652	Mar. 21	1417	360 361	62	1665
Loom. Swivel.....	O. W. Schaum.....	493,653	Mar. 21	1420	361 362	62	1666
Loom. Swivel.....	O. W. Schaum.....	493,654	Mar. 21	1422	362	62	1666
Loom. Swivel.....	H. Schippers.....	496,668	May 2	443	119	63	700
Loom. Swivel.....	T. Smith and J. J. Minchin.....	499,399	June 13	1101	265 266	63	1597
Loom. Swivel.....	T. Smith and J. J. Minchin.....	499,400	June 13	1108	266 267	63	1598
Loom take-up mechanism.....	A. D. Emery.....	503,458	Aug. 15	2017	501	64	962
Loom take-up mechanism.....	R. J. Risk.....	491,816	Feb. 14	1219	305	62	1008
Loom take-up mechanism.....	O. A. Sawyer and M. M. Labue.....	506,264	Oct. 10	806	199 200	65	165
Loom take-up mechanism.....	H. Wyman.....	478,418	May 30	3274	816	63	1268
Loom-temple.....	D. Durkin.....	503,906	Aug. 22	2731	685	64	1113
Loom-temple.....	F. E. D. Field.....	510,851	Dec. 12	1744	431	65	1750
Loom-temple.....	W. I. Stimpson.....	497,692	May 16	2110	527	63	1029
Loom-temple.....	A. Tomlinson.....	504,288	Aug. 29	3364	841	64	1248
Loom warp-beam.....	A. J. Seybert.....	504,442	Sept. 5	211	55	64	1310
Loom warp-clamp.....	J. F. Kieswetter.....	493,405	Mar. 14	992	256	62	1570
Loom warp stop-motion.....	J. C. Brooks.....	501,041	July 4	796	208	64	145
Loom warp stop-motion.....	W. F. Draper.....	496,353	Apr. 25	2917	729	63	590
Loom warp stop-motion.....	E. Smith.....	509,494	Nov. 28	2555	618	65	1282
Loom warp stop-motion.....	O. Smith.....	498,191	May 23	2890	721	63	1184
Loom warp stop-motion.....	O. Smith.....	498,192	May 23	2898	722	63	1185
Loom warp stop-motion.....	O. Smith.....	498,193	May 23	2902	722 723	63	1186
Loom warp stop-motion.....	O. Smith.....	498,194	May 23	2907	723	63	1186
Loom warp-thread-operating mechanism.....	F. A. Woodhead.....	510,752	Dec. 12	1545	383	65	1714
Loom weft stop mechanism.....	A. D. Emery.....	503,466	Aug. 15	2034	506	64	964
Loom weft stop-motion.....	J. N. d'Andria and E. Slicer.....	499,196	June 13	762	182	63	1537
Loom weft stop-motion.....	T. Thacker.....	492,998	Mar. 7	356	90	62	1429
Looms. Automatic warp stop-motion for.....	E. Smith.....	491,139	Feb. 7	121	33	62	771
Looms. Differential take-up for.....	C. Jones and R. Tolson.....	497,579	May 16	1929	425	63	997
Looms. Drop-box-changing mechanism for power.....	F. Hofmann.....	500,768	July 4	377	97	64	70
Looms. Fluff-catcher for vertical.....	A. D. Emery.....	503,463	Aug. 15	2030	505	64	964
Looms. Fluffing-discharger for.....	A. D. Emery.....	503,471	Aug. 15	2045	509	64	966
Looms for weaving looped pile fabrics. Lay-motion for.....	R. C. Young.....	501,585	July 18	1670	417	64	395
Looms. Jacquard harness-evening mechanism for.....	R. T. Markee.....	492,038	Feb. 21	1565	390	62	1091
Looms. Lay-driving mechanism for vertical.....	A. D. Emery.....	503,457	Aug. 15	2015	500	64	962
Looms. Loose-reed motion for power.....	W. McMichael.....	508,041	Nov. 7	92	26	65	776
Looms. Pile-wire for.....	G. Segschneider.....	500,275	June 27	2548	623	63	1875
Looms. Pneumatic let-off mechanism for.....	F. Stiener.....	495,847	Apr. 18	2128	535	63	426
Looms. Positive shuttle-motion for.....	E. H. Graham.....	493,956	Aug. 29	2829	706	64	1148
Looms. Positive shuttle-motion for.....	J. M. Linscott.....	496,574	May 2	288	77	63	671
Looms. Race-rail for double-shed vertical.....	A. D. Emery.....	503,465	Aug. 15	2033	506	64	964
Looms. Reed-supporting device for.....	J. W. Cheney.....	499,870	June 20	1887	459	63	1747
Looms. Take-up mechanism for circular.....	A. deLaski.....	503,863	Aug. 22	2664	668	64	1100
Looms. Take-up mechanism for narrow-ware.....	E. Burgess.....	494,755	Apr. 4	362	91	63	71
Looms. Take-up mechanism for narrow-ware.....	O. W. Schaum.....	497,823	May 23	2313	581	63	1082
Loop. Billet.....	W. P. Gelabert.....	493,995	Mar. 21	1991	507	62	1766
Loop-fastener.....	H. Green.....	502,962	Aug. 8	1226	302	64	806
Loop. Garment.....	C. G. Meyer.....	491,661	Feb. 14	980	247	62	960
Loop-switch.....	F. D. Goold.....	489,674	Jan. 10	1053	214	62	235
Lounge.....	W. S. Bowie.....	497,749	May 16	2192	548	63	1045
Lounge.....	A. Jansen.....	489,958	Jan. 17	1518	397	62	343
Lounge.....	K. Wenzel.....	497,696	May 16	2119	529	63	1031
Lounge or couch bed.....	W. S. Bowie.....	497,748	May 16	2189	548	63	1045
Low-water alarm.....	N. Guyer.....	502,815	Aug. 8	979	238	64	761
Low-water alarm.....	W. D. McLauchlin and A. Phillips.....	505,720	Sept. 26	2376	600	64	1755
Low-water alarm.....	A. Phillips and W. D. McLauchlin.....	489,497	Jan. 10	811	213	62	125
Low-water indicator for boilers.....	W. H. Rodgers.....	492,236	Feb. 21	1874	468	62	1155
Lozenge-machine.....	W. Brierley.....	496,590	May 2	309	83	63	676
Lubricant.....	R. Hutchison.....	496,225	Apr. 25	2698	.....	63	548
Lubricant.....	W. S. Lever.....	496,742	May 2	560	150	63	720
Lubricant, journal-box, and method of making.....	J. C. Kitton.....	507,072	Oct. 17	2144	532	65	429
Lubrication system.....	A. C. Pain.....	498,689	May 30	3741	924	63	1349
Lubricator: See Axle-lubricator. Shaft-lubricator. Journal-lubricator. Windmill-lubricator. Pulley-lubricator.							
Lubricator.....	E. D. Bangs.....	494,315	Mar. 28	2514	634	62	1889
Lubricator.....	E. D. Bangs.....	503,925	Aug. 22	2759	691	64	1118
Lubricator.....	L. W. Beard.....	497,297	May 16	1485	374	63	918
Lubricator.....	G. Binder.....	504,700	Sept. 12	640	163	64	1403
Lubricator.....	M. Booth.....	509,864	Dec. 5	22	5	65	1414
Lubricator.....	G. W. Boyd.....	507,409	Oct. 24	2749	675	65	555
Lubricator.....	F. Brunbauer.....	493,475	Mar. 14	1108	285	62	1590
Lubricator.....	J. Clark.....	499,011	June 6	476	111	63	1474
Lubricator.....	J. Desmond.....	510,632	Dec. 12	1345	330	65	1676
Lubricator.....	J. Desmond.....	510,633	Dec. 12	1347	331	65	1677
Lubricator.....	W. A. Downes.....	490,246	Jan. 17	2006	525	62	440
Lubricator.....	J. R. Drozeski.....	505,597	Sept. 26	2165	548	64	1717
Lubricator.....	N. and A. Druebert.....	494,738	Apr. 4	335	85	63	66
Lubricator.....	N. J. H. Duncan.....	506,308	Oct. 10	879	216	65	179
Lubricator.....	J. H. and F. A. Earles.....	502,264	July 25	2782	703	64	553
Lubricator.....	G. B. Essex.....	493,824	Mar. 21	1702	433	62	1721

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Lubricator	L. Fawcett	510,779	Dec. 12	1591	396	65	1722
Lubricator	G. Finfrock and G. Veesenmeyer	499,186	June 6	743	397	63	1520
Lubricator	A. A. Freeman	497,273	May 9	1407	356	63	889
Lubricator	W. F. Garrison	491,477	Feb. 7	684	172	62	879
Lubricator	T. Glover and T. J. Jean	490,247	Jan. 17	2007	525	62	440
Lubricator	A. G. Hay and M. McIntyre	499,541	June 13	1341	318	63	1640
Lubricator	F. Herman	505,828	Oct. 3	39	10	65	10
Lubricator	B. F. Howard	496,262	Apr. 25	2758	690	63	559
Lubricator	A. R. Hoy	492,018	Feb. 21	1535	383	62	1085
Lubricator	S. Irving	509,908	Dec. 5	108	24	65	1430
Lubricator	C. C. Jerome	493,727	Mar. 21	1543	393	62	1690
Lubricator	P. F. Krug	490,910	Jan. 31	3106	796	62	683
Lubricator	P. F. Krug	502,100	July 25	2498	627	64	499
Lubricator	B. Liebing	509,668	Nov. 28	2833	684	65	1335
Lubricator	V. C. T. Lohmann and C. V. Andersen	494,106	Mar. 21	2178	556	62	1812
Lubricator	E. H. Lunken	492,091	Feb. 21	1641	408	62	1106
Lubricator	E. H. Lunken	498,438	May 30	3313	825	63	1275
Lubricator	J. C. Mackintosh	495,819	Apr. 18	2083	525	63	417
Lubricator	W. F. Mattes and J. F. Lewis	499,434	June 13	1169	279	63	1609
Lubricator	E. McCoy	498,809	June 6	93	23	63	1406
Lubricator	J. L. Morris	494,788	Apr. 4	423	105	63	82
Lubricator	G. L. Motter	496,578	May 2	292	78	63	672
Lubricator	G. W. Mowrer and J. R. Jordan	508,485	Nov. 14	892	206	65	927
Lubricator	R. Place	502,139	July 25	2558	641	64	511
Lubricator	T. Poore	491,224	Feb. 7	265	66	62	798
Lubricator	A. R. Queen and J. J. Kimball	501,627	July 18	1741	433	64	349
Lubricator	A. J. Rogers	497,968	May 23	2549	636	63	1123
Lubricator	H. C. Roller	499,595	June 13	1425	341	63	1654
Lubricator	H. Ritter and E. H. Lunken	506,442	Oct. 10	1127	281	65	228
Lubricator	C. W. Sherburne	498,944	June 6	342	81	63	1452
Lubricator	O. T. Snyder	504,178	Aug. 29	3185	796	64	1214
Lubricator	D. Stone	503,013	Aug. 8	1305	320	64	820
Lubricator	C. E. Traves	503,506	Aug. 15	2100	525	64	977
Lubricator	C. Tregoning	491,389	Feb. 7	547	139	62	853
Lubricator	A. W. Walker	495,535	Apr. 18	1632	409	63	339
Lubricator	M. W. White	500,451	June 27	2826	696	63	1925
Lubricator	E. E. Witter	491,153	Feb. 7	141	38	62	776
Lubricator	C. B. Wood	502,158	July 25	2600	654	64	519
Lubricator	S. F. Woodworth	507,397	Oct. 24	2730	669	65	551
Lubricator	J. U. Zurinden	492,252	Feb. 21	1897	474	62	1160
Lug. Supporting.	G. H. Drake	491,091	Feb. 7	44	12	62	757
Lumber-carrier	H. and J. W. Hawkins and J. B. Harmon	500,127	June 27	2314	560	63	1834
Lumber, Compound	C. E. Parks	509,180	Nov. 21	1965	479	65	1159
Lumber-drying kiln	N. T. Torbert	505,011	Sept. 12	1158	297	64	1503
Lumber-drying rack	P. B. Raymond	504,279	Aug. 29	3351	837	64	1245
Lumber. Flooring or other	F. B. Feldmann	502,289	Aug. 1	44	11	64	575
Lumber-gage	F. O. Havener	489,584	Jan. 10	936	242	62	210
Lumber-kiln loading device	H. G. Wadley	506,286	Oct. 10	850	209	65	173
Lumber-loading jack	E. L. Stocking	503,335	Aug. 15	1841	456	64	930
Lumber. Matched	J. H. Shull	492,736	Feb. 28	2665	660	62	1328
Lumber-piling machine	H. Daniels	500,861	July 4	520	135	64	94
Luminous fountain	P. E. Singer	507,600	Oct. 31	3095	755	65	632
Luminous fountain	G. Trouvé	492,999	Mar. 7	357	90	62	1430
Lunch-box	J. P. Duval	490,341	Jan. 24	2172	566	62	486
Lunch box or case	J. J. C. Mandioni	489,711	Jan. 10	1113	287	62	246
Lung-tester	C. W. Delaney	509,207	Nov. 21	2012	489	65	1168
Lung-tester. Coin-operated	G. R. Beckwith and W. F. McCollum	511,285	Dec. 19	2489	606	65	1900
Lung-testing machine. Coin-controlled	L. Kern	502,439	Aug. 1	322	76	64	625
Luxaleator	S. Mackaye	490,487	Jan. 24	2400	620	62	529
Machine-brake	A. Boule	494,268	Mar. 28	2446	617	62	1875
Machine-brake	B. T. Reilly	503,495	Aug. 15	2081	519	64	974
Machine-die	A. Vuillier	508,789	Nov. 14	1291	322	65	1017
Machine feed mechanism	S. Hauck and G. S. Comstock	507,496	Oct. 24	2887	710	65	580
Machine-joint	A. W. Kirsch-King	490,876	Jan. 31	3030	779	62	669
Machine-operating mechanism	T. S. Smith	505,254	Sept. 19	1547	403	64	1588
Machine-tool. Rotating automatic	H. R. Towne	489,398	Jan. 3	631	170	62	136
Machinery. Rope or cable drive for	J. F. O'Rourke	511,091	Dec. 19	2167	534	65	1840
Magazine-camera	L. and A. Chronik	509,611	Nov. 28	2740	662	65	1318
Magazine-camera	E. E. Ellis	500,707	July 4	278	75	64	52
Magazine-camera	R. F. Rice	491,164	Mar. 28	2277	578	62	1843
Magnet coil and manufacturing same. Field	J. Johnson and C. D. Haskins	508,620	Nov. 14	1046	258	65	969
Magnet coils. Connector for electro-	M. O. Southworth	508,643	Nov. 14	1085	268	65	978
Magnet core for dynamos or motors. Field	G. S. Strong	505,539	Sept. 26	2047	522	64	1694
Magnet. Electro	S. H. Stupakoff	495,125	Apr. 11	975	244	63	200
Magnet. Electro	I. A. Timmis	506,282	Oct. 10	846	208	65	173
Magnet. Electro	R. Varley, Jr.	489,277	Jan. 3	456	126	62	100
Magnet. Field	F. A. Perret	495,562	Apr. 18	1671	421	63	347
Magnet for electric motors or dynamos. Field	C. F. Daniels	489,071	Jan. 3	136	37	62	33
Magnet frame for dynamo-electric machines. Laminated field	A. L. Riker	507,690	Oct. 31	3242	794	65	660
Magnets. Magnetic frame for field	A. L. Riker	507,689	Oct. 31	3241	793	65	660
Magnetic fields. Transformer and means for developing rotary	C. S. Bradley	492,480	Feb. 28	2256	563	62	1245
Magnetic from non-magnetic substances. Machine for separating	G. G. Crosby	511,512	Dec. 26	2878	698	65	1984
Magnetic lock	A. E. Kintner	494,146	Mar. 28	2252	574	62	1839

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Magnetic permeameter.....	E. D. Knap and S. D. Sprong.....	508,827	Nov. 14	1352	334	65	1027
Magnetic separation and apparatus therefor. Process of.....	R. H. Sanders and C. T. Thompson.....	499,253	June 13	835	199	63	1550
Magnetic separators. Device for and method of adjusting and equalizing the magnetic density in the pole-pieces of.....	C. Q. Payne.....	500,606	July 4	110	30	64	22
Magnetic tool.....	J. F. Standiford.....	492,245	Feb. 21	1886	471	62	1157
Magneto apparatus.....	A. F. Boardman.....	510,320	Dec. 5	794	192	65	1561
Mail-bag.....	P. J. Caesar.....	494,119	Mar. 28	2205	562 563	62	1831
Mail-bag.....	J. W. Latcher.....	502,520	Aug. 1	458	110	64	651
Mail-bag.....	H. Stephens.....	490,232	Jan. 17	1978	519	62	435
Mail-bag catch-hook.....	J. B. Lamkin.....	495,116	Apr. 11	950	239	63	196
Mail-bag catcher or discharger.....	G. W. Dailey.....	506,102	Oct. 3	468	122	65	91
Mail-bag catching device.....	E. M. Van Hoesen.....	489,276	Jan. 3	455	126	62	100
Mail-bag delivery-crane.....	G. W. Smith.....	497,391	May 16	1630	412	63	944
Mail-bag depositor.....	M. M. Taylor.....	505,996	Oct. 3	303	78	65	59
Mail-bag fastener.....	J. C. Kennedy.....	506,699	Oct. 17	1530	383	65	316
Mail-bag fastener.....	J. A. Roosevelt.....	508,841	Nov. 14	1375	340	65	1032
Mail-bag fastening.....	Z. B. Hendrix.....	505,045	Sept. 12	1214	313	64	1513
Mail-bag hanger.....	M. Trundle.....	505,863	Oct. 3	97	26	65	20
Mail-bag holder.....	G. B. Clark.....	511,509	Dec. 26	2873	697	65	1983
Mail bag or pouch.....	J. W. C. Springstun.....	490,172	Jan. 17	1878	489	62	415
Mail-bags. Automatically-folding crane for.....	W. H. Luther.....	501,150	July 11	990	252	64	195
Mail-bags, &c. Frame for.....	G. A. La Fever.....	506,515	Oct. 10	1253	313	65	252
Mail-box.....	P. H. Beench.....	507,474	Oct. 24	2849	698	65	574
Mail-box.....	A. Krastin.....	507,660	Oct. 31	3203	784	65	653
Mail-box. House.....	W. S. Boon.....	496,772	May 2	600	160 161	63	727
Mail-box. House.....	J. Ringen.....	497,214	May 9	1310	833	63	873
Mail-box. House.....	J. Ringen.....	501,441	July 11	1447	363	64	278
Mail-crane.....	J. Teeter.....	503,221	Aug. 15	1651	405	64	897
Mail-distributing apparatus.....	F. D. Goold.....	490,607	Jan. 24	2581	665 666	62	565
Mail. Holder for sending coins by.....	W. B. Coulter.....	500,800	July 4	428	112	64	79
Mail-marking machine.....	G. E. Barnard.....	501,816	July 18	2048	504 505	64	401
Mail-marking machine.....	C. R. Bowman and W. Rice.....	504,664	Sept. 5	558	142 143	64	1375
Mail-marking machine.....	W. C. Howard.....	506,506	Oct. 10	1238	307 308 309	65	249
Mail-pouch.....	F. D. Ward.....	497,257	May 9	1377	349	63	885
Mail-pouch.....	W. C. Wilson.....	509,711	Nov. 28	2891	700	65	1345
Mail-pouch deliverer.....	E. W. Bradford.....	496,551	May 2	252	67	63	665
Mail-pouch deliverer.....	A. Kimber.....	496,518	May 2	200	53	63	655
Mail-pouch lifter.....	R. J. Hunt.....	509,906	Dec. 5	105	24	65	1430
Mail receiving and collecting apparatus.....	W. O. Taylor.....	499,969	Dec. 5	201	47	65	1447
Mail-receptacle.....	A. Holtn.....	498,550	May 30	3509	867	63	1309
Mail tie-sack.....	A. C. Wendell.....	505,688	Sept. 26	2321	589	64	1746
Mailing apparatus.....	T. S. Wiles and A. G. Goldthwait.....	497,152	May 9	1220	311 312	63	856
Mailing bag or envelope.....	W. A. Vawter.....	497,037	May 9	1042	266	63	824
Mains. Coupling and valve for water or gas.....	A. J. Sands.....	499,043	June 6	527	123	63	1483
Mallet.....	G. F. Barney.....	495,607	Apr. 18	1743	439	63	358
Mallet.....	J. Kratz.....	492,608	Feb. 28	2473	614	62	1291
Malt-drying apparatus.....	C. Hauptmann and J. Schwarz.....	506,041	Oct. 3	370	97, 98	65	72
Malt-drying apparatus.....	G. Portz.....	494,937	Apr. 4	643	164 165	63	124
Malt-liquor-pipe cleaner.....	J. Ditton and H. J. Schneider.....	497,312	May 16	1510	380	63	922
Malt. Making caramel.....	R. Rahr.....	491,813	Feb. 14	1216	62	62	1007
Malt-turning apparatus.....	F. Hochmuth.....	505,945	Oct. 3	219	57	65	43
Malting.....	F. B. Giesler.....	507,520	Oct. 31	3061	749	65	625
Malting apparatus.....	F. B. Giesler.....	507,613	Oct. 31	3116	762 763	65	637
Malting apparatus.....	G. J. Meyer.....	504,478	Sept. 5	271	70	64	1320
Malting apparatus. Grain.....	J. F. Dornfeld.....	506,036	Oct. 3	359	95, 96	65	70
Malting-drum.....	F. B. Giesler.....	507,536	Oct. 31	2973	729	65	609
Malting. Dry-kiln for.....	J. Kam.....	489,746	Jan. 10	1174	306	62	258
Malting machinery.....	H. C. Baker and J. W. Free.....	496,335	Apr. 25	2880	719 720	63	583
Malting. Pneumatic.....	G. Knoche.....	507,659	Oct. 31	3201	784	65	652
Malting. Process of.....	J. A. Tilden.....	500,305	June 27	2603	636	63	1884
Mandolin.....	A. C. Fairbanks.....	510,335	Dec. 5	812	197	65	1564
Mandrel attachment.....	L. W. Bosley.....	492,775	Mar. 7	5	2	62	1359
Mandrel. Expandible.....	H. T. Giles.....	509,159	Nov. 21	1931	472	65	1152
Mandrel. Expandible.....	H. T. Giles.....	509,160	Nov. 21	1932	473	65	1152
Mandrel. Sectional.....	C. P. Higgins.....	503,960	Aug. 29	2836	708	64	1149
Manganese and alloys of manganese free from carbon. Manufacturing.....	W. H. Greene and W. H. Wahl.....	489,303	Jan. 3	491	.....	62	107
Manger.....	H. S. Hale.....	490,767	Jan. 31	2868	735 736	62	635
Manger.....	J. M. Reid.....	492,473	Feb. 28	2246	561	62	1243
Manger.....	W. Vender.....	489,349	Jan. 3	563	152	62	121
Mangle.....	R. Koenig.....	506,436	Oct. 10	1117	278	65	225
Mangle.....	A. Lorenz.....	494,277	Mar. 28	2458	619	62	1877
Mangle.....	S. Wiggins.....	491,455	Feb. 7	653	164	62	872
Manhole-cover.....	P. J. Hickey and C. F. Norris.....	508,471	Nov. 14	801	198	65	921
Mantel.....	A. W. House.....	493,404	Mar. 14	991	256	62	1569
Mantel-shelf and clothes-rack. Combined.....	C. W. Parks.....	509,242	Nov. 21	2078	501	65	1180
Manual recorder.....	G. B. and E. R. Peters.....	506,720	Oct. 17	1571	392 393 394	65	324
Manual recorder.....	J. Pfeifer.....	491,784	Feb. 14	1171	293 294	62	997

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Manual recorder and cash-drawer.....	R. L. Brown.....	489,067	Jan. 3	130	35	62	32
Manual recorder and cash-drawer.....	H. M. Geiger.....	496,733	May 2	545	{ 146 147 }	{ 63 62 }	717
Manure-receptacle for cars, &c.....	W. Jefferys.....	489,309	Jan. 3	501	138	62	109
Map-case.....	L. Ludgin.....	510,607	Dec. 12	1304	318	65	1668
Map-case.....	G. P. Peterson and S. U. Stewart.....	490,884	Jan. 31	3050	723	62	672
Map, Educational.....	M. M. Gillam.....	492,005	Feb. 21	1511	377	62	1081
Map-holder.....	H. Smith.....	507,178	Oct. 24	2360	583	65	481
Map or chart stand. Adjustable.....	J. H. Kaufman.....	491,358	Feb. 7	499	129	62	843
Map-stand.....	C. E. Linabury.....	490,253	Jan. 17	2015	527	62	441
Map-stand. Revolving adjustable.....	L. U. Snead.....	510,941	Dec. 19	1920	469	65	1794
Mapping or drawing lands. Apparatus for.....	J. F. D. Schrader.....	491,193	Feb. 7	216	55	62	789
Marble. Manufacturing artificial.....	H. A. Majewski and W. Beyenbach.....	508,731	Nov. 14	1209	301	65	1001
Marble or granite polishing machine.....	J. W. Birkenstock.....	510,832	Dec. 12	1684	{ 418 419 }	{ 65 62 }	1739
Marble-shooter.....	J. Reinert.....	496,539	May 2	234	62	63	662
Marble-shooting device.....	R. J. Chipman.....	492,491	Feb. 28	2288	568	62	1251
Marbleizing metal, china, &c.....	S. Withers.....	505,303	Sept. 19	1635		64	1605
Marbling enameled articles.....	G. Gnüchtel.....	503,661	Aug. 22	2368	591	64	1041
Marbling or enameling process and apparatus.....	H. Claus.....	506,389	Oct. 10	1027	256	65	208
Marine boiler.....	J. A. Eno.....	505,941	Oct. 3	213	55, 56	65	42
Marker and coverer. Corn or potato.....	S. Emick.....	511,329	Dec. 26	2569	625	65	1927
Marker. Land.....	G. W. and E. E. Gooch.....	492,006	Feb. 21	1512	378	62	1021
Marking circular articles. Machine for.....	A. B. Shippee.....	496,489	May 2	150	42	63	646
Marking-gage.....	J. A. Traut.....	504,003	Aug. 29	2908	729	64	1162
Martingale. Gag.....	D. Petrie.....	499,578	June 13	1402	334	63	1649
Mash-machine.....	J. Brauer.....	495,297	Apr. 11	1254	{ 312 313 }	{ 63 62 }	250
Mash-mixing machine.....	T. Puetz, Jr.....	490,498	Jan. 24	2425	626	62	534
Masher for vegetables, fruits, &c.....	G. H. Zane.....	505,504	Sept. 26	1975	507	64	1680
Mask for treating the skin. Face.....	M. J. Pinault.....	495,265	Apr. 11	1199	300	63	240
Mason's implement. Brick.....	C. A. Derby.....	506,391	Oct. 10	1030	257	65	208
Mason's tool.....	J. G. Paulds.....	491,997	Feb. 21	1500	374	62	1078
Massage apparatus. Hydraulic.....	W. S. Blunt.....	511,008	Dec. 19	2035	503	65	1814
Mast-arms. Automatic switch for.....	W. A. Turbayne.....	497,104	May 9	1146	293	63	843
Mast-hoop.....	C. P. H. Vary.....	502,542	Aug. 1	502	120	64	659
Mat: See Cork mat. Fire-mat. Door-mat. Metal mat. Electric mat. Wire mat.							
Mat.....	H. Beisheim.....	496,216	Apr. 25	2686	674	63	545
Mat or similar flexible article.....	H. E. T. Gerhard.....	490,556	Jan. 24	2508	646	62	551
Match.....	C. M. Bowman.....	491,204	Feb. 7	234	59	62	792
Match and ticket case. Combined.....	C. W. Becannon.....	498,875	June 6	227	54	63	1433
Match-box.....	H. Cramer.....	493,983	Mar. 21	1970	503	62	1771
Match-box.....	E. J. Hill.....	496,261	Apr. 25	2756	689	63	558
Match-box.....	H. Korb and S. Krug.....	498,064	May 23	2698	675	63	1149
Match-box.....	P. Seiler.....	509,051	Nov. 21	1742	431	65	1117
Match-box.....	F. Wallis.....	492,700	Feb. 28	2612	647	62	1318
Match-box and cigar-cutter. Combined.....	W. W. Hayden.....	493,866	Mar. 21	1763	449	62	1733
Match-box and cigar-tip cutter. Combined.....	J. W. Maillot.....	499,129	June 6	652	157	63	1504
Match box and lighter. Combined.....	D. J. Morgan.....	509,481	Nov. 28	2538	612	65	1278
Match-box or like receptacle.....	J. M. Fordham.....	495,320	Apr. 11	1282	321	63	256
Match-bunching machine.....	C. B. Andrews.....	507,399	Oct. 24	2732	670	65	551
Match-bunching machine.....	E. H. Eisenhart.....	500,872	July 4	537	139	64	97
Match-lighter and cigar-cutter. Combined.....	A. Ellison and W. A. Wright.....	510,778	Dec. 12	1590	396	65	1722
Match-lighter. Automatic.....	R. Kraus.....	491,314	Feb. 7	420	{ 109 110 }	{ 62 63 }	827
Match-making machine.....	C. M. Bowman.....	499,777	June 20	1726	{ 416 417 }	{ 63 62 }	1719
Match-making machine.....	J. C. Donnelly.....	508,374	Nov. 7	642	158	65	877
Match-packing machine.....	G. Grisel.....	498,899	June 6	265	62, 63	63	1439
Match-safe.....	F. Boardman.....	493,227	Mar. 7	707	181	62	1497
Match-safe.....	N. O. Bond.....	498,377	May 30	3221	801	63	1257
Match-safe.....	J. J. Brenk.....	506,303	Oct. 10	872	215	65	178
Match-safe.....	B. Fiedler.....	510,906	Dec. 19	1854	456	65	1781
Match-safe and cigar-cutter.....	G. F. H. Hicks.....	491,841	Feb. 14	1257	313	62	1016
Match-safe and cigar-cutter. Combined.....	C. Brunner and J. H. Goodwin.....	502,807	Aug. 8	958	233	64	757
Match safe and cigar-cutter. Combined.....	U. Porstendorfer.....	509,942	Dec. 5	159	37	65	1439
Match-safe. Pocket.....	E. Oldenbusch.....	501,689	July 18	1843	458	64	366
Match-safe. Pocket.....	G. Rich.....	508,977	Nov. 21	1634	401	65	1096
Match-splint-bundling machine.....	J. F. Hamill, P. B. Lentz, and C. T. Cole.....	490,963	Jan. 31	3187	815	62	698
Match-splint cards. Machine for making.....	P. Beer.....	497,746	May 16	2186	547	63	1044
Match-splint-coiling machine.....	G. J. G. and M. O. Rehfuß.....	507,843	Oct. 31	3499	861	65	708
Match-stick-bunching machine.....	E. H. Eisenhart.....	496,778	May 2	614	164	63	729
Match-stick-bunching machine.....	M. Moul.....	502,909	Aug. 8	1127	{ 277 278 }	{ 64 63 }	789
Match-stick-bunching machine.....	M. Moul and E. G. Quickel.....	489,752	Jan. 10	1183	310	62	260
Match-stick cutting and bunching machine.....	E. H. Eisenhart.....	508,293	Nov. 7	510	124	65	853
Matches. Making.....	C. M. Bowman.....	499,776	June 20	1724	{ 415 416 }	{ 63 62 }	1719
Matches. Method of and device for making.....	C. M. Bowman.....	491,205	Feb. 7	234	59	62	792
Matching-machine gluing attachment.....	B. G. Luther.....	493,101	Mar. 7	514	129	62	1461
Matrices and means therefor. Drying.....	A. L. Thomas.....	506,349	Oct. 10	956	238	65	194
Matrices. Forming.....	C. L. Redfield. (Reissue).....	11,316	Mar. 28	2890	724	62	1957
Matrix and matrix-assembling mechanism.....	W. Berri.....	499,278	June 13	880	213	63	1557
Matrix and method of using matrices.....	M. Joyce.....	489,011	Jan. 3	52	15	62	13
Matrix-board.....	W. B. Carr and A. G. French.....	507,485	Oct. 24	2862		65	577
Matrix-drying machine.....	G. A. Davis.....	492,147	Feb. 21	1734	432	62	1126
Matrix-lines. Justifying.....	C. Sears.....	508,186	Nov. 7	332	82, 83	65	819
Matrix-making machine.....	E. V. Beals.....	490,263	Jan. 24	2037	{ 533 534 535 }	{ 62 63 64 }	458
Matrix-making machine.....	A. J. Kletzker and J. G. Goesel.....	503,324	Aug. 15	1821	451	64	927

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Matrix-making machine.....	C. L. Redfield.....	495,835	Apr. 18	2110	{ 530 531 106	63	423
Matrix-making machine.....	C. Sears.....	508,248	Nov. 7	439	{ 107 108 109	65	840
Matrix-making machine.....	C. L. Travis.....	496,373	Apr. 25	2957	{ 738 739	63	598
Matrix-making machines. Justifying mechanism for.	J. A. Watson.....	510,305	Dec. 5	774	188	65	1556
Matrix-making machines. Type-die for.....	C. L. Redfield. (Reissue).....	11,335	May 16	2213	554	63	1049
Matrix-pages. Machine for justifying.....	V. F. Lake and I. Risley.....	510,032	Dec. 5	327	73	65	1471
Matte from slag. Apparatus for separating.....	T. Drohan and T. Pearce.....	496,823	May 2	690	182	63	742
Matte from slag. Apparatus for separating.....	W. H. Howard.....	489,307	Jan. 3	497	137	62	108
Matte from slag. Apparatus for separating.....	M. W. Iles.....	494,571	Apr. 4	70	16	63	14
Matte from slag. Apparatus for separating.....	D. Sheedy and M. W. Iles.....	500,621	July 4	135	36	64	26
Matte from slag. Process of and apparatus for the separation of.....	M. W. Iles.....	494,570	Apr. 4	67	15	63	13
Mattress.....	N. P. Chaney.....	505,649	Sept. 26	2258	572	64	1735
Mattress.....	W. Staab.....	504,443	Sept. 5	212	55	64	1310
Mattress-filling apparatus.....	W. H. Moore.....	489,540	Jan. 10	671	228	62	197
Mattress-frame.....	A. E. Kenney and W. H. Taber.....	510,541	Dec. 12	1188	286	65	1648
Mattress. Invalid.....	H. F. Harding.....	509,081	Nov. 21	1804	443	65	1128
Mattress stay. Air.....	A. A. Young.....	496,030	Apr. 25	2400	607	63	492
Mattress. Ventilated.....	H. S. Sternberger.....	510,490	Dec. 12	1072	257	65	1628
Mattress. Woven-wire.....	E. R. Billington.....	493,147	Mar. 7	582	146	62	1473
Mattresses. Ventilating-button for.....	J. W. Young and L. H. Scruggs.....	509,345	Nov. 21	2255	545	65	1213
Mayonnaise-mixer.....	J. D. Harvey.....	506,635	Oct. 10	1420	356	65	285
Measure and funnel. Combined.....	J. H. Bradnack.....	507,479	Oct. 24	2854	700	65	575
Measure. Compositor's pay.....	W. T. Drake and F. C. Heffron.....	509,073	Nov. 21	1786	440	65	1125
Measure. Facial.....	A. M. Ward.....	505,496	Sept. 26	1942	501	64	1676
Measure. Folding steel.....	W. L. E. Keuffel.....	496,123	Apr. 25	2546	642	63	520
Measure register. Grain.....	B. F. Haley.....	503,719	Aug. 22	2464	612	64	1060
Measure. Ring.....	J. Wichelmann.....	492,566	Feb. 28	2404	599	62	1277
Measure. Scale.....	F. Boas and S. Weinmann.....	492,569	Feb. 28	2409	600	62	1278
Measure. Speed.....	L. T. Weiss.....	505,582	Sept. 26	2142	542	64	1713
Measure. Tailor's.....	A. M. Cone.....	497,165	May 9	1242	316	63	860
Measure. Tailor's.....	C. Gunkel.....	509,080	Nov. 21	1803	443	65	1127
Measure. Tailor's.....	T. E. Sipe.....	497,503	May 16	1821	459	63	977
Measure. Tailor's.....	T. H. Wiggins.....	507,054	Oct. 17	2120	527	65	425
Measure. Tape.....	F. Buck.....	498,104	May 23	2757	689	63	1160
Measurer and extractor. Liquid.....	W. B. Donathen.....	494,467	Mar. 28	2757	692	62	1932
Measurer. Automatic grain.....	J. E. Buxton.....	497,424	May 16	1678	424	63	953
Measurer. Automatic grain.....	E. W. Flagg.....	504,155	Aug. 29	3144	766	64	1206
Measuring and delivering apparatus. Liquid.....	J. B. Benton and J. A. Keyes.....	495,657	Apr. 18	1831	458	63	373
Measuring and delivering apparatus. Liquid.....	A. T. Wilkins.....	493,138	Mar. 7	570	{ 142 143	62	1471
Measuring and dispensing apparatus. Liquid.....	W. M. Fowler.....	491,705	Feb. 14	1049	265	62	975
Measuring and drawing tool.....	L. O. Allred.....	496,714	May 2	508	136	63	712
Measuring and recording apparatus. Liquid.....	W. M. Fowler.....	490,923	Jan. 31	2951	758	62	652
Measuring and registering apparatus.....	W. C. Young.....	492,453	Feb. 28	2211	553	62	1236
Measuring apparatus. Electric.....	T. Bruger.....	511,503	Dec. 26	2865	694	65	1981
Measuring apparatus. Electric.....	C. H. Rudd.....	504,754	Sept. 12	734	183	64	1422
Measuring apparatus for alternate currents. Electric.....	S. Evershed.....	503,589	Aug. 22	2245	562	64	1020
Measuring apparatus. Liquid.....	J. Lewis.....	503,149	Aug. 15	1529	375	64	875
Measuring can. Liquid.....	L. W. Hemp.....	504,525	Sept. 5	357	90	64	1336
Measuring device.....	J. N. Pease.....	499,576	June 13	1399	334	63	1649
Measuring device for box-covering machines.....	A. G. Potter.....	507,451	Oct. 24	2816	689	65	568
Measuring device for canisters.....	V. J. Long, Jr.....	509,320	Nov. 21	2215	535	65	1206
Measuring device. Heat.....	W. E. Ayrton and J. Perry.....	492,602	Feb. 28	2464	{ 612 613	62	1289
Measuring device. Horse.....	J. K. Foster.....	491,733	Feb. 14	1090	275	62	982
Measuring distances and solving trigonometrical problems. Instrument for.....	E. Falletti.....	504,869	Sept. 12	923	238	64	1459
Measuring electricity. Method of and apparatus for.....	A. Aberg.....	502,454	Aug. 1	345	83	64	629
Measuring-instrument.....	H. Gohrt.....	492,886	Mar. 7	181	44	62	1394
Measuring-instrument. Distance.....	J. L. Baillie.....	499,950	June 20	2005	486	63	1768
Measuring-instrument. Electric.....	A. H. Hoyt.....	497,521	May 16	1842	465	63	982
Measuring-instrument. Electric.....	R. M. Hunter.....	496,312	Apr. 25	2841	{ 709 710	63	575
Measuring-instrument. Electric.....	E. Thomson.....	502,022	July 25	2377	{ 597 598	64	477
Measuring-instrument. Electric.....	E. Thomson.....	511,376	Dec. 26	2660	645	65	1945
Measuring-instrument. Electrical.....	O. Frölich.....	497,539	May 16	1870	471	63	987
Measuring-instrument. Electrical.....	J. H. F. Görges.....	489,249	Jan. 3	418	116	62	93
Measuring-instrument. Electrical.....	R. M. Hunter.....	501,589	July 18	1674	418	64	337
Measuring-instrument. Electrical.....	R. M. Hunter.....	592,077	July 25	2463	619	64	493
Measuring-instrument. Electrical.....	A. Koepoel.....	494,961	Apr. 4	678	175	63	130
Measuring-instrument. Electrical.....	O. T. Louis.....	510,074	Dec. 5	393	87	65	1483
Measuring-instrument. Electrical.....	E. Weston.....	490,700	Jan. 31	2764	711	62	616
Measuring-instrument. Electrical.....	E. Weston.....	490,760	Jan. 31	2857	733	62	632
Measuring-instrument. Electrical.....	E. Weston.....	494,828	Apr. 4	487	123	63	94
Measuring-instrument. Electrical.....	E. Weston.....	496,500	May 2	167	47	63	649
Measuring-instrument. Electrical.....	E. Weston.....	499,313	June 13	934	227	63	1567
Measuring-instrument. Electrical.....	E. G. Willyoung.....	491,457	Feb. 7	655	164	62	873
Measuring-instruments. Shunt for electrical.....	E. Weston.....	496,501	May 2	169	48	63	650
Measuring-jacket.....	J. R. Campbell.....	490,606	Jan. 24	2580	665	62	565
Measuring-machine.....	R. H. Grant.....	504,107	Aug. 29	3071	769	64	1193
Measuring machine. Cloth.....	P. F. C. Chevron.....	498,765	June 6	19	5	63	1392
Measuring machine. Cloth.....	W. H. Holloway.....	507,006	Oct. 17	2035	504	65	411
Measuring machine. Cloth.....	S. Loveman, G. W. McCrary, and T. W. Livingston.....	498,128	May 23	2794	699	63	1167
Measuring machine. Cloth.....	J. M. Meredith, Jr.....	492,734	Feb. 28	2662	{ 659 660	62	1328
Measuring machine. Cloth.....	J. E. Windle.....	507,300	Oct. 24	2560	631	65	517

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Measuring machine. Cloth.....	R. M. Wren and A. J. Oliver	502,943	Aug. 8	1194	294	64	800
Measuring machine. Wall-paper.....	S. G. Lundy	491,488	Feb. 7	699	177	62	883
Measuring mug. Beer.....	D. A. S. Mackintosh.....	492,816	Mar. 7	70	17	62	1371
Measuring proportional parts for mixtures. Apparatus for.....	A. K. Suddoth.....	502,596	Aug. 1	581	139	64	673
Measuring-stick. Extensible.....	T. Schafer.....	510,994	Dec. 19	2019	498	65	1811
Measuring tank. Self.....	L. W. Hemp.....	504,527	Sept. 5	360	91	64	1337
Measuring the density of gases. Device for.....	W. Dürr.....	494,192	Mar. 28	2323	588	62	1853
Measuring the diameter of articles being turned. Apparatus for automatically.....	A. Miebach.....	496,272	Apr. 25	2773	694	63	562
Measuring-vessel.....	W. H. Bastin.....	503,571	Aug. 22	2214	553 554	64	1014
Measuring-vessel.....	A. H. Cell and E. G. Paster	502,347	Aug. 1	163	38	64	596
Measuring-vessel.....	E. L. Detrick.....	492,957	Mar. 7	293	74	62	1417
Measuring-vessel.....	A. F. Dubois.....	509,210	Nov. 21	2016	499	65	1169
Measuring-vessel.....	C. Herzog.....	495,037	Apr. 11	796	201	63	167
Measuring-vessel.....	G. Potter.....	509,488	Nov. 23	2545	614	65	1320
Measuring-vessel. Rotating.....	L. T. Nichols.....	491,064	Jan. 31	3352	855	62	732
Meat block.....	A. Weaver.....	503,511	Aug. 15	2107	525	64	979
Meat-block attachment.....	S. P. Rush.....	504,115	Aug. 29	3082	771	64	1195
Meat-chopper.....	C. G. Schmidt.....	499,755	June 20	1695	406	63	1713
Meat-chopping apparatus.....	H. Leineweber.....	502,440	Aug. 1	324	76, 77	64	625
Meat-chopping machine.....	W. H. Ashton.....	488,979	Jan. 3	7	2	62	4
Meat-clamp.....	A. G. and E. J. Kyle.....	506,702	Oct. 17	1537	384	65	318
Meat-cutter.....	J. B. Arnett.....	496,842	May 9	721	191	63	767
Meat-cutter.....	O. D. Woodruff.....	507,195	Oct. 24	2391	590	65	486
Meat cutting and filling machine.....	H. C. F. Otte.....	498,940	June 6	335	78	63	1451
Meat-hanger.....	A. H. Hieatzman.....	511,238	Dec. 19	2403	585	65	1884
Meat-holder.....	F. C. Schleichert.....	499,804	June 20	1770	429	63	1727
Meat. Machine for straining or removing tendons from chopped.....	E. Grether.....	501,417	July 11	1420	356	64	272
Meat or bread cutter.....	M. Cameron.....	489,457	Jan. 10	742	197	62	172
Meat-pounder.....	J. A. Carlson.....	489,928	Jan. 17	1461	382	62	332
Meat. Preserving.....	F. G. Dosmond and J. F. Rozès	496,047	Apr. 25	2434	62	63	498
Meat-preserving device.....	J. W. Powers.....	505,126	Sept. 19	1352	348	64	1552
Meat-press.....	F. A. Clark.....	492,781	Mar. 7	13	4	62	1361
Meat-rack.....	F. Schraudner.....	500,956	July 4	657	174	64	120
Meat-scorer.....	E. Rader and L. G. Heist.....	494,027	Mar. 21	2043	521	62	1786
Meat-slicer.....	R. S. Carr.....	492,934	Mar. 7	259	65	62	1410
Meat-slicing machine.....	C. Wilson.....	501,554	July 18	1627	407	64	329
Meat-tenderer.....	R. A. Gailbreath.....	502,355	Aug. 1	178	42	64	598
Meat-tenderer.....	R. B. Lavigne.....	503,953	Nov. 21	1599	392	65	1088
Meat-tenderer.....	J. T. Oakes.....	509,323	Nov. 21	2220	536	65	1207
Meat-tenderer.....	B. H. Passmore.....	504,892	Sept. 19	958	247	64	1465
Meat-ventilating pin.....	H. J. Reiss.....	509,099	Nov. 21	1843	451	65	1135
Mechanical apparatus. Device for selecting and operating.....	R. Mackie.....	507,147	Oct. 24	2300	566	65	470
Mechanical devices. Apparatus for selecting and operating.....	R. Mackie.....	507,148	Oct. 24	2304	567	65	471
Mechanical horse.....	L. A. Rygg.....	491,927	Feb. 14	1393	348	62	1042
Mechanical motor.....	J. Grass and C. E. Hardie.....	503,593	Aug. 22	2255	565	64	1021
Mechanical motor.....	W. C. Langdon.....	505,946	Oct. 3	220	57	65	44
Mechanical motor.....	G. A. Piper.....	495,368	Apr. 11	1357	340	63	269
Mechanical motor.....	J. E. West.....	505,339	Sept. 19	1685	434	64	1613
Mechanical movement.....	G. Beekman.....	495,656	Apr. 18	1830	458	63	373
Mechanical movement.....	A. G. Brewer.....	508,676	Nov. 14	1131	279	65	986
Mechanical movement.....	A. G. Brosius.....	503,122	Aug. 15	1487	366	64	867
Mechanical movement.....	G. E. Frink.....	497,316	May 16	1516	382	63	923
Mechanical movement.....	E. M. Kellogg.....	500,544	July 4	71	21	64	14
Mechanical movement.....	R. D. Layton.....	491,896	Feb. 14	1346	334	62	1033
Mechanical movement.....	C. Lloyd.....	507,142	Oct. 24	2293	563	65	469
Mechanical movement.....	E. Patten.....	502,828	Aug. 8	998	243	64	765
Mechanical movement.....	G. R. Peare.....	511,357	Dec. 26	2618	636	65	1937
Mechanical movement.....	H. Reiss.....	496,000	Apr. 25	2355	595	63	484
Mechanical movement.....	W. Robinson.....	491,295	Feb. 7	391	100	62	822
Mechanical movement.....	N. M. Saati.....	510,557	Dec. 12	1214	294	65	1653
Mechanical movement.....	T. C. Van Wyck.....	509,977	Dec. 5	227	53	65	1452
Mechanical movement.....	W. Wyand.....	508,360	Nov. 7	621	152	65	873
Mechanical movement. Electro.....	E. Gray.....	491,346	Feb. 7	473	122	62	838
Mechanical power for elevators, &c.....	P. Sweeney.....	499,605	June 13	1440	345 316	63	1657
Medical air-injector. Electro.....	J. Dawdy and F. M. Cattern.....	505,393	Sept. 19	1777	460	64	1630
Medical apparatus. Electro.....	J. A. Cabot.....	501,558	July 18	1632	408	64	330
Medical apparatus. Electro.....	T. C. Hodgkinson.....	500,539	June 27	2966	728	63	1950
(Medical.) Apparatus for curing diseases of the skin, blood, &c.....	G. Meeker.....	508,231	Nov. 7	413	100	65	835
Medical appliance. Electro.....	S. Hetherington-Carruthers.....	500,767	July 4	376	97	64	70
Medical compound.....	J. Schmid.....	504,626	Sept. 5	503	.....	64	1365
Medical purposes. Electrical instrument for (Medical.) Treating diseases electrically.....	B. Y. Boyd.....	494,520	Mar. 28	2849	713	62	1949
Medicated suspension-perch.....	S. Silsbee.....	506,449	Oct. 10	1140	283	65	230
Medicated vapors. Apparatus for administering.....	H. A. Doud.....	510,847	Dec. 12	1738	429	65	1749
Mediator. Steam.....	E. R. Longstreth and L. B. Spung	491,430	Feb. 7	601	152	62	863
Medicinal composition.....	C. C. Cooper.....	497,232	May 9	1336	340	63	878
Medicinal purposes. Machine for making tablets for.....	O. L. Mulot.....	496,694	May 2	481	.....	63	707
Medicinal soap.....	J. J. Mitchell.....	500,594	July 4	86	24	64	17
Medicine-case spring.....	B. Rochow.....	505,847	Oct. 3	68	.....	65	16
Medicine. Device for administering.....	H. M. Rosenblatt, C. A. Dickson, and T. G. Owen.....	491,136	Feb. 7	114	31	62	770
Medicine. Device for administering.....	F. H. Olmsted.....	490,493	Jan. 24	2417	624	62	533
Melograph or music-recording attachment for pianos.....	G. P. de Pilchau.....	507,840	Oct. 31	3491	858 860	65	706
Melon-carrier.....	M. J. Ward.....	510,456	Dec. 12	1021	244	65	1617
Menthol cone.....	T. D. Vint.....	507,860	Oct. 31	3524	867	65	713

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Merchandise-supporting hook.....	J. R. Lewis.....	505,837	Oct. 3	54	14	65	13
Merry-go-round.....	H. S. Moore.....	504,886	Sept. 12	949	{ 245 246 }	64	1463
Merry-go-round.....	J. S. Sprague.....	508,994	Nov. 21	1658	408	65	1100
Messages. Apparatus for receiving written.....	C. Rogers.....	509,140	Nov. 21	1905	466	65	1147
Metal. Apparatus for automatically guiding skin molds in machines for making leaf.....	C. Reich.....	489,642	Jan. 10	1011	263	62	226
Metal. Apparatus for forming elongated articles from billets of heated.....	J. Robertson.....	493,945	Mar. 21	1895	{ 483 484 }	62	1758
Metal articles. Coating.....	F. J. Clamer.....	494,668	Apr. 4	220	55	63	45
Metal articles. Method of and apparatus for compressing and shaping.....	J. Robertson.....	493,897	Mar. 21	1809	460	62	1742
Metal articles. Producing coated.....	F. J. Clamer.....	494,667	Apr. 4	218	55	63	45
Metal balls. Apparatus for manufacturing.....	G. Taylor.....	491,452	Feb. 7	647	{ 162 163 }	62	871
Metal balls, &c. Machine for manufacturing.....	E. G. Hoffmann.....	504,083	Aug. 29	3019	{ 754 755 }	64	1183
Metal-banding or bale-wiring tool.....	G. Schubert.....	503,257	Aug. 15	1704	419	64	907
Metal-bar-shearing machine.....	W. Raymond.....	498,729	May 30	3830	944	63	1364
Metal bar to be calked.....	W. Grant.....	500,884	July 4	556	144	64	101
Metal bars. Machine for rounding, straightening, and planishing.....	W. Steel.....	491,668	Feb. 14	990	250	62	962
Metal bars. Machine for tapering and shaping.....	T. and J. Coulter.....	493,982	Mar. 21	1969	{ 502 503 }	62	1771
Metal bars or rods. Means for manufacturing.....	T. S. Very.....	494,659	Apr. 4	207	52	63	43
Metal bending and twisting machine.....	J. C. Herman.....	499,733	June 20	1646	{ 396 397 }	63	1706
Metal-bending machine.....	J. Baum.....	492,858	Mar. 7	129	32	62	1383
Metal-bending machine.....	C. A. Bertsch.....	510,764	Dec. 12	1569	391	65	1718
Metal-bending machine.....	C. Cunningham.....	498,930	June 6	321	76	63	1449
Metal-bending machine.....	E. Partyka.....	491,187	Feb. 7	207	53	62	787
Metal blanks into cutters. Machine for cutting.....	J. W. Taylor.....	510,207	Dec. 5	611	{ 143 144 }	65	1525
Metal chests. Manufacture of.....	F. J. King.....	498,718	May 30	3805	{ 937 938 }	63	1359
Metal cutting and working machine.....	M. F. Smith.....	506,342	Oct. 10	944	{ 235 236 }	65	191
Metal-cutting device.....	H. C. Muller.....	495,356	Apr. 11	1339	335	63	266
Metal-cutting machine.....	C. L. Huston.....	494,864	Apr. 4	544	{ 137 138 }	63	106
Metal disks. Machinery for the manufacture of hollow bodies from.....	T. B. Clatworthy.....	492,571	Feb. 28	2411	601	62	1279
Metal-drill.....	F. H. Richards.....	500,213	June 27	2459	600	63	1860
Metal-drilling machine.....	G. M. French, Jr.....	505,516	Sept. 26	2001	512	64	1685
Metal-embossing machine.....	G. Klump.....	502,566	Aug. 1	531	127	64	664
Metal film and metal paper. Producing.....	C. Endruweit.....	510,013	Dec. 5	299	65	1466	
Metal-folding machine. Plate.....	W. F. Niedringhaus and C. A. Wet- tengel.....	503,292	Aug. 15	1761	{ 435 436 }	64	917
Metal-heating apparatus and process. Electric-bath.....	G. D. Burton and E. E. Angell.....	499,964	June 20	2023	491	63	1771
Metal-heating device. Electric.....	W. Mitchell.....	491,437	Feb. 7	621	156	62	866
Metal hook and coupling therefor.....	C. W. Dwelle.....	494,997	Apr. 4	727	185	63	139
Metal. Machine for cutting off bars of.....	F. A. Pratt.....	504,171	Aug. 29	3173	{ 791 792 793 }	64	1212
Metal. Machine for cutting scrap.....	E. H. Wheeler.....	490,054	Jan. 17	1626	439	62	376
Metal. Machine for folding and cutting sheets of.....	T. L. Thomas.....	499,807	June 20	1775	430	63	1728
Metal mat or like structure.....	J. Horrocks.....	501,788	July 18	2011	496	64	395
Metal. Method of and apparatus for separating and settling molten.....	J. W. Neill.....	505,904	Oct. 3	164	42	65	32
Metal objects together. Means for and method of securing.....	A. J. Moxham.....	505,988	Oct. 3	294	75	65	57
Metal. Ornamenting.....	J. H. Hines.....	510,340	Dec. 5	819	65	1565	
Metal. Perforating.....	C. Osborne.....	490,773	Jan. 31	2876	739	62	637
Metal-pickling apparatus.....	G. Mesta.....	510,697	Dec. 12	1452	{ 358 359 }	65	1696
Metal-planing machine.....	W. R. Fox.....	489,734	Jan. 10	1148	297	62	253
Metal-planing machine.....	W. Lewis.....	497,754	May 16	2201	{ 550 551 552 553 554 }	63	1047
Metal plates. Apparatus for cleaning and polishing coated.....	R. Lewis and G. Morgan.....	509,745	Nov. 28	2948	{ 713 714 }	65	1356
Metal plates. Apparatus for straightening.....	H. Aiken.....	492,951	Mar. 7	281	71, 72	62	1414
Metal plates. Dusting.....	R. B. Thomas.....	501,746	July 18	1940	480	64	383
Metal plates. Machine for cleaning.....	S. A. Sagne.....	493,560	Mar. 14	1262	324	62	1619
Metal plates. Making.....	J. B. Nau.....	490,451	Jan. 24	2335	606	62	516
Metal plates or sheets. Machine for crimping.....	W. E. Williams.....	510,559	Dec. 12	1217	295	65	1653
Metal plates prior to electrolysis. Treatment of.....	C. B. Schoenmehl.....	494,231	Mar. 28	2388	603	62	1865
Metal-pouring device.....	J. Downs.....	510,062	Dec. 5	376	83	65	1480
Metal punching and shearing machine.....	L. C. Hauber.....	499,540	June 13	1339	317	63	1639
Metal-punching apparatus.....	C. L. Coffin.....	499,519	June 13	1311	309	63	1634
Metal ribbons and strips. Apparatus for edging.....	H. E. Procunier.....	493,294	Mar. 14	826	211	62	1536
Metal-rolls. Shield for.....	T. D. Morgan.....	500,345	June 27	2671	655	63	1897
Metal sawing or cutting machine.....	C. Fremont.....	501,135	July 11	964	246	64	190
Metal shapes. Forming true sharp corners on.....	F. P. Howe.....	499,022	June 6	496	115	63	1477
Metal-shaping machine.....	C. A. Collord.....	493,151	Mar. 7	590	148	62	1475
Metal-shaping machine.....	J. Mills and A. S. Smith.....	490,670	Jan. 31	2720	700	62	607
Metal-shearing machine.....	D. McGary.....	496,167	Apr. 25	2606	656	63	531
Metal-shears.....	E. T. Horner.....	494,566	Apr. 4	61	14	63	12
Metal sheets. Apparatus for coating.....	D. Jenkins.....	505,660	Sept. 26	2273	{ 576 577 }	64	1738
Metal-spinning apparatus.....	E. Polte.....	491,188	Feb. 7	209	53, 54	62	787
Metal-straightening press.....	J. N. Short.....	489,102	Jan. 3	189	50, 51	62	44
Metal tie and nut-lock.....	J. P. Warner.....	508,664	Nov. 14	1118	275	65	983

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. i.	Vol.	Page.
Metal tubes. Machine for buffing	T. Harper	505,221	Sept. 19	1499	{ 390 391 }	64	1578
Metal tubes. Machine for forming	W. Keglcr	510,796	Dec. 12	1619	403	65	1728
Metal tubes. Method of and apparatus for shaping and drawing	J. Robertson	493,946	Mar. 21	1898	484	62	1759
Metal upon metal. Depositing	P. H. Bertrand	510,376	Dec. 5	877	.....	65	1577
Metal-upsetting machine	F. W. Bruch	504,909	Sept. 12	989	254	64	1471
Metal wheel	A. H. B. and E. H. N. Neff	505,633	Sept. 26	2227	565	64	1728
Metal wheel and making same	J. W. Bettendorf	496,633	May 2	381	103	63	689
Metal wheel and making same	H. L. Jacobs	507,908	Oct. 31	3593	{ 886 887 }	65	725
Metal-working	J. H. Bassler	501,038	July 4	790	207	64	144
Metal-working	E. E. Ries	499,040	June 6	518	122	63	1481
Metal-working apparatus	C. P. Higgins	503,965	Aug. 29	2843	{ 712 713 }	64	1151
Metal-working. Electric	C. R. Arnold	489,114	Jan. 3	206	55	62	48
Metal-working. Electrical	G. D. Burton and E. E. Angell	505,263	Sept. 19	1558	{ 406 407 }	64	1590
Metal-working machine	J. P. Lee	510,512	Dec. 12	1105	{ 287 288 }	65	1634
Metal-working machine. Combination	J. A. Lidback	508,029	Nov. 7	73	21	65	771
Metal-working. Making dies or patterns for	C. F. Hiron	497,982	May 23	2576	.....	63	1122
Metals and alloys. Composition for the purification and separation of	J. A. Frey	499,018	June 6	491	.....	63	1476
Metals. Apparatus for the electrolytic extraction of	S. H. Emmens	501,997	July 25	2331	584	64	469
Metals by electricity. Shaping and spinning	E. Thomson	501,547	July 18	1617	405	64	383
Metals electrically. Apparatus for heating	C. L. Coffin	510,777	Dec. 12	1589	396	65	1722
Metals electrically. Method of and apparatus for heating, welding, or working	C. L. Coffin	501,825	July 18	2059	507	64	404
Metals. Electro-depositing	O. Lugo	493,277	Mar. 14	795	206	62	1531
Metals. Electrolytic production of	C. Hoepfner	507,130	Oct. 24	2261	556	65	464
Metals from compound ores. Extracting	A. Chanute	501,559	July 18	1633	.....	64	330
Metals from ores. Means for and process of separating	C. E. Seymour	489,101	Jan. 3	186	50	62	43
Metals. Method of and apparatus for uniting	J. H. Bassler	499,277	June 13	876	{ 212 213 }	63	1557
Metals. Plating	C. Vateky	506,285	Oct. 10	849	209	65	173
Metals. Process of and compound for coating	W. Mild	491,220	Feb. 7	259	.....	62	797
Metals. Refining	A. P. G. Rollet	491,498	Feb. 7	711	.....	62	886
Metals. Separating	J. J. Crooke	491,084	Feb. 7	35	.....	62	755
Metals. Testing rolled or forged	A. E. Hunt	499,739	June 20	1658	399	63	1708
Metals. Treating materials containing	R. F. Nenninger. (Reissue)	11,345	June 13	1578	380	63	1679
Metals. Uniting	F. M. Harris	489,077	Jan. 3	142	40	62	35
Metallic band. Twisted	J. A. Bowler	494,975	Apr. 4	700	179	63	134
Metallic chlorides. Electrolytically decomposing fused	F. M. Lyte	510,276	Dec. 5	728	{ 176 177 }	65	1547
Metallic compounds. Electric reduction of refractory	T. L. Willson	492,377	Feb. 21	2066	521	62	1198
Metallic finishing-plate	W. S. Grafton, E. C. Ewing, and A. Glass.	496,478	May 2	134	37, 38	63	643
Metallic post	C. T. Schoen	497,134	May 9	1196	305	63	852
Metallic roller	F. G. and A. C. Sargent	507,332	Oct. 24	2623	645	65	530
Metallic sheets. Coating	C. J. Leroux and J. H. Fischbach	500,237	June 27	2496	.....	63	1867
Metallic surfaces. Coating	H. Gessler	495,629	Apr. 18	1780	.....	63	365
Metallic tie and fastener	T. M. Brintnall	511,317	Dec. 19	2541	618	65	1909
Metallic tie and track-fastening. Combined	G. P. Gunn	502,435	Aug. 1	311	74	64	623
Metallic-tie support and fastening	J. M. Price	507,080	Oct. 17	2158	534	65	432
Metallic tie to resist progressive strains	P. H. Jackson	504,924	Sept. 12	1015	{ 261 262 }	64	1476
Metallization	E. Denorus	491,799	Feb. 14	1199	.....	62	1003
Metallurgical furnace	F. G. Bates	502,167	July 25	2611	{ 657 658 }	64	522
Metallurgical furnace	G. F. Simonds	507,460	Oct. 24	2828	692	65	570
Metallurgical furnace	W. Stubblebine	498,089	May 23	2734	{ 683 684 }	63	1156
Meter:							
See Current-meter. Grain-meter.							
Electric meter. Liquid-meter.							
Electric-current meter. Multiphase meter							
ter. Proportional meter.							
Electrical meter. Time-meter.							
Fluid-meter. Volt and ampere meter.							
Gas-meter. Water-meter.							
Meter-dials. Means for taking readings of	A. B. Herrick	504,159	Aug. 29	3149	787	64	1207
Mica sheets. Machine for making	E. Gengenbach	494,714	Apr. 4	296	74	63	59
Micrometer-gage	J. P. Lavigne	508,952	Nov. 21	1598	392	65	1087
Micrometer-gage	J. P. Lavigne	510,688	Dec. 12	1442	356	65	1694
Micrometer-gage	J. C. Smith	495,379	Apr. 11	1376	343	63	272
Micrometer-gage	F. Spalding	495,915	Apr. 18	2234	563	63	416
Microphones and manufacturing same. Variable resistance for	A. C. Cousens	506,627	Oct. 10	1409	.....	65	283
Middlings and flour separating machine	H. Bittinger	502,696	Aug. 8	765	186	64	722
Middlings-purifier	W. D. Gray	489,676	Jan. 10	1056	275	62	235
Middlings-purifier	W. D. Gray	502,187	July 25	2641	666	64	528
Middlings-purifier	J. Higginbottom and O. Stuart	490,285	Jan. 24	2083	{ 543 544 }	62	467
Middlings-purifier	H. H. Ring	508,979	Nov. 21	1636	402	65	1096
Milk-agitator	B. Ewing	503,951	Aug. 29	2821	704	64	1146
Milk-can, &c.	E. L. Cantwell	489,554	Jan. 10	889	233	62	201
Milk-can	C. Fries and W. H. Richardson	504,027	Aug. 29	2941	736	64	1168
Milk-can	H. Philipp	502,085	July 25	2480	623	64	496
Milk-can	A. F. Tripp	489,644	Jan. 10	1014	264	62	226
Milk-can	G. H. Wright	493,804	Mar. 21	1674	427	62	1716
Milk-coagulating product	C. P. Eyre	491,416	Feb. 7	585	.....	62	860
Milk-cooler	J. H. Beck and E. E. Reilly	492,183	Nov. 21	1788	447	62	1138
Milk-cooler	T. B. Blanton	508,202	Nov. 7	368	90	65	827

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Milk-cooler	C. A. Clark	495,877	Apr. 18	2177	547	63	434
Milk-cooler	C. L. Kneeland	499,840	June 20	1835	446	63	1738
Milk-cooler	F. J. Merz	503,868	Aug. 22	2672	669	64	1101
Milk-cooler	F. Miller	506,057	Oct. 3	398	104	65	78
Milk-cooler	C. G. Nerger	490,398	Jan. 24	2261	587	62	503
Milk cooler and aerator	J. E. Baird	496,377	Apr. 25	2966	740	63	599
Milk cooler and aerator	P. S. Ryan	506,942	Oct. 17	1940	480	65	393
Milk-cooling apparatus	S. M. Heulings	507,730	Oct. 31	3299	807	65	671
Milk-cooling apparatus	J. A. Myers	508,146	Nov. 7	278	69	65	809
Milk-heater	J. L. Jönsson and T. Berg	492,300	Feb. 21	1964	490	62	1175
Milk or butter cooling device	J. L. Wilder	490,005	Jan. 17	1595	417	62	358
Milk or cream and producing butter. Apparatus for treating	G. W. Grader	498,646	May 30	3665	907	63	1336
Milk or cream purifying apparatus	G. W. Grader	498,645	May 30	3660	906	63	1335
Milk or other can	E. Plançon	489,829	Jan. 10	1288	337	62	283
Milk. Receptacle for cans of condensed	W. A. Boulter	498,923	Jan. 17	1452	380	62	330
Milk-tester. Centrifugal	L. J. Augustenborg and R. Hansen	495,653	Apr. 18	1826	457	63	372
Milk-tester. Centrifugal	P. V. P. Berg	506,838	Oct. 17	1768	444	65	361
Milk-tester. Centrifugal	N. G. Williams	500,312	June 27	2618	639	63	1888
Milk-vat	D. W. Curtis	494,916	Apr. 4	617	157	63	119
Milk. Vessel for the conveyance of	W. W. Mellor and J. Shaw	502,005	July 25	2343	5-7	64	471
Milker. Cow	H. Heitmann	507,069	Oct. 17	2141	531	65	429
Milker. Cow	C. F. Kastengren	500,713	July 4	290	78, 79	64	54
Milker. Cow	J. Nielsen	496,561	May 2	294	79, 80	63	673
Milker. Cow	J. Westgarth	492,449	Feb. 28	2203	551	62	1234
Milking apparatus. Cow	W. Murchland	501,804	July 18	2035	501	64	399
Milking-machine	B. Atwater	498,947	June 6	346	83	63	1453
Milking-machine	B. Atwater	498,948	June 6	849	83, 84	63	1453
Milking-machine	L. Steenstrup	510,449	Dec. 12	1005	240	65	1614
Milking-machine. Cow	J. C. Fay	510,964	Dec. 19	1962	481	65	1802
Mill:					482		
See Bone-cutting mill. Grinding or pulverizing mill.							
Boring-mill. mill.							
Chasing-mill. Hominy-mill.							
Cider-mill. Picket-mill.							
Clay-mill. Pug-mill.							
Coffee-mill. Pugging-mill.							
Coffee-grinding mill. Pulverizing-mill.							
Crushing or grinding mill. Rolling-mill.							
Fanning-mill. Sawmill.							
Gig mill. Stamp-mill.							
Grinding-mill. Stamping-mill.							
Grinding and crushing mill. Windmill.							
Wire-rolling mill.							
Mill	T. L. Sturtevant	498,037	May 23	2658	664	63	1142
Mill cut-off. Feed	J. F. Winchell	509,416	Nov. 28	2400	581	65	1250
Mill-feeder	A. C. Brantingham	494,188	Mar. 28	2316	587	62	1852
Mill-rolls. Machine for re-dressing	D. J. Davidson	489,412	Jan. 3	649	176	62	140
Mills. Automatic feed-regulator for	A. N. Wolf	500,832	July 4	479	125	64	87
Milling-cutter	J. Thomson	509,145	Nov. 21	1911	467	65	1149
Milling-machine	J. Becker	489,282	Jan. 3	463	129	62	102
Milling-machine	E. W. Bemis	506,620	Oct. 10	1400	351	65	281
Milling-machine	C. H. Norton	509,444	Nov. 28	2466	593	65	1265
Milling-machine	S. L. Worsley	497,850	May 23	2355	594	63	1089
Milling-machine tail-stock	J. W. Boynton	491,521	Feb. 14	756	591	62	914
Milling-machine. Wrench	V. F. Carpenter	489,523	Jan. 10	851	222	62	193
Milling or forming settings. Machine for	M. L. J. Girdany	495,325	Apr. 11	1295	325	63	258
Millstone-dress	J. H. Brown	509,294	Nov. 21	2170	521	65	1197
Millstone-mounting	H. C. Shaw	495,642	Apr. 18	1807	453	63	369
Mine galleries, tunnels, &c. Apparatus for boring	F. Dünschede	507,891	Oct. 31	3563	877	65	720
Mine trap-door	G. J. Herth and G. Bonenberger	508,879	Nov. 14	1437	356	65	1043
Mine trap-door	J. Rees	497,211	May 9	1304	332	63	872
Mines, &c. Recovering lost coal from	R. Y. Mitchell	508,523	Nov. 14	901	222	65	940
Mines. Ventilating-fan for	D. H. Fisher	511,519	Dec. 26	2885	702	65	1986
Miners' hats. Lamp-support for	J. A. Simpson	511,365	Dec. 26	2634	640	65	1940
Mining apparatus	E. F. Peck	507,926	Oct. 31	3623	896	65	731
Mining apparatus. Hydraulic	N. C. Miller	489,751	Jan. 10	1182	309	62	260
Mining apparatus. Placer	M. D. Platner	495,832	Apr. 18	2104	529	63	422
Mining coal	D. C. Boyce	494,187	Mar. 28	2315	586	62	1852
Mining-drill	J. F. Butler	489,246	Jan. 3	412	114	62	92
Mining. Hydrothermal	C. W. Bechler	497,513	May 16	1832	462	63	960
Mining-machine	J. Boland and G. W. Fritz	501,402	July 11	1399	350	64	268
Mining-machine	M. Hardsocg	493,381	Mar. 14	961	247	62	1563
Mining-machine	A. Keil and A. R. Westerdahl	501,209	July 11	1076	248	64	212
Mining-machine	F. M. Lechner	503,607	Aug. 22	2287	570	64	1027
Mining-machine	B. A. Legg and A. Keil	501,795	July 18	2023	499	64	397
Mining-machine	F. N. Slade	493,659	Mar. 21	1427	363	62	1667
Mining-machine	O. E. Zohe	508,856	Nov. 14	1400	349	65	1037
Mining-machine. Coal	B. F. Wilson	502,426	Aug. 1	299	71	64	620
Mining-machine. Electric	E. A. Sperry	497,832	May 23	2326	583	63	1085
Mining machine. Placer	C. O. Sumner	505,684	Sept. 26	2315	587	64	1745
Mining machinery. Electric coal	E. C. Morgan	494,587	Apr. 4	91	22	63	19
Mineral-locator	R. T. Lacy, Jr.	507,018	Oct. 17	2059	508	65	415

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Mineral-separating apparatus. Hydraulic.	W. S. Lockhart.	489,538	Jan. 10	869	227	62	197
Mineral separator. Dry.	G. H. Patterson.	504,240	Aug. 29	3289	821	64	1233
Minerals. Washing and separating.	W. S. Lockhart.	509,818	Nov. 28	3070	742 741 743	65	1321
Mirror.	J. B. Willard.	500,310	June 27	2615	638	63	1827
Mirror and making same.	J. Jacobson.	501,514	July 18	1563	393	64	315
Mirror. Duplex.	C. H. French and D. Heald.	499,630	June 13	1481	356	63	1664
Mirror-frame.	H. and J. Caro.	491,525	Feb. 14	763	194	62	915
Mirror maze.	G. V. Palm.	507,159	Oct. 24	2322	570 571	65	475
Mirror-support and adjusting device.	W. P. Tarbell.	494,497	Mar. 28	2813	705	62	1943
Miter-box.	H. F. Beimling.	506,090	Oct. 3	450	118	65	88
Miter-box.	M. Hanson.	509,736	Nov. 28	2935	710	65	1353
Miter-box.	F. W. Loveall.	497,524	May 16	1846	466	63	982
Miter-box.	J. J. Spilker.	490,514	Jan. 24	2444	630 631	62	539
Miter-cutting machine.	D. H. Brenner.	499,202	June 13	770	183	63	1339
Miter-cutting machine.	F. W. Eichenauer.	496,643	May 2	401	109	63	692
Mitering and joining moldings, &c. Table for.	C. Thuener.	500,042	June 20	2146	520	63	1793
Mitering-knife.	A. Dodds.	491,773	Feb. 14	1159	290	62	995
Mitering-machine.	W. W. Abbott.	493,541	Mar. 14	1221	313	62	1611
Mitering-machine.	J. A. Brandon.	505,024	Sept. 12	1177	301 302	64	1506
Mitering-machine.	W. R. Fox.	493,494	Mar. 14	1139	291 292	62	1595
Mitering-machine. Adjustable.	J. Luscher.	507,742	Oct. 31	3312	811	65	674
Mixer:							
See Dough-mixer.	Fluid-mixer.						
Drink-mixer.	Glass-batch mixer.						
Drug-mixer.	Mayonnaise-mixer.						
Mixer and stirrer.	A. Hancock.	504,472	Sept. 5	262	68	64	1319
Mixing apparatus.	R. Smith.	492,475	Feb. 28	2248	562	62	1244
Mixing apparatus.	R. Smith.	495,603	Apr. 18	1737	438	63	358
Mixing apparatus.	A. Werner.	490,525	Jan. 24	2465	635	62	542
Mixing-machine.	A. Witz.	506,086	Oct. 3	444	116	65	86
Moccasin.	C. W. James and W. E. Grimes.	500,134	June 27	2329	563	63	1837
Moistener. Envelope and stamp.	W. E. Ray.	503,618	Aug. 22	2307	575	64	1030
Moistener. Envelope or stamp.	H. A. Fry.	509,156	Nov. 21	1927	471	65	1151
Moistener. Envelope or stamp.	G. R. Shebheard.	509,053	Nov. 21	1746	432	65	1117
Moistener. Finger.	M. W. Stebbins.	503,995	Aug. 29	2896	725	64	1160
Moistener. Postage-stamp or envelope.	J. B. Walsh.	505,495	Sept. 26	1940	500	64	1675
Moistening and cooling the atmosphere of rooms. Apparatus for.	G. Shilling and C. G. Smith.	494,494	Mar. 28	2806	703	62	1942
Moistening and sealing envelope-flaps. Apparatus for.	G. Schneider.	510,616	Dec. 12	1320	321	65	1671
Moistening attachment for bread boxes or receptacles.	L. B. Parish.	510,928	Dec. 19	1892	464	65	1789
Moistening device for envelopes, &c.	A. Rink.	489,267	Jan. 3	444	122	62	98
Moisture in the air. Apparatus for controlling.	H. D. Streator.	511,555	Dec. 26	2943	717	65	1997
Molasses-gate.	W. H. Clemes.	507,527	Oct. 31	2957	724	65	607
Molasses-gate.	C. F. Smith.	490,404	Jan. 24	2269	590	62	505
Mold:							
See Brick-mold.	Car-wheel mold.						
Brush-mold.	Cigar-mold.						
Bullet-mold.	Glass-mold.						
Butter-mold.	Sand mold.						
Candy-mold.	Tooth-mold.						
Capsule-mold.	Type-mold.						
Mold.	M. C. Bullock and S. W. Douglass.	501,915	July 25	2216	553	64	447
Mold and making same.	B. Jones.	510,865	Dec. 12	1788	.....	65	1756
Moldboard, &c. Auxiliary.	C. E. Fox.	503,413	Aug. 15	1953	485	64	951
Mold-forming knife.	L. His.	494,000	Mar. 21	1997	509	62	1777
Mold-jacket.	D. M. Springer.	506,950	Oct. 17	1952	483	65	395
Mold, mold-facing, and core and making same.	B. Jones.	507,226	Oct. 24	2441	.....	65	495
Mold-press.	H. E. Dennis.	500,320	June 27	2633	644	63	1890
Mold-sander.	C. H. Horton.	509,033	Nov. 21	1715	424	65	1111
Mold skim-gate.	W. A. James.	508,884	Nov. 14	1444	357	65	1044
Molded article.	A. C. Estabrook.	497,778	May 23	2253	565	63	1072
Molder's flask.	W. Edgar.	494,469	Mar. 28	2759	692	62	1933
Molder's flask.	J. Flockhart.	501,414	July 11	1417	355	64	272
Molder's flask-hinge.	J. Rost.	508,983	Nov. 21	1642	403	65	1097
Molding compound.	J. Rowbotham.	499,753	June 20	1693	.....	63	1713
Molding-flask.	J. Oliver.	497,890	May 23	2432	606	63	1104
Molding-flask.	E. C. Stearns.	496,014	Apr. 25	2375	601	63	488
Molding-flasks. Retaining-bar for.	T. J. Bradberry.	505,155	Sept. 19	1399	359	64	1560
Molding flower-pots, &c. Machine for.	W. West.	507,053	Oct. 17	2118	525 526	65	425
Molding-knife.	A. Hokanson.	507,540	Oct. 31	2978	730	65	610
Molding-machine.	G. C. Avery.	507,577	Oct. 31	3056	747	65	624
Molding-machine.	R. Campbell.	501,824	July 18	2058	507	64	403
Molding-machine.	W. W. Doolittle.	505,511	Sept. 26	1989	509 510	64	1683
Molding-machine.	C. Seymour.	509,331	Nov. 21	2236	540 541	65	1210
Molding-machine.	W. B. Sterrit.	491,273	Feb. 7	334	85	62	812
Molding-machine.	A. L. Teetor.	495,570	Apr. 18	1683	424 425	63	349
Molding-machine.	J. Wachalec.	511,224	Dec. 19	2381	581	65	1880
Molding-machine press-board.	G. J. Keenan.	489,013	Jan. 3	55	15	62	14
Molding. Metallic.	W. S. Grafton.	502,357	Aug. 1	181	42, 43	64	599
Molding or turning machine attachment.	G. A. Neitzel.	504,111	Aug. 29	3077	770	64	1194
Molding seat-rings.	F. H. Richards.	496,002	Apr. 25	2358	596	63	485
Molten materials. Machine for centrifugally treating.	O. B. Peck.	491,131	Feb. 7	102	28, 29	62	768
Money-drawer. Electric-alarm.	W. J. Walker.	491,824	Feb. 14	1230	307 308	62	1010
Money-drawer. Electric-alarm.	W. J. Walker.	492,646	Feb. 28	2536	628	62	1303

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Money-drawer. Electric-alarm	W. J. Walker and A. L. Bedford	499,864	June 20	1873	455	63	1744
Money-drawer. Electric-alarm	W. J. Walker and A. L. Bedford	501,306	July 11	1220	309	64	236
Money-receptacle	F. Billingham	507,984	Nov. 7	13	4	65	761
Money-tray	O. Hofmann	491,649	Feb. 14	962	242	62	957
Monkey-wrench	W. E. Badger	502,869	Aug. 8	1058	260	64	776
Monkey-wrench	E. S. Pratt	502,997	Aug. 8	1283	314	64	816
Monument. Cast-metal.	J. M. Cameron	498,506	May 30	3427	850	63	1295
Mooring apparatus	W. Thompson and D. Dishart	491,613	Feb. 14	914	229 } 230 }	62	946
Mop	L. D. Fowler	505,897	Oct. 3	154	39	65	30
Mop	J. T. Satterwhite	492,339	Feb. 21	2027	504	62	1186
Mop	T. W. Stewart	499,402	June 13	1113	267	63	1599
Mop and window-cleaner. Combined.	C. Wiebush	503,888	Aug. 22	2700	677	64	1106
Mop and wringer. Combined.	C. A. Chisholm	502,657	Aug. 1	688	165	64	692
Mop-head	W. N. Cook	497,292	May 9	1464	369	63	898
Mop-wringer	E. Beach	509,717	Nov. 28	2903	702	65	1748
Mop-wringer	A. M. Burnham	504,077	Aug. 29	3009	752	64	1181
Mop-wringer	A. M. Burnham	509,070	Nov. 21	1777	438	65	1123
Mop-wringer	A. Cathan	488,984	Jan. 3	14	4	62	5
Mop-wringer	W. Graham	503,663	Aug. 22	2372	592	64	1042
Mop-wringer	J. B. Henck, Jr.	490,561	Jan. 24	2513	647	62	552
Mop-wringer	M. E. Prescott	493,340	Mar. 14	899	230	62	1549
Mop-wringer	W. F. Utman	502,448	Aug. 1	337	81	64	628
Mop-wringing apparatus	R. S. Kirkpatrick	503,541	Aug. 15	2151	539	64	967
Mordant	E. Boursier	497,229	May 9	1333		63	877
Mordant. Resist.	W. T. Whitehead	499,687	June 13	1563		63	1677
Mordant. Zinc resist.	W. T. Whitehead	499,690	June 13	1566		63	1678
Mortar. Druggist's and chemist's	F. L. Brashear	507,410	Oct. 24	2750	675	65	555
Mortising-bit	L. O. Orton	493,444	Mar. 14	1000	272	62	1582
Mortising-machine	L. Grant and N. C. Heston	504,722	Sept. 12	668	170	64	1408
Mortising-machine	S. J. Hicks	493,501	Mar. 14	1153	294 } 295 }	62	1598
Mortising-machine	C. Loetscher	495,350	Apr. 11	1327	333	63	264
Mortising-machine	C. Seymour	495,209	Apr. 11	1105	275 } 276 }	63	223
Mortising-machine	A. S. Wagner	507,571	Oct. 31	3046	745	65	623
Mortising-machine attachment	H. Robinson	490,502	Jan. 24	2428	627	62	535
Mortising-machine bed	A. J. Saunders	506,945	Oct. 17	1944	481 } 482 }	65	393
Mortising-machine. Hollow-chisel	J. Harris	494,140	Mar. 28	2340	571 } 572 }	62	1837
Mortising-machine. Timber	C. P. Turner	493,133	Mar. 7	562	140 } 141 }	62	1469
Mortising-tool	S. J. Hicks	502,120	July 25	2531	635	64	506
Mosaic and tile press	B. Toulouse and J. Delorieu	501,584	July 18	1669	417	64	337
Mosaics. Making	H. B. Allaey	490,467	Jan. 24	2368	612	62	523
Mosquito-bar fixture	C. J. C. Puckette	506,885	Oct. 17	1851	461	65	375
Mosquito-canopy	W. H. Johnson	492,298	Feb. 21	1962	489	62	1174
Mosquito-canopy. Adjustable	A. H. Eva	496,252	Apr. 25	2744	686	63	556
Mosquito-cap. Pocket outdoor	E. F. A. Bushnell	499,965	June 20	2026	491	63	1772
Mosquito-net frame	H. H. Rumble	506,551	Oct. 10	1303	326	65	261
Mosquito-net frame	E. J. Willingham	508,072	Nov. 7	144	41	65	785
Moth-proof bag	C. A. Ives	492,163	Feb. 21	1760	439	62	1132
Mother-of-pearl and making same. Imitation	J. de Jong	494,255	Mar. 28	2427	612	62	1872
Motion. Apparatus for transmitting	J. Hunt	493,589	Mar. 14	1311	335	62	1630
Motion. Clutch mechanism for reversing	M. and C. Heineke	499,226	June 13	801	190	63	1544
Motion. Device for communicating	L. Warfield	494,182	Mar. 28	2306	584	62	1849
Motion. Device for converting	E. H. Johnson	504,086	Aug. 29	3028	756	64	1185
Motion mechanism. Differential	J. Dronsfield	500,322	June 27	2637	645	63	1891
Motion. Mechanism for converting	G. Humphries	508,387	Nov. 7	667	164	65	882
Motion. Mechanism for converting	F. W. Kremer	496,832	May 2	703	186	63	745
Motion. Mechanism for converting	S. Sloan	497,478	May 16	1771	446	63	968
Motion. Mechanism for converting	W. W. Virtue	491,910	Feb. 14	1364	340	62	1037
Motion. Mechanism for transmitting	G. F. Evans	493,859	Mar. 21	1752	446	62	1731
Motion-reversing apparatus	W. J. Walsh	491,722	Feb. 14	1075	271	62	980
Motion-transmitter. Frictional	W. H. Masterman	502,570	Aug. 1	538	128	64	665
Motions. Means for giving reciprocating or other	H. S. McKay	498,721	May 30	3812	939 } 940 }	63	1361
Motive power and apparatus therefor. Production of	A. Krank	501,083	July 11	864	224 } 225 }	64	173
Motive power. Producing	C. Tellier	492,976	Mar. 7	325	82	62	1423
Motor:							
See Aerothermic motor.	Hydrocarbon-motor.						
Air-motor.	Hydropneumatic motor.						
Car-motor.	Mechanical motor.						
Churn-motor.	Multiphase motor.						
Clock-motor.	Pedal-motor.						
Current-motor.	Petroleum-motor.						
Electric motor.	Railway-motor.						
Electrical motor.	Revolving motor.						
Electrical reciprocating motor.	Rocking-horse motor.						
Electro-magnetic reciprocating motor.	Rotary motor.						
Siphon-motor.	Sewing-machine motor.						
Ether-motor.	Spring-motor.						
Ether-vapor motor.	Steam-motor.						
Fan-motor.	Transformer-motor.						
Fluid-motor.	Vehicle-motor.						
Gas-motor.	Water-motor.						
Horse-power motor.	Wave-motor.						
Hydraulic motor.	Weight-motor.						
Motor	F. W. Clark	503,829	Aug. 22	2618	654	64	1090
Motor	G. Keller	504,272	Aug. 29	3343	835	64	1244
Motor	J. Kent and C. R. Glass	506,119	Oct. 3	493	128	65	97

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Motor.....	H. A. Kingsland and W. P. Sanger.....	497,246	May 9	1364	346	63	883
Motor.....	S. B. Maxfield and W. Snyder.....	509,043	Nov. 21	1733	428	65	1115
Motor.....	H. P. McAfee.....	494,343	Mar. 28	2566	646	62	1898
Motor.....	W. H. and E. G. Monroe.....	506,926	Oct. 17	1920	475	65	389
Motor.....	D. E. Myers.....	504,993	Sept. 12	1133	290	64	1497
Motor.....	B. L. Pickard.....	507,327	Oct. 24	2616	644	65	529
Motor.....	W. Rabich.....	496,486	May 2	144	40	63	645
Motor.....	F. Schram.....	503,878	Aug. 22	2684	673	64	1103
Motor.....	D. D. Shaw.....	509,052	Nov. 21	1744	{ 431 432 }	65	1117
Motor.....	L. H. Sinclair.....	504,056	Aug. 29	2983	{ 745 746 }	64	1176
Motor.....	T. A. Stark.....	490,173	Jan. 17	1878	489	62	416
Motor.....	W. H. Starr.....	503,623	Aug. 22	2314	577	64	1031
Motor.....	W. Sweet.....	506,3-2	Oct. 10	1019	254	65	206
Motor.....	N. L. Turner.....	507,464	Oct. 24	2832	693	65	571
Motor.....	W. J. Walker and A. L. Bedford.....	507,769	Oct. 31	3365	824	65	683
Motor and dynamo transmitting mechanism.....	H. W. Morton.....	489,026	Jan. 3	71	20	62	18
Motor connection and lock.....	T. James.....	501,904	July 18	2188	544	64	426
Motor driving-gear.....	J. C. Henry.....	494,478	Mar. 28	2773	695	62	1935
Motor for cars or other purposes.....	D. P. Sanders.....	511,652	Dec. 26	3102	{ 757 758 }	65	2025
Motor for the transmission of power.....	D. W. Carter.....	496,596	May 2	317	86	63	677
Motors and compressors. Apparatus for cooling liquids employed in.....	W. Maybach.....	499,302	June 13	919	222	63	1565
Movement-cure apparatus.....	J. W. Osborne.....	502,578	Aug. 1	549	131	64	667
Moving bodies to pass obstructions. Device for enabling.....	G. H. Forbes.....	506,037	Oct. 3	364	96	65	71
Moving granular materials. Process of and apparatus for.....	J. P. Griscom.....	496,684	May 2	466	125	63	704
Mower.....	W. R. Baker.....	500,550	July 4	21	8	64	6
Mower.....	F. W. Blackmer.....	489,214	Jan. 3	358	100	62	81
Mower.....	E. M. Brewster.....	501,665	July 18	2114	523	64	414
Mower.....	J. J. Crist.....	506,162	Oct. 3	572	{ 148 149 }	65	110
Mower.....	H. E. Pridmore.....	497,816	May 23	2299	{ 577 578 }	63	1080
Mower.....	H. E. Pridmore.....	497,817	May 23	23-3	{ 579 580 }	63	1081
Mower and tedder. Combined.....	K. and F. H. Jackman.....	495,677	Apr. 18	1860	465	63	377
Mower attachment.....	W. Burdin.....	498,205	May 23	2922	728	63	1189
Mower clutch. Lawn.....	H. Broome.....	497,944	May 23	2514	627	63	1117
Mower clutch-operating mechanism. Lawn.....	T. Coldwell.....	504,330	Sept. 5	30	9	64	1276
Mower. Field or lawn.....	D. M. Miller.....	495,825	Apr. 18	2088	527	63	418
Mower grass-box. Lawn.....	J. F. Braun.....	493,612	Mar. 14	1355	{ 444 446 }	62	1638
Mower grass-gathering attachment. Lawn.....	M. Fry.....	505,310	Sept. 19	1649	{ 427 428 }	64	1607
Mower grass-receptacle. Lawn.....	J. V. Werner and W. Falker.....	498,039	May 23	2662	665	63	1143
Mower. Lawn.....	B. D. Adams.....	491,914	Feb. 14	1370	341	62	1038
Mower. Lawn.....	A. Aldrich.....	506,457	Oct. 10	1152	286	65	233
Mower. Lawn.....	C. H. Braithwaite.....	504,411	Sept. 5	162	43	64	1300
Mower. Lawn.....	F. and C. G. Carlson.....	494,120	Mar. 28	2210	563	62	1832
Mower. Lawn.....	G. W. Carr.....	505,187	Sept. 19	1446	372	64	1568
Mower. Lawn.....	L. C. Clark.....	507,579	Oct. 31	3060	748	65	625
Mower. Lawn.....	L. Clousing.....	498,533	May 30	3473	{ 860 861 }	63	1303
Mower. Lawn.....	J. E. Crook and J. J. Davis.....	491,039	Jan. 31	3319	846	62	725
Mower. Lawn.....	H. Deck.....	503,904	Aug. 22	2726	684	64	1112
Mower. Lawn.....	S. P. Graham.....	503,792	Aug. 22	2573	640	64	1082
Mower. Lawn.....	G. W. Jennings.....	507,543	Oct. 31	2980	731	65	611
Mower. Lawn.....	T. Johnston.....	509,600	Nov. 28	2726	658	65	1315
Mower. Lawn.....	A. E. Miller.....	492,941	Mar. 7	265	68	62	1411
Mower. Lawn.....	E. R. Stabler.....	497,420	May 16	1674	423	63	952
Mower. Lawn.....	W. D. Wansbrough.....	503,509	Aug. 15	2104	527	64	978
Mower. Lawn.....	A. R. Woodvatt.....	510,753	Dec. 12	1546	384	65	1714
Mower or reaper cutting apparatus.....	W. S. and W. S. Elliott, Jr.....	491,340	Feb. 7	464	120	62	836
Mower or reaper cutting mechanism.....	L. King.....	490,024	Jan. 17	1643	427	62	367
Mower rake attachment.....	J. Marshall.....	503,152	Aug. 15	1533	{ 376 377 }	64	875
Mower sharpener. Lawn.....	Z. T. Bush.....	498,219	May 23	2943	732	63	1192
Mower sickle-head.....	T. J. Mitchell.....	502,129	July 25	2544	638	64	509
Mower track-clearer.....	R. D. Loose.....	506,324	Oct. 10	919	228	65	187
Mowing and harvesting machinery. Cutting apparatus for.....	P. T. Walton.....	504,641	Sept. 5	524	135	64	1369
Mowing and reaping machine cutter-bar.....	J. J. Ellsworth.....	489,438	Jan. 3	689	185	62	148
Mowing-machine.....	G. Beekman.....	509,285	Nov. 21	2153	{ 517 518 }	65	1194
Mowing-machine.....	J. Beermaker.....	507,962	Oct. 31	3683	{ 915 916 }	65	742
Mowing-machine.....	J. Dain, Jr.....	495,475	Apr. 18	1540	{ 386 387 }	63	323
Mowing-machine.....	W. P. Grannis.....	503,957	Aug. 29	2830	707	64	1148
Mowing-machine.....	F. S., J. T., T., and A. Jackson.....	491,736	Feb. 14	1093	{ 276 277 }	62	983
Mowing-machine.....	J. W. Latimer.....	509,317	Nov. 21	2207	533	65	1204
Mowing-machine.....	S. L. McColloch.....	497,055	May 9	1065	{ 273 274 }	63	828
Mowing-machine.....	J. Sindelar.....	494,900	Apr. 4	595	{ 149 150 }	63	115
Mowing-machine cutter-bar.....	I. F. Bassford.....	493,054	Mar. 7	440	111	62	1446
Mowing-machine cutter-bar.....	M. C. Sooter.....	491,142	Feb. 7	126	34	62	773
Mowing-machine cutter-bars. Mechanism for raising.....	G. H. Pratt.....	500,945	July 4	632	167	64	116
Mowing-machine push-bar.....	J. H. Jones.....	504,419	Sept. 5	179	46	64	1304
Mowing or reaping machine cutting apparatus.....	I. Case.....	499,967	June 20	2028	492	63	1772

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Mucilage-bottle tip.	W. H. Underwood	492,068	Feb. 21	1602	398	62	1098
Mucilage-holder	J. Chase	506,156	Oct. 3	563	146	65	109
Mucilage-holder	W. H. Palmer and W. W. Davis	506,539	Oct. 10	1287	322	65	258
Mud pan	H. R. June	510,794	Dec. 12	1617	402	65	1727
Muffle. Electrically-heated	W. Mitchell	491,432	Feb. 7	623	156	62	867
Muffle-kiln	T. Hoelzer	490,825	Jan. 31	2957	759	62	653
Muffle-kiln. Downdraft	A. M. Strusholm	502,063	Nov. 7	125	36	65	782
Multi-cylinder engine	L. C. Worron	501,983	July 25	2309	577	64	464
Multiphase meter	T. Duncan	500,868	July 4	531	138	64	97
Multiphase motor	L. Bell	504,904	Sept. 12	984	253	64	1470
Multiphase motor	L. Bell	505,505	Sept. 26	1975	507	64	1680
Multiplying-machine	J. Sawyer	502,425	Aug. 1	296	70, 71	64	620
Multitubular boiler	A. Coignet	498,239	May 30	2981	742	63	1215
Music. Binder for sheet	C. S. Fowler	500,482	June 27	2866	706	63	1932
Music-board	H. S. Sharpe	493,126	Mar. 7	552	137	62	1468
Music book or folio	W. H. Ayres	495,870	Apr. 18	2171	545	63	433
Music-box	G. A. Brachhausen and P. Riessner	500,371	June 27	2709	665	63	1904
Music-box	E. L. Cuendet	501,766	July 18	1979	499	64	390
Music-box coin-controlled mechanism	G. A. Brachhausen and P. Riessner	509,358	Nov. 28	2285	554	65	1230
Music-boxes. Damping device for	G. A. Brachhausen	500,369	June 27	2707	664	63	1903
Music-boxes. Damping device for	G. A. Brachhausen	500,370	June 27	2708	665	63	1903
Music-boxes. Machine for making note-plates for	G. A. Brachhausen and P. Riessner	500,373	June 27	2711	665	63	1904
Music-boxes. Note-plate for	G. A. Brachhausen and P. Riessner	500,374	June 27	2714	667	63	1905
Music-chart	J. H. Brady, W. A. Whitehead, and S. J. Shea	506,971	Oct. 17	1982	491	65	401
Music-leaf holder	J. Wood and W. Wilkinson	495,665	Apr. 18	2159	541	63	431
Music-leaf support	A. J. Lehmann	499,555	June 13	1362	323	63	1643
Music-leaf turner	H. Ahlstrand	499,195	June 13	761	181	63	1537
Music-leaf turner	J. W. Darley, Jr.	500,380	June 27	2721	668	63	1906
Music-leaf turner	T. Douglas	511,200	Dec. 19	2344	573	65	1873
Music-leaf turner	J. Hird	498,009	May 23	2617	653	63	1135
Music-leaf turner	F. M. Hurley	507,816	Oct. 31	3448	847	65	700
Music-leaf turner	O. O. Martinell	498,166	Apr. 25	2605	656	63	531
Music-leaf turner	O. W. Newcomb	499,680	June 13	1555	375	63	1676
Music-leaf turner	J. W. Paschall	495,599	Apr. 18	1732	436	63	357
Music-leaf turner	K. B. Pierce	494,690	Apr. 4	255	65	61	51
Music-leaf turner	J. H. and S. H. Redfield	504,052	Aug. 29	2977	744	64	1174
Music-leaf turner	M. L. Smith	491,907	Feb. 14	1311	339	62	1036
Music or book-leaf turner	F. W. Kline	510,801	Dec. 12	1627	405	65	1729
Music-rack	R. Binns	498,950	June 6	355	85	63	1454
Music-rack. Folding	W. H. Howe	501,208	July 11	1075	273	64	211
Music-rest and leaf-holder	W. H. Cud	509,612	Nov. 28	2743	662	65	1318
Music-sheet for mechanical musical instruments	R. M. Hunter	497,323	May 16	1526	384	63	925
Music-sheet. Perforated	W. H. Gilman	505,878	Oct. 3	121	31	65	24
Music-sheet turner	J. N. Carpenter	505,307	Sept. 19	1640	424	64	1605
Music-sheet-turning apparatus	F. Morel	501,212	July 11	1081	275	64	213
Music-stand	J. Mueller	511,308	Dec. 19	2526	614	65	1906
Music-stand. Adjustable	C. J. MacRae	502,920	Aug. 8	1261	308	64	811
Music-writing machine	F. H. Bowen	500,793	July 4	415	109	64	77
Musical block	A. S. and G. S. Bowen	491,833	Feb. 14	1243	310	62	1013
Musical box	O. P. Lochmann	498,278	May 30	3047	758	63	1226
Musical instrument	J. F. C. Abelspies	497,939	May 27	2506	625	63	1116
Musical instrument	A. R. Breinl	511,500	Dec. 26	2862	692	65	1981
Musical instrument	F. and R. A. Mann and T. Dawkins	509,232	Nov. 21	2067	499	65	1178
Musical instrument	C. Doriot	504,671	Sept. 5	583	149	64	1380
Musical instrument	R. Eisenmann	496,402	May 2	21	6	63	623
Musical instrument	C. A. Gregory	500,231	June 27	2487	607	63	1865
Musical instrument	J. F. Luscomb	491,183	Feb. 7	202	51	62	786
Musical instrument	A. Pettersson	494,025	Mar. 21	2040	520	62	1785
Musical instrument	K. Polenoff	502,103	July 25	2504	628	64	500
Musical instrument	L. H. Schubert	500,433	June 27	2803	690	63	1920
Musical instrument	A. P. Venon	496,238	Apr. 25	2720	682	63	552
Musical instrument	C. Warren	499,767	June 20	1710	410	63	1716
Musical instrument actuated by electricity. Keyed	P. E. Singer	492,563	Feb. 28	2399	597	62	1276
Musical-instrument attachment	W. Leiner	493,099	Mar. 7	508	128	62	1460
Musical-instrument attachment	J. W. Long	494,853	June 6	183	45	63	1425
Musical-instrument case	J. A. Weser	504,463	Sept. 5	242	64	64	1315
Musical instrument. Electrical	A. Montanelli	490,358	Jan. 24	2204	575	62	492
Musical instrument. Electrical	P. E. Singer	501,540	July 18	1597	402	64	332
Musical instrument. Electrical	P. E. Singer	501,541	July 18	1598	402	64	332
Musical instrument. Electrical	P. E. Singer	501,542	July 18	1599	403	64	332
Musical instrument. Electrical	P. E. Singer	501,543	July 18	1601	403	64	332
Musical-instrument finger-board	T. Wolfram	497,973	May 23	2557	638	63	1125
Musical-instrument keyboard	C. C. Kropp	502,099	July 25	2497	627	64	499
Musical instrument. Mechanical	F. Pietzschmann	491,223	Feb. 7	262	65, 66	62	798
Musical instrument. Mechanical	T. Zöllner	494,664	Apr. 4	216	54	63	44
Musical instrument. Mechanically-played	O. P. Lochmann	510,351	Dec. 5	836	202	65	1569
Musical-instrument reed tube	H. Janes	490,115	Jan. 17	1783	465	62	397
Musical-instrument reeds. Trimmer for	A. Flach	492,608	Feb. 23	2570	636	62	1309
Musical instrument. Stringed	W. Kumpf	505,662	Sept. 26	2276	577	64	1738
Musical instrument. Stringed	A. Stelzner	492,948	Mar. 7	277	70	62	1413
Musical-instrument strings. Pin for	G. A. Ernst	493,917	Mar. 21	1847	471	62	1748
Musical instruments. Adjustable bridge for stringed	G. Wooster	490,528	Jan. 24	2469	636	62	543
Musical instruments. Automatic cut-off for	C. Riegger	498,573	May 30	3538	875	63	1314

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Musical instruments. Combined bridge and tail-piece for	W. P. Owen and C. L. Eggert, Jr	490,213	Jan. 17	1953	512	62	429
Musical instruments. Device for tuning	J. P. Olsen	490,494	Jan. 24	2418	624	62	533
Musical instruments. Fret for	J. F. Stratton	501,743	July 18	1936	479	64	382
Musical instruments. Machine for swaging wire for	F. Ramacciotti	508,974	Nov. 21	1628	{ 399 400 }	65	1095
Musical instruments. Mouthpiece for	T. Henninger	491,646	Feb. 14	900	241	62	956
Musical instruments. Perforated sheet or plate for	A. Peterson	489,568	Jan. 10	912	238	62	206
Musical instruments. Reed for	H. Metzger	500,287	June 27	2567	627	63	1878
Musical instruments. Stringing	C. S. Weber	509,414	Nov. 28	2397	581	65	1250
Musical instruments. Tuning-peg for stringed	C. W. Hutchins	490,564	Jan. 24	2517	648	62	552
Musical key and transposition guide	J. B. F. Showalter	490,509	Jan. 24	2438	629	62	537
Musical ring	L. D. Gerwig	498,008	May 23	2616	653	63	1135
Musical string-instruments. Tuning-peg for	L. L. Filstrup	508,098	Nov. 7	197	52	65	795
Musical-stringed-instrument key	S. B. Dietz, Jr	504,024	Aug. 29	2938	735	64	1167
Musicians. Manual gymnasium for	J. Hall	494,197	Mar. 28	2330	591	62	1555
Mustard-pot	C. A. Pfenning	500,035	June 20	2136	518	63	1791
Mustard-pot valve	P. L. R. C. Claassen	492,782	Mar. 7	14	4	62	1362
Muzzle	J. Heinz	508,419	Nov. 14	724	178	65	906
Muzzle. Animal	G. C. Watson and J. S. Williams	490,795	Jan. 31	2915	749	62	644
Nail	N. Gillespie	489,184	Jan. 3	310	86	62	71
See Heel-nail. Horseshoe-nail.							
Nail	J. B. Adler	493,144	Mar. 7	579	145	62	1473
Nail	W. C. Lipe	510,035	Dec. 5	330	74	65	1472
Nail	W. H. Tuttle	496,625	May 2	369	100	63	686
Nail	E. Wimer	497,154	May 6	1228	313	63	857
Nail-assorting machine	C. W. Glidden	498,429	May 30	3295	822	63	1271
Nail-blank-feeding mechanism	J. A. Coleman	506,206	Oct. 10	698	176	65	143
Nail-cutting machine	W. N. Severance	500,958	July 4	659	{ 175 176 }	64	120
Nail-cutting machine	W. N. Severance	500,956	July 4	668	{ 176 177 }	64	122
Nail-driver. Magnetic	R. Boeklen	510,467	Dec. 12	1039	249	65	1621
Nail-extractor	C. M. Blydenburgh	506,465	Oct. 10	1168	290	65	236
Nail-extractor	G. H. Scranton, Jr	502,914	Aug. 8	1135	280	61	791
Nail for fastening hides	T. L. Baumgarten	511,671	Dec. 26	3132	765	65	2030
Nail-holding tool	J. C. Richardson	509,399	Nov. 28	2375	576	65	1246
Nail machine. Wire	G. Alexander	496,389	May 2	4	1	63	619
Nail machine. Wire	E. B. Roth and G. R. Bispham	493,222	Mar. 7	698	{ 178 179 }	62	1495
Nail machine. Wire	J. Stevenson, Jr	492,565	Feb. 28	2402	{ 597 598 599 }	62	1276
Nail machines. Die for wire	R. Naysmith	507,379	Oct. 24	2704	664	65	546
Nail machines. Gripping-die for wire	W. Taylor	511,174	Dec. 19	2306	{ 564 565 }	65	1866
Nail machines. Reel for wire	J. B. Munslow	502,373	Aug. 1	208	49	64	604
Nail or spike	A. T. Abbott	505,743	Sept. 26	2411	609	64	1761
Nail or staple	H. E. Leathers	498,664	May 30	3697	913	63	1342
Nail-puller	G. J. Capewell	505,815	Oct. 3	21	5, 6	65	7
Nail separating and feeding device	J. M. Benjamin and R. C. Simmons	503,895	Aug. 22	2712	{ 681 682 }	64	1108
Nail-trimmer	M. Trebbin	490,377	Jan. 24	2234	581	62	498
Nailing implement. Hand	E. Lehmann	489,020	Jan. 3	63	18	62	16
Nailing implement. Hand	A. F. Preston	510,442	Dec. 12	980	{ 236 237 }	65	1612
Nailing-machine	L. Goddu	490,623	Jan. 24	2625	{ 675 676 }	62	574
Nailing-machine	L. Goddu	490,625	Jan. 24	2632	{ 677 678 }	62	575
Nailing-machine	F. O. Tobey	502,212	July 25	2583	677	64	536
Napkin-holder	G. S. Mock	502,739	Aug. 8	846	206	64	736
Napkin or paper holder	C. C. Scott	505,726	Sept. 26	2387	603	64	1757
Napkin-ring	E. Drevet	501,332	July 11	1275	320	64	244
Napping-bats and apparatus therefor. Forming and sticking	W. A. Baglin	508,859	Nov. 14	1408	350	65	1038
Nautical signal	J. R. McGregor and G. O. Perry	493,283	Mar. 14	808	208	62	1533
Neckscarf	A. Bertin	490,820	Jan. 31	2947	757	62	651
Neckscarf	T. C. Robinson	500,723	July 4	311	83	64	58
Neckscarf	S. B. Solomon	490,512	Jan. 24	2442	630	62	538
Neckscarf	F. O. Ward	490,933	Jan. 31	3138	805	62	689
Necktie	G. E. Miller	498,807	June 6	90	23	63	1405
Necktie-box	M. Benas	495,008	Apr. 11	753	191	63	159
Necktie-clasp	J. A. Levison	495,170	Apr. 11	1052	262	63	213
Necktie-fastener	J. A. Cupler	490,138	Jan. 17	1829	478	62	406
Necktie-fastener	C. Molé	499,406	June 13	1218	291	63	1618
Necktie-fastener	H. S. Pullman	502,757	Aug. 8	875	214	64	741
Necktie-holder	O. M. Steppacher	497,140	May 9	1204	307	63	853
Necktie stiffening-plate	E. L. Wallace	494,501	Mar. 28	2817	706	62	1944
Needle. Sewing	A. B. Blanchard	500,556	July 4	31	11	64	8
Needle-threader	R. L. Hastings	492,581	Feb. 28	2428	605	62	1282
Needles. Making	E. J. Hall	503,476	Aug. 15	2657	513	64	968
Negative and screen holder	J. Scouler	505,331	Sept. 19	1676	432	64	1611
Nest. Hen's	J. L. McKnight	492,046	Feb. 21	1575	392	62	1093
Net. Fly	C. E. Rhinehart	507,285	Oct. 24	2541	625	65	513
Net for horses. Fly	J. Finley	495,730	Apr. 18	1949	490	63	393
Net-making machine	J. Knox	504,595	Sept. 5	463	{ 118 119 }	64	1356
Net-making machine	G. W. Price	491,592	Feb. 14	875	221	62	938
Netting-machine	G. W. Price	495,266	Apr. 11	1200	{ 301 302 303 }	63	241
Newspaper-clip	E. T. Orne	506,604	Oct. 10	1376	345	65	276

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.
				Spec.	Dr. g.	Page.
Newspaper folding and staple-binding machine.....	L. C. Crowell.....	510,528	Dec. 12	1133	274 275 276 277 278 279 280 281	65 1638
Newspaper-holder.....	W. Schweitzer.....	508,769	Nov. 14	1268	315	65 1012
Newspaper-holder.....	J. W. Sinz.....	511,366	Dec. 26	2635	640	65 1940
Newspaper lock-box.....	E. J. Colby.....	502,870	Nov. 14	1428	354 355	65 1042
Newspaper-wrapping machine.....	L. C. Crowell.....	500,115	June 27	2262	551 552 552	63 1824
Newspaper-wrapping machine.....	L. C. Crowell.....	500,116	June 27	2272	553 554	63 1826
Newspaper-wrapping machine.....	L. C. Crowell.....	500,117	June 27	2281	554 555	63 1827
Newspaper-wrapping machine.....	L. C. Crowell.....	500,536	June 27	2957	726 727	63 1948
Newspaper-wrapping machine.....	L. C. Crowell.....	508,567	Nov. 14	966	237 238	65 953
Nickel from ores containing nickel. Producing and separating sulphide of.....	C. C. Bartlett.....	499,314	June 13	936	63	63 1568
Nickel-in-the-slot machine.....	G. Bettini.....	497,906	May 23	2457	614 615	63 1107
Nickel. Obtaining and separating sulphide of.....	R. M. Thompson.....	489,574	Jan. 10	921	62	62 207
Nickel. Obtaining and separating sulphide of.....	R. M. Thompson.....	489,575	Jan. 10	923	62	62 207
Nickel. Obtaining and separating sulphide of.....	R. M. Thompson.....	489,576	Jan. 10	925	62	62 208
Nickel. Obtaining and separating sulphide of.....	R. M. Thompson.....	489,881	Jan. 10	1362	62	62 297
Nickel. Producing and separating sulphide of.....	J. L. Thomson.....	489,882	Jan. 10	1363	62	62 297
Nickel. Separating metallic.....	P. D. Ricketts.....	505,846	Oct. 3	66	65	65 15
Nickel. Treating ores containing.....	A. L. Grant and C. G. Richardson.....	490,847	Jan. 31	2987	62	62 660
Nicotine-absorbent.....	E. L. Lewis.....	495,186	Apr. 11	1077	266	63 218
Nippers. Cutting.....	S. Taft.....	496,584	May 2	299	81	63 673
Nipple and cap. Filling.....	H. S. Chase.....	504,150	Aug. 29	3137	784	64 1205
Nipple-holder.....	J. Canney.....	502,224	July 25	2703	682	64 540
Nipples during threading. Device for holding.....	J. H. Reilly.....	500,746	July 4	341	90	64 64
Nipples during threading. Device for holding.....	F. W. Smith, Jr.....	500,748	July 4	344	91	64 64
Nitro-cellulose and its compounds. Denitration of.....	H. D. Turgard.....	508,124	Nov. 7	241	65	65 803
Nitro-cellulose or celluloid surfaces. Producing.....	B. B. Goldsmith.....	490,195	Jan. 17	1916	62	62 422
Nitroglycerine-shell.....	C. P. Winslow.....	494,696	Apr. 4	265	68	63 53
Non-conducting composition of matter for covering steam pipes, boilers, &c.....	S. W. Steiner.....	505,426	Sept. 19	1840	64	64 1643
Non-conducting covering.....	H. W. Johns.....	510,026	Dec. 5	316	71	65 1469
Non-conducting covering.....	R. H. Martin.....	497,382	May 16	1616	408	63 942
Non-conducting coverings. Removable fastening for.....	T. Williams.....	494,313	Mar. 28	2512	633	62 1888
Non-conducting coverings. Support for.....	T. Williams.....	494,312	Mar. 28	2510	633	62 1888
Non-heat-conducting composition.....	R. V. Mattison.....	492,092	Feb. 21	1642	62	62 1107
Non-heat-conducting composition for coating boilers.....	R. V. Mattison.....	492,094	Feb. 21	1642	62	62 1107
Non-heat-conducting composition for covering boilers, &c.....	R. V. Mattison.....	492,093	Feb. 21	1642	62	62 1107
Nose-bag. Animal.....	G. D. Leonard.....	494,428	Mar. 28	2701	678	62 1923
Note-indicator.....	A. Wider.....	498,922	June 6	309	71, 72	63 1447
Nozzle appliance.....	O. P. Austin.....	509,353	Nov. 28	2279	553	65 1229
Nozzle.....	J. B. Thies.....	497,480	May 16	1773	446 447	63 968
Nozzle. Adjustable.....	E. E. Woodward.....	497,903	May 23	2452	612 613	63 1107
Nozzle. Exhaust.....	F. Mertsheimer.....	493,510	Mar. 14	1165	298	62 1600
Nozzle. Exhaust.....	H. C. Reagan, Jr.....	493,783	Mar. 21	1632	415 416	62 1708
Nozzle. Spray.....	A. W. White.....	498,599	May 30	3574	85	63 1321
Nozzle. Spraying.....	W. L. Deming.....	511,728	Dec. 26	3228	792	65 2048
Nozzle. Spraying.....	W. L. Deming.....	511,729	Dec. 26	3229	792	65 2048
Nozzle. Spraying.....	J. J. McGowen.....	502,742	Aug. 8	849	207	64 737
Nozzle. Variable exhaust.....	H. R. Walker.....	490,000	Jan. 17	1588	415	62 356
Numbering and perforating machine.....	J. Brady.....	499,281	June 13	884	214 215	63 1558
Numbering-head.....	C. A. Haney.....	510,912	Dec. 19	1861	458	65 1782
Numbering-machine.....	E. G. Bates.....	489,449	Jan. 10	724	194	62 163
Numbering-machine.....	F. Sanders.....	497,729	May 16	2162	541	63 1040
Nut and bolt lock.....	J. S. Briggs.....	496,379	Apr. 25	2969	741	63 600
Nut and bolt lock.....	N. T. Clark and J. K. Haynie.....	503,195	Aug. 15	1605	394	64 859
Nut and bolt lock.....	C. M. Stetson.....	490,176	Jan. 17	1883	490	62 416
Nut and drill ratchet-wrench. Adjustable.....	C. H. Bernheim.....	501,862	July 18	2111	521	64 413
Nut-clamp.....	J. B. Dolan.....	511,414	Dec. 26	2727	660	65 1956
Nut cracker and picker. Combined.....	N. R. Streeter and C. P. Mosher.....	508,355	Nov. 7	610	150	65 871
Nut for screw-bolts. Locking.....	L. W. Crosta.....	510,120	Dec. 5	467	105	65 1498
Nut-lock.....	H. W. Armstrong.....	498,734	May 30	3838	946	63 1366
Nut-lock.....	E. L. Arnold.....	493,393	Mar. 14	979	252	62 1567
Nut-lock.....	O. H. Beam.....	504,296	Aug. 29	3380	845	64 1251
Nut-lock.....	J. W. Berry.....	496,847	May 9	729	193	63 768
Nut-lock.....	N. Bosmann, Jr.....	497,531	May 16	1859	469	63 985
Nut-lock.....	H. P. Brown.....	508,402	Nov. 14	703	173	65 902
Nut-lock.....	J. C. Brown.....	509,870	Dec. 5	29	7	65 1416
Nut-lock.....	H. Cohen and J. W. Tharp.....	504,561	Sept. 5	416	106	64 1347
Nut-lock.....	J. W. B. Cook.....	490,740	Jan. 31	2825	725 726	62 627
Nut-lock.....	J. W. B. Cook.....	499,872	June 20	1890	459	63 1748
Nut-lock.....	M. F. Deininger.....	498,631	May 30	3635	900	63 1331
Nut-lock.....	M. E. Dempsey.....	492,715	Feb. 28	2637	653	62 1323
Nut-lock.....	S. O. Doane.....	510,501	Dec. 12	1089	263	65 1631

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Nut-lock	J. G. Dulany	498,208	May 23	2927	729	63	1190
Nut-lock	J. D. Fichtner	506,485	Oct. 10	1207	300	65	243
Nut-lock	J. J. Fronheiser	495,198	Apr. 11	1093	271	63	221
Nut-lock	G. Gibson	492,672	Feb. 28	2574	637	62	1310
Nut-lock	G. Gibson	492,722	Feb. 28	2648	656	62	1325
Nut-lock	G. Gibson	510,683	Dec. 12	1435	354	65	1693
Nut-lock	W. Gledhill	506,490	Oct. 10	1217	303	65	244
Nut-lock	G. W. Grafflin, Jr.	490,553	Jan. 24	2505	645	62	550
Nut-lock	G. W. Grafflin, Jr.	490,557	Jan. 24	2508	646	62	551
Nut-lock	G. E. Hain	495,551	Apr. 18	1658	416	63	343
Nut-lock	J. Harmon and G. W. Faber ..	508,823	Nov. 14	1346	333	65	1026
Nut-lock	J. L. Hayward	491,173	Feb. 7	186	47	62	783
Nut-lock	J. C. Herman	493,213	Mar. 7	640	174	62	1492
Nut-lock	J. W. Hester	506,231	Oct. 10	758	187	65	155
Nut-lock	R. Holmes	501,345	July 11	1304	325	64	250
Nut-lock	R. Holmes	511,616	Dec. 26	3052	743	65	2015
Nut-lock	J. Horner	511,270	Dec. 19	2460	600	65	1894
Nut-lock	C. P. Howell	510,023	Dec. 5	313	70	65	1468
Nut-lock	H. M. Howell	502,363	Aug. 1	189	45	64	601
Nut-lock	J. L. Hudson	497,666	May 16	2064	515	63	1021
Nut-lock	A. A. Johnson	510,510	Dec. 12	1103	266	65	1633
Nut-lock	C. F. Johnson	497,244	May 9	1361	346	63	882
Nut-lock	T. D. Jones	502,195	July 25	2655	671	64	531
Nut-lock	W. J. Jones	498,660	May 30	3690	912	63	1340
Nut-lock	E. L. Krauser	505,468	Sept. 26	1902	490	64	1668
Nut-lock	E. La Rochelle	494,338	Mar. 28	2558	614	62	1897
Nut-lock	D. A. Leonard	504,596	Sept. 5	466	119	64	1356
Nut-lock	H. Löhnert	505,947	Oct. 3	222	58	65	44
Nut-lock	H. W. Lusk	508,177	Nov. 7	321	80	65	817
Nut-lock	T. Martin	505,365	Sept. 19	1735	449	64	1622
Nut-lock	C. W. McCormick	490,585	Jan. 24	2545	655	62	558
Nut-lock	A. W. Miles and E. A. Commander.	493,732	Mar. 21	1554	396	62	1693
Nut-lock	A. W. Miles and E. A. Commander.	509,602	Nov. 28	2729	659	65	1316
Nut-lock	D. A. Mitchell	497,589	May 16	1946	488	63	999
Nut-lock	J. R. Montgomery	511,446	Dec. 26	2782	673	65	1985
Nut-lock	E. U. Moore	501,590	July 18	1676	418	64	338
Nut-lock	S. J. Myers	494,707	Apr. 4	283	71	63	57
Nut-lock	I. Nappin	504,608	Sept. 5	481	133	64	1359
Nut-lock	A. J. Obrist	495,363	Apr. 11	1352	338	63	268
Nut-lock	G. L. Odgers	510,285	Dec. 5	744	180	65	1550
Nut-lock	R. K. Orit and M. A. Shearer ..	509,239	Nov. 21	2076	501	65	1180
Nut-lock	E. Poole	492,050	Feb. 21	1579	393	62	1094
Nut-lock	E. E. Poole	504,999	Sept. 12	1142	292	64	1499
Nut-lock	B. Porter	500,672	July 4	229	60	64	44
Nut-lock	A. H. Read	510,708	Dec. 12	1474	364	65	1701
Nut-lock	S. G. Read	498,446	May 30	3324	827	63	1277
Nut-lock	S. S. Reed and I. S. Reitz	498,943	June 6	311	81	63	1452
Nut-lock	W. M. Reed	508,757	Nov. 14	1218	311	65	1009
Nut-lock	W. M. Sayre	495,520	Apr. 18	1605	404	63	335
Nut-lock	J. W. Schoaf	493,122	Mar. 7	546	136	62	1467
Nut-lock	J. C. Seger	511,465	Dec. 26	2411	680	65	1972
Nut-lock	B. F. Shafer, Sr.	503,808	Aug. 22	2593	648	64	1085
Nut-lock	C. P. Sherman	490,458	Jan. 24	2350	608	62	519
Nut-lock	H. E. Smith	505,856	Oct. 3	81	21	65	18
Nut-lock	C. Starz	491,908	Feb. 14	1363	339	62	1036
Nut-lock	S. J. Stevens	493,127	Mar. 7	553	138	62	1468
Nut-lock	W. M. Stewart	505,140	Sept. 19	1375	352	64	1556
Nut-lock	E. Stillwell	498,368	May 30	3210	798	63	1255
Nut-lock	W. Sutton	489,595	Jan. 10	953	248	62	213
Nut-lock	J. Taini	509,700	Nov. 28	2874	695	65	1343
Nut-lock	H. Taylor	503,065	Aug. 8	1379	341	64	824
Nut-lock	J. B. Woods	498,834	June 6	148	36	63	1418
Nut-lock	W. C. Woods	498,601	May 30	3579	886	63	1321
Nut-lock	J. Brinkerhoff	497,702	May 16	2125	530	63	1032
Nut-lock and bolt-tightener	L. Tolan, Jr., and F. L. Morton ..	502,477	Aug. 1	320	91	64	636
Nut-lock for vehicle-axles	J. G. Perry	491,718	Feb. 14	1069	270	62	979
Nut-lock washer	N. E. Bradford	500,095	June 20	2225	542	63	1807
Nut-locks. Cement for	A. L. Mills	505,839	Oct. 3	57	15	65	14
Nut-locks. Making	C. Swayze	500,975	July 4	698	...	64	127
Nut-machine	W. E. Spooner	507,291	Oct. 24	2548	627	65	514
Nut. Spring locking	M. F. High	491,175	Feb. 7	190	48	62	784
Nut-tapping machine	C. P. Dorr	510,245	Dec. 5	679	162	65	1539
Nut-tapping machine	L. H. Cole	494,367	Mar. 28	2607	655	62	1905
Nut-tapping machine	T. S. Disston	504,971	Sept. 12	1093	279	64	1490
Nut-tapping machine	E. T. Gilbert	507,802	Oct. 31	3426	841	65	695
Nut-tapping machine	J. A. Plopper	498,186	May 23	2879	719	63	1182
Nut-tapping machine	W. D. Putnam	497,892	May 23	2435	607	63	1104
Nut-tapping machine. Screw	F. S. Cook	507,972	Oct. 31	3685	918	65	744
Nut. Wagon	W. H. and B. H. Collins	507,310	Oct. 24	2589	637	65	524
Nut-wrench	J. Geisler	498,782	June 6	48	11	63	1397
Nut-wrench	T. C. Lippitt	507,587	Oct. 31	3074	752	65	628
Nuts on bolts. Means for locking	T. C. Palmer	492,829	Mar. 7	88	21	62	1375
oar-lock	L. K. Buntain	506,974	Oct. 17	1987	492	65	402
oar-lock	L. Gerhardt	498,512	May 30	3433	852	63	1296
oar-lock for self-feathering oars	W. J. Gessart	499,727	June 20	1634	393	63	1704
oar-cleaner	G. H. Rich	491,594	Feb. 14	884	222	62	939
Observation-wheel	J. Murray	506,828	Oct. 17	1754	441	65	358
Obstetrical and examination stirrup	J. M. Maurer	505,319	Sept. 19	1661	429	64	1678
Obstetrical appliance	J. H. and I. N. Loyda	504,598	Sept. 5	468	120	64	1357
Ocean-power	R. L. Johansen	508,320	Nov. 7	555	136	65	860
Oil-box. Self-regulating	O. P. Jarvis	507,734	Oct. 31	3304	808	65	672

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Oil-burner	J. Aitchison	510,149	Dec. 5	518	119 120	65	1507
Oil-burner	J. Barrow	499,088	June 6	593	142	63	1494
Oil-burner	A. H. Calkins	497,490	May 16	1795	451	63	973
Oil-burner	H. Holland	511,241	Dec. 10	2410	587	65	1885
Oil-burner	C. Ingersoll	509,970	Aug. 29	2850	715	64	1152
Oil-burner	F. L. McGahan	501,356	July 11	1322	330 331	64	254
Oil-burner	F. L. McGahan	506,331	Oct. 10	926	210	65	128
Oil-burner	W. T. Putnam	500,350	June 27	2680	657 658	63	1898
Oil-burner	W. T. Putnam	501,692	July 12	1846	459	64	367
Oil-burner	B. Roberts	491,226	Feb. 7	268	67	62	799
Oil-burner	C. T. Smith	489,549	Jan. 10	885	231	62	200
Oil-burner	H. Stacey	494,992	Apr. 4	722	184	63	138
Oil-burner	H. Stacey	509,831	Nov. 28	3090	746	65	1384
Oil-burner	C. Trench	497,842	May 23	2345	588	63	1088
Oil-burner	C. Trench	498,198	May 23	2913	725	63	1187
Oil-burner	W. Vollmer and N. S. Campbell	498,591	May 30	3553	8-3	63	1318
Oil-burner for furnaces	W. N. Graves	505,355	Sept. 19	1712	442	64	1618
Oil-burner. Fuel.	J. S. Thurman	505,931	Oct. 3	199	50	65	39
Oil-burner safety attachment	F. L. and A. L. McGahan	508,039	Nov. 7	29	26	65	775
Oil-burning apparatus	F. L. Babcock	506,027	Oct. 3	348	92	65	68
Oil-can	L. S. Bonbrake	505,347	Sept. 19	1695	436	64	1615
Oil-can	J. A. Campbell	496,246	Apr. 25	2730	6-4	63	555
Oil-can	F. E. Heinig	496,121	Apr. 25	2543	641	63	519
Oil-can	F. A. Lane	495,223	Apr. 11	1125	281	63	226
Oil-can	D. A. Lisk and T. D. Brown	504,788	Sept. 12	793	200	64	1432
Oil-can	C. W. Proctor	504,748	Sept. 12	725	181	64	1420
Oil-can	T. Schirmacher	508,767	Nov. 14	1266	315	65	1012
Oil-can	I. Weil	502,336	Aug. 1	141	32	64	591
Oil-can and filler	E. W. Luce	511,440	Dec. 26	2772	671	65	1963
Oil-can or other liquid-receptacle	T. A. Schluter	493,777	Mar. 21	1776	453	62	1736
Oil-can. Pneumatic	J. S. and E. L. Arnett	496,843	May 9	723	192	63	767
Oil-cloth cutter	J. W. Lewis	503,546	Aug. 15	2167	541	64	990
Oil-cup	W. F. Althoff and J. H. Stokesbary	491,830	Feb. 14	1238	309	62	1012
Oil-cup	J. U. Zurlinden	492,318	Feb. 21	1994	496	62	1180
Oil-delivery appliance	F. T. Fay	498,991	Jan. 3	23	6, 7	62	7
Oil-drip pan	F. B. Flynn	496,403	May 2	23	6, 7	63	623
Oil from crank-pin journals of connecting-rods. Device for catching	R. M. La Touche	504,391	Sept. 5	128	33	64	1294
Oil from tanks. Valve and pipe adjunct for graduating the flow of	G. R. Moore	503,769	Aug. 22	2541	632	64	1075
Oil-heater	A. G. Glasgow	504,524	Sept. 5	355	90	64	1336
Oil on water. Shell for distributing	J. C. Simmonds and A. Peniston	495,569	Apr. 18	1682	424	63	349
Oil or gasoline can	L. S. Bonbrake	489,786	Jan. 10	1233	323	62	270
Oil or other liquids under pressure. Apparatus for supplying	H. Schumm	496,751	May 2	574	1-4	63	722
Oil. Process of and apparatus for deodorizing and refining crude	R. H. Laird	507,230	Oct. 24	2446	603	65	496
Oil. Process of and apparatus for thickening linseed.	E. Schaal	493,187	Mar. 7	644	164	62	1485
Oil-purifier	D. H. McClelland	498,184	May 23	2877	718	63	1182
Oil. Refining vegetable	G. W. Scollay	498,821	June 6	121	63	63	1413
Oil solvent	E. E. Ling	507,586	Oct. 31	3073	65	62	628
Oil. Treating	C. Toppan	498,588	May 30	3556	63	63	1317
Oil, &c. Treating cotton-seed	G. W. Scollay	498,822	June 6	122	31	63	1413
Oils and products thereof. Producing sulphureted.	W. D. Field	498,162	May 23	2438	63	63	1175
Oils. Apparatus for burning hydrocarbon or other.	G. Gerrard	510,170	Dec. 5	549	128	65	1514
Oils. Compound of blown	W. D. Field	491,880	Feb. 14	1324	62	62	1028
Oils. Hastening the drying action of drying.	W. N. Blakeman, Jr.	496,989	May 9	971	63	63	812
Oils. Imparting drying properties to	W. N. Blakeman, Jr.	496,991	May 9	974	63	63	812
Oils. Imparting drying properties to fatty	W. N. Blakeman, Jr.	496,987	May 9	969	63	63	812
Oils into stoves, furnaces, &c. Apparatus for feeding hydrocarbon or other	H. H. Bailey	505,871	Oct. 3	107	28	65	22
Oils. Thickening drying.	W. N. Blakeman, Jr.	496,988	May 9	970	63	63	812
Oiler	H. W. Fleming and J. A. Mack	506,312	Oct. 10	883	217	65	180
Oiler	C. J. Hauck, Jr.	509,309	Nov. 21	2190	526	65	1202
Oiling-can	S. Anderson	506,763	Oct. 17	1648	413	65	332
Oleins or stearine from suet. Process of and apparatus for separating	E. J. B. Benoit and J. Soler y Vila	498,375	May 30	3219	800	63	1256
Opera-chair	G. A. Clapp	509,196	Nov. 21	1905	485	65	1165
Opera-chair	M. W. Kempner	506,914	Oct. 17	1892	472	65	383
Opera-chair	M. McAneny and F. Stansbury	501,896	July 18	2176	539 540	64	424
Opera-chair	H. A. J. Rieckert and L. F. Kwiatkowski	489,328	Jan. 3	526	143	62	113
Opera, field, marine, or other glass	J. Aitchison and T. Bradley	500,835	July 4	484	126	64	88
Opera-glass holder	R. Brass	490,264	Jan. 24	2046	536	62	459
Opera-glass holder	L. W. Levy	491,711	Feb. 14	1057	267	62	976
Opera-glass holder	J. Murphy	506,012	Oct. 3	328	86	65	64
Opera-glass holder	P. N. Staff	507,566	Oct. 31	308	743	65	620
Opera-glasses. Mirror attachment for	M. Murray	498,019	May 23	2630	658	63	1138
Ophthalmoscope	A. W. O. Roth	507,934	Oct. 31	3638	899	65	734
Optical illusion	H. E. Perry	500,607	July 4	114	30, 31	64	22
Optical illusions. Device for producing	G. V. Palm	498,524	May 30	3455	857	63	1299
Orange-cleaning machine	H. Learned	503,210	Aug. 15	1629	400	64	894
Orange-knife	C. A. Dietz	509,515	Nov. 28	2588	626	65	1248
Orange or fruit cleaning machine	J. L. Blockburger	502,651	Aug. 1	675	163	64	690
Orange-sorting machine	P. L. Billingsley	508,911	Nov. 21	1533	373	65	1075
Orange-wrapping machine	A. Ayer	498,222	May 30	2951	735 736	63	1209
Ordnance. Breech-loading	A. Noble and G. Henderson	492,942	Mar. 7	266	68, 69	62	1412

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Ordnance. Breech mechanism for.....	J. B. G. A. Canet.....	502,172	July 25	2619	{ 660 661	{ 64	523
Ordnance. Mechanism for firing breech-loading.....	W. H. Driggs.....	493,987	Mar. 21	1979	{ 505 639	{ 62	1773
Ordnance. Operating.....	W. B. Gordon.....	497,977	May 23	2563	{ 640 641	{ 63	1126
Ordnance recoil-check.....	H. Schneider.....	510,650	Dec. 12	1380	{ 337 338	{ 65	1683
Ordnance. Recoil-mount for.....	W. H. Driggs.....	502,178	July 25	2628	{ 662 663	{ 64	525
Ore bricks. Manufacturing purple.....	H. Bird.....	490,535	Jan. 24	2479	.....	62	545
Ore. Concentrating magnetic iron.....	G. Conkling.....	504,200	Aug. 29	3226	804	64	1222
Ore. Concentrating magnetic iron.....	G. Conkling.....	504,201	Aug. 29	3228	804	64	1222
Ore-concentrator.....	F. D. Darragh and F. G. King.....	506,035	Oct. 3	356	{ 94 95	{ 65	69
Ore-concentrator.....	G. Johnston.....	489,744	Jan. 10	1170	305	62	257
Ore-concentrator.....	G. Johnston.....	490,849	Jan. 31	2989	{ 765 766	{ 62	660
Ore-concentrator.....	G. Johnston.....	490,850	Jan. 31	2991	766	62	660
Ore-concentrator.....	J. H. McCoy.....	501,022	July 4	762	200	64	139
Ore-concentrator.....	T. McGlew.....	505,169	Sept. 19	1421	366	64	1564
Ore-concentrator.....	T. McGlew.....	505,412	Sept. 19	1811	{ 467 468	{ 64	1637
Ore-concentrator.....	J. H. Montgomery.....	495,003	Apr. 4	740	188	63	141
Ore-concentrator.....	C. E. Seymour.....	498,823	June 6	124	31	63	1413
Ore-concentrator.....	C. E. Seymour.....	503,687	Aug. 22	2405	690	64	1048
Ore-concentrator.....	C. E. Seymour.....	506,609	Oct. 10	1383	347	65	277
Ore-concentrator.....	C. B. Walker.....	497,643	May 23	2346	588	63	1088
Ore-crusher.....	U. Cummings.....	498,424	May 30	3286	{ 820 821	{ 63	1269
Ore-crushing machine.....	A. Fraser.....	501,999	July 25	2334	585	64	469
Ore-crushing mortar.....	A. Schulerburg.....	492,634	Feb. 28	2515	623	62	1298
Ore-dressing apparatus.....	W. J. Bartsch.....	491,672	Feb. 14	996	251	62	963
Ore-elevator.....	L. J. Hewes.....	507,126	Oct. 24	2253	555	65	463
Ore-grinder.....	G. A. Gelien.....	508,008	Nov. 7	43	13	65	766
Ore-jigger or concentrating-machine.....	E. A. Wall.....	506,751	Oct. 17	1623	408	65	334
Ore-leaching apparatus.....	W. D. Bohm.....	507,350	Oct. 24	2654	{ 652 653	{ 65	536
Ore-roasting furnace.....	H. F. Brown.....	489,142	Jan. 3	242	67	62	56
Ore-roasting furnace.....	H. F. Brown.....	489,143	Jan. 3	245	68, 69	62	57
Ore or feed pulverizer.....	J. M. Jones.....	500,582	July 4	68	19, 20	64	14
Ore-pulverizer. Centrifugal.....	O. B. Peck.....	497,204	May 9	1291	329	63	869
Ore-roasting and calcining furnace.....	R. C. Greer.....	495,883	Apr. 18	2187	549	63	436
Ore-roasting and calcining furnace.....	R. C. Greer.....	508,542	Nov. 14	929	228	65	945
Ore-roasting kiln.....	O. W. Davis, Jr.....	501,494	July 18	1528	383	64	309
Ore screening and concentrating apparatus.....	W. Clancy.....	508,282	Nov. 7	499	{ 120 121	{ 65	850
Ore-separating machine.....	H. Bradford.....	504,665	Sept. 5	561	{ 143 144	{ 64	1378
Ore. Separating or concentrating.....	H. Bradford.....	504,666	Sept. 5	567	144	64	1370
Ore-separator.....	A. C. Campbell.....	506,976	Oct. 17	1989	{ 492 493	{ 65	402
Ore-separator.....	R. Dilworth.....	503,454	Aug. 15	2010	{ 498 499	{ 64	961
Ore-separator.....	W. Krug.....	490,911	Jan. 31	3107	{ 796 797	{ 62	683
Ore-separator.....	W. S. Lockhart.....	500,662	July 4	210	54	64	41
Ore-separator.....	W. P. Miller.....	497,474	May 16	1762	{ 443 444	{ 63	967
Ore-separator.....	C. F. Willsie.....	503,023	Aug. 8	1316	322	64	822
Ore-separator and amalgamator. Combined.....	J. J. Fitzgerald.....	501,879	July 18	2147	532	64	410
Ore separator and concentrator.....	I. F. Monell.....	504,931	Sept. 12	1024	264	64	1478
Ore-separator. Centrifugal.....	O. B. Peck.....	489,090	Jan. 3	163	45	62	38
Ore-separator. Centrifugal.....	O. B. Peck.....	489,197	Jan. 3	331	91	62	75
Ore-separator. Centrifugal.....	O. B. Peck.....	489,198	Jan. 3	334	92	62	75
Ore-separator. Centrifugal.....	O. B. Peck.....	489,199	Jan. 3	335	92, 93	62	76
Ore-separator. Centrifugal.....	O. B. Peck.....	489,200	Jan. 3	336	93	62	76
Ore-separator. Centrifugal.....	O. B. Peck.....	489,201	Jan. 3	337	93, 94	62	76
Ore-separator. Centrifugal.....	O. B. Peck.....	489,202	Jan. 3	339	94	62	77
Ore-separator. Centrifugal.....	O. B. Peck.....	489,203	Jan. 3	340	95	62	77
Ore-separator. Centrifugal.....	O. B. Peck.....	489,204	Jan. 3	342	95, 96	62	78
Ore-separator. Centrifugal.....	O. B. Peck.....	489,205	Jan. 3	343	96	62	78
Ore-separator. Centrifugal.....	O. B. Peck.....	490,040	Jan. 17	1667	433	62	372
Ore-separator. Centrifugal.....	O. B. Peck.....	490,084	Jan. 17	1733	{ 451 452	{ 62	385
Ore-separator. Centrifugal.....	O. B. Peck.....	495,681	Apr. 18	1863	{ 467 468	{ 63	378
Ore-separator. Centrifugal.....	O. B. Peck.....	499,312	June 13	985	{ 239 240	{ 63	1576
Ore-separator. Centrifugal.....	O. B. Peck.....	499,343	June 13	988	240	63	1576
Ore-separator. Centrifugal.....	O. B. Peck.....	499,344	June 13	989	241	63	1576
Ore-separator. Centrifugal.....	O. B. Peck.....	499,345	June 13	991	{ 241 242	{ 63	1577
Ore-separator. Centrifugal.....	O. B. Peck.....	499,346	June 13	994	242	63	1577
Ore-separator. Centrifugal.....	O. B. Peck.....	499,347	June 13	999	243	63	1578
Ore-separator. Centrifugal.....	O. B. Peck. (Reissue).....	11,367	Sept. 26	2513	{ 634 635	{ 64	1782
Ore-separator. Magnetic.....	C. G. Buchanan.....	497,117	May 9	1164	298	63	846
Ore-separator. Magnetic.....	G. G. Crosby.....	495,608	Apr. 18	1744	440	63	359
Ore-separator. Magnetic.....	C. Q. Payne.....	500,605	July 4	106	29	64	21
Ore-tank.....	C. G. Brown.....	497,856	May 23	2365	593	63	1091
Ore-washer.....	C. Faber.....	489,797	Jan. 10	1246	326	62	273
Ore washer and concentrator.....	G. M. Eldridge.....	502,663	Aug. 1	697	167	64	693

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Ore washer and concentrator.....	C. F. Pike. (Reissue).....	11,377	Oct. 24	2942	{ 721 722 }	65	590
Ores and manufacturing carbon bisulphide. Reducing sulphide	M. Wanner.....	497,256	May 9	1376	.....	63	885
Ores. Apparatus for reducing and smelting sulphide.	A. L. Engelbach and S. E. Bretherton.	496,250	Apr. 25	2740	655	63	555
Ores. Concentrating.....	E. Waller and C. A. Sniffin.....	509,058	Nov. 21	1752	.....	65	1118
Ores. Concentrating and separating.....	J. W. Meier.....	497,804	May 23	2282	.....	63	1077
Ores. Desulphurizing metallic.....	H. H. Eames.....	502,431	Aug. 1	305	73	64	622
Ores. Extracting metals from.....	H. Calhoun and A. M. Beam.....	504,706	Sept. 12	649	.....	64	1405
Ores. Extraction of metal from.....	J. Turton.....	494,044	Mar. 21	2067	.....	62	1790
Ores. Lixivating.....	S. R. Whittall.....	495,715	Apr. 18	1923	.....	63	388
Ores. Method of and apparatus for separating.....	C. Q. Payne.....	500,604	July 4	99	28, 29	64	20
Ores of zinc, manganese, or iron. Treating.....	G. E. Moore.....	505,408	Sept. 19	1802	.....	64	1635
Ores. Process of and apparatus for obtaining metals from their	S. H. Cochran.....	491,638	Feb. 14	943	{ 237 238 }	62	953
Ores. Process of and apparatus for treating.....	J. F. Wiswell.....	495,212	Apr. 11	1110	277	63	224
Ores. System for concentration of.....	C. E. Seymour.....	510,051	Dec. 5	355	79, 80	65	1476
Ores. Treating.....	F. R. Carpenter.....	499,318	June 13	941	.....	63	1563
Ores. Treating.....	E. C. Engelhardt.....	509,368	Nov. 28	2304	.....	65	1234
Ores. Treating.....	W. B. Jackson.....	499,659	Jan. 31	2698	694	62	603
Ores. Treating complex or sulphide.....	W. R. Ingalls and F. Wyatt.....	497,473	May 16	1760	.....	63	966
Ores. Treating refractory.....	C. J. Fauvel.....	502,181	July 25	2632	663	64	526
Ores. Treating refractory.....	C. J. Fauvel.....	503,839	Aug. 22	2632	658	64	1093
Organ.....	H. Nelson.....	502,050	July 25	2423	610	64	485
Organ.....	J. Polukani.....	499,036	June 6	511	130	63	1480
Organ-action.....	W. Schwarze.....	498,086	May 23	2729	682	63	1155
Organ or piano. Pneumatic.....	J. V. Pilcher.....	498,362	May 30	3197	796	63	1252
Organ bellows. Exhaust for reed.....	F. W. Hedgeland.....	505,161	Sept. 19	1409	362	64	1562
Organ bellows. Means for operating.....	O. C. Klock and C. R. Stevens.....	500,009	June 20	2094	507	63	1784
Organ. Church.....	R. E. Pilcher.....	474,593	Apr. 4	108	26	63	23
Organ coupler and connection.....	H. Lehr and J. Diehl.....	509,914	Dec. 5	116	26	65	1432
Organ-feeder.....	J. Peloubet.....	496,952	May 9	915	{ 239 240 }	63	803
Organ. Harmonic.....	L. Orser.....	497,056	May 9	1070	{ 274 275 }	63	830
Organ. Mouth.....	R. Seydel.....	495,842	Apr. 18	2122	533	63	425
Organ or piano. Pedal attachment.....	W. A. Hobday.....	489,810	Jan. 10	1265	332	62	277
Organ pedal attachment.....	H. Lehr and J. Diehl.....	490,970	Jan. 31	3198	817	62	700
Organ. Pedal bass.....	K. Klär.....	491,566	Feb. 14	831	211	62	930
Organ. Pipe.....	V. Anderson.....	503,226	Aug. 15	1656	407	64	898
Organ. Pipe.....	H. Jäschke.....	503,857	Aug. 22	2658	666	64	1098
Organ. Reed.....	J. P. Caulfield.....	492,189	Feb. 21	1797	448	62	1139
Organ. Reed.....	L. K. Fuller.....	502,666	Aug. 1	702	168	64	694
Organ. Reed.....	E. W. Ham.....	503,850	Aug. 22	2650	664	64	1097
Organ reed-board.....	J. Peloubet.....	501,535	July 18	1589	400	64	320
Organ. Reed or pipe.....	M. S. Wright.....	509,506	Nov. 28	2575	622	65	1286
Organ stop-action.....	F. W. Fraser.....	501,880	July 18	2150	533	64	419
Organ stop-action.....	J. V. Pilcher.....	497,206	May 9	1294	330	63	870
Organ stop-action. Pipe.....	J. Woodberry.....	489,887	Jan. 10	1370	{ 356 357 }	62	299
Organs. Adjustable combination-pedal attachment for pipe.....	E. S. Votey.....	509,850	Nov. 28	3123	{ 754 755 }	65	1390
Organs. Means for operating pressure-box bellows of.....	W. Schwarze.....	498,087	May 23	2731	683	63	1156
Organs or pianos. Pedal-action for.....	O. C. Klock and C. R. Stevens.....	500,010	June 20	2095	507	63	1784
Organs. Pneumatic action for pipe.....	F. F. Schoenstein.....	510,521	Dec. 12	1120	271	65	1636
Organs. Solo attachment for reed.....	J. P. Caulfield.....	493,014	Mar. 7	385	96	62	1435
Organs. Swell pedal-action for pipe.....	E. M. Skinner.....	500,040	June 20	2142	{ 519 520 }	63	1793
Organic substances from sulphite liquor. Recovering.....	V. B. Drewsen.....	505,755	Sept. 26	2431	.....	64	1766
Ornamental screen.....	S. B. Walker.....	501,262	July 11	1160	294	64	226
Ornamentation.....	F. Schmalz.....	493,450	Mar. 14	1069	.....	62	1581
Ornaments and cutting their shanks. Machine for forming.....	L. A. Eucker.....	500,480	June 27	2862	705	63	1931
Oscillating engine.....	M. H. Delany.....	501,994	July 25	2327	798	64	468
Oven.....	W. Dalton.....	507,110	Oct. 24	2221	548	65	457
Oven.....	K. K. Karlsteen.....	489,651	Jan. 10	1023	{ 266 267 }	62	228
Oven.....	W. H. Wiester.....	504,184	Aug. 29	3200	798	64	1217
Oven. Baker's.....	A. Allen.....	511,396	Dec. 26	2696	653	65	1950
Oven. Baker's.....	F. Dührkop.....	492,392	Feb. 28	2116	538	62	1217
Oven. Baker's.....	J. T., and J. Vicars, Jr.....	498,335	May 30	3148	{ 785 786 }	63	1245
Oven. Baking.....	F. Eberhart.....	492,938	Mar. 7	263	67	62	1411
Oven. Baking.....	D. Grove.....	498,261	May 30	3019	752	63	1221
Oven. Baking.....	C. F. Hubbard.....	489,743	Jan. 10	1168	{ 304 305 }	62	257
Oven. Baking.....	L. Kubala.....	495,347	Apr. 11	1323	337	63	263
Oven. Baking.....	W. Morton.....	496,838	May 2	710	{ 188 189 }	63	746
Oven. Baking.....	P. Pfeleiderer and H. Werner.....	505,175	Sept. 19	1430	368	64	1565
Oven. Combined flattening and annealing.....	J. Clabby.....	505,418	Sept. 19	1823	{ 469 470 }	64	1639
Oven door. Baker's.....	E. A. C. Petersen.....	503,872	Aug. 22	2677	671	64	1102
Oven heat regulator.....	A. Bednarz.....	505,345	Sept. 19	1693	436	64	1615
Oven or other door.....	W. R. Webster and J. Hamilton.....	503,820	Aug. 22	2610	652	64	1089
Oven. Portable baking.....	C. M. Fitch and A. B. Kingsland.....	492,541	Feb. 28	2366	527	62	1268
Oven sliding drawer. Bake.....	O. A. Wilcox.....	500,522	June 27	2939	721	63	1946
Oven. Sponge or bread raising.....	W. O. Silvey and L. Shiflet.....	497,609	May 16	1978	495	63	1005
Overalls.....	P. J. Lonergan.....	506,052	Oct. 3	388	102	65	76
Overflow-alarm.....	W. E. Vail.....	507,570	Oct. 31	3045	744	65	622
Overflow for bath or laundry tubs.....	B. S. Giles.....	495,450	Apr. 18	1545	388	63	324
Overflow, waste, and trap for basins, baths, &c.....	E. L. Burgoin.....	497,465	May 16	1749	441	63	965

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Overgaiter	F. Fathers	499,419	June 13	1145	275	63	1604
Overshoe	J. F. Bullard	502,275	Aug. 1	16	4	64	569
Overshoe	J. O. Mattison and L. M. Phillips	499,241	June 13	823	195	63	1548
Overshoe	T. P. Paxson	505,885	Oct. 3	132	34	65	27
Overshoe	W. L. Sedgwick and H. M. Erwin	511,166	Dec. 19	2287	559	65	1863
Overshoe-holder	C. L. Hammerstein	505,655	Sept. 26	2266	574	64	1737
Oxygen. Apparatus for making	R. D. Bowman	505,809	Oct. 3	8	2, 3	65	4
Oxygen. Making	G. Webb, Jr., and G. H. Rayner	500,697	July 4	263		64	49
Oyster-dredge winder	A. D. Post	496,061	Apr. 25	2457	620	63	503
Oyster-sack	J. E. Burke	501,053	July 11	819	213	64	164
Ozone. Apparatus for the production and inhalation of	M. P. Oudin	499,572	June 13	1393	333	63	1648
Ozone. Liberating	N. Helmer	509,163	Nov. 21	1938	474	65	1153
Ozone gas. Process of and apparatus for manufacturing	E. Fahrigr	511,330	Dec. 26	2570	625	65	1927
Package-carrier	J. G. Parkinson	501,023	July 4	763	200	64	139
Package-carrier	H. M. Weaver	500,308	June 27	2611	637	63	1886
Package-carrier apparatus	W. H. Albach	501,035	July 4	786	206	64	143
Package-filling machines. Card-feeder for	H. E. Smyser	505,858	Oct. 3	88	24	65	19
Package making and filling machine	H. E. Smyser	505,888	Oct. 3	135	35	65	27
Package-making machinery	H. E. Smyser	505,857	Oct. 3	82	21	65	18
Package-register	J. R. Fletcher	498,254	May 30	3005	749	63	1219
Package. Sealed	B. B. Van Derveer	510,621	Dec. 12	1327	324	65	1673
Packages. Machine for putting up	E. B. Olmsted	494,688	Apr. 4	248	63, 64	63	50
Packing	R. G. Ferguson	490,107	Jan. 17	1773	462	62	394
Packing	M. Grimm	494,716	Apr. 4	298	75	63	60
Packing	J. Hoffstadt	511,734	Dec. 26	3234	793	65	2049
Packing and shipping case	W. H. Haworth	496,157	Apr. 25	2595	653	63	529
Packing-box	B. Cohen and D. W. Gaskill	493,545	Mar. 14	1228	314	62	1613
Packing-box	C. K. Mengel	503,976	Aug. 29	2859	717	64	1153
Packing-box	C. B. Overbaugh	495,907	Apr. 18	2221	560	63	443
Packing-box. Bottle	E. J. Vance and J. M. Leaver	495,534	Apr. 18	1629	409	63	339
Packing-box for jars, bottles, &c.	S. E. Parrish, A. and C. E. Linton	498,567	May 30	3329	873	63	1312
Packing-case	D. F. Griffiths	507,808	Oct. 31	3435	814	65	697
Packing-case	E. A. Turner	508,451	Nov. 14	766	189	65	915
Packing case or box	O. H. Jadwin	505,570	Sept. 26	2121	537	64	1709
Packing for builders' use. Sound-deadening	S. Cabot	511,584	Dec. 26	2992	729	65	2006
Packing for piston-rods. Stuffing-box	W. H. Apple	493,671	Mar. 21	1448	369	62	1672
Packing for stuffing-boxes. Metallic	T. H. Holmes	500,899	July 4	574	150	64	105
Packing. Gasket	R. Walsh	494,402	Mar. 28	2667	669	62	1916
Packing. Hydraulic	H. V. Loss	492,217	Feb. 21	1845	462	62	1149
Packing. Joint	J. A. Barnes	505,084	Sept. 19	1291	333	64	1541
Packing. Manufacturing piston-rod	C. H. North	506,857	Oct. 17	1797	451	65	365
Packing. Metallic	E. D. Bangs	506,028	Oct. 3	349	93	65	68
Packing. Metallic	T. Tripp	490,050	Jan. 17	1680	437	62	374
Packing. Metallic	T. Tripp	490,051	Jan. 17	1682	438	62	375
Packing. Metallic rod	C. F. Churchill	493,978	Mar. 21	1963	501	62	1770
Packing. Metallic rod	J. L. Halyburton	509,895	Dec. 5	82	20	65	1425
Packing. Metallic rod	S. F. Long	494,817	Apr. 4	472	118	63	91
Packing. Metallic rod	S. F. Long	494,818	Apr. 4	474	119	63	91
Packing. Metallic rod	C. Longstreth	503,723	Aug. 22	2468	613	64	1060
Packing. Method of	H. C. Hunter	492,804	Mar. 7	51	12	62	1369
Packing. Piston	I. A. Kilmer	503,859	Aug. 22	2660	666	64	1099
Packing. Piston	I. A. Kilmer	503,860	Aug. 22	2661	667	64	1099
Packing. Piston	P. Reilly	500,297	June 27	2585	633	63	1281
Packing. Piston	G. H. Reynolds	499,471	June 13	1224	292	63	1619
Packing. Piston	T. Roberts	509,827	Nov. 28	3085	745	65	1383
Packing. Piston-rod	C. S. Dean	494,980	Apr. 4	708	180	63	135
Packing. Piston-rod	W. H. Dunshee and C. H. Chandler	494,703	Apr. 4	275	70	63	55
Packing. Piston-rod	G. Hagmann	509,603	Nov. 28	3049	736	65	1376
Packing. Piston-rod	C. C. Jerome	508,139	Nov. 7	270	66, 67	65	807
Packing-ring-cutting machine	M. E. Briggs	503,341	Aug. 15	1848	458	64	932
Packing-ring or gasket. Rubber	J. J. Voohees	499,266	June 13	858	205	63	1553
Packing. Rod	A. Bradford	501,913	July 25	2214	552	64	447
Packing. Rod	J. B. Griswold	499,422	June 13	1148	276	63	1605
Packing. Rod	F. D. Toucey	491,029	Jan. 31	3303	843	62	722
Packing. Sheet	T. McGowan	492,420	Feb. 28	2159	540	62	1225
Packing. Steam	G. W. Petner	491,539	Feb. 14	781	199	62	919
Packing. Steam-piston	N. T. Greene	495,221	Apr. 11	1123	280	63	226
Packing. Steam-piston	S. P. Hinckley	511,423	Dec. 26	2743	663	65	1959
Packing-vessel	H. C. Hunter	492,803	Mar. 7	51	12	62	1368
Packing-vessel	H. C. Hunter	492,806	Mar. 7	54	13	62	1369
Packing vessel or jar	R. S. Wiesenfeld	489,773	Jan. 10	1215	319	62	267
Pad							
See Blotting-pad.	Hoof-pad.						
Buffing-pad.	Stair-pad.						
Chair-pad.	Truss-pad.						
Harness-pad.	Wax pad.						
Heel-pad.							
Pad-fastener	G. Foland and S. F. Carey	490,743	Jan. 31	2831	727	62	628
Pad-inker	G. J. B. Rodwell	511,215	Dec. 19	2366	578	65	1878
Paddle-wheel	E. G. Bailey	505,784	Sept. 26	2478	625	64	1775
Padlock	J. B. Amwake	494,540	Apr. 4	1	1	63	3
Padlock	I. Bremer	490,537	Jan. 24	2482	640	62	546
Padlock	W. G. Browne and W. D. Palmer	506,665	Oct. 17	1475	371	65	307
Padlock	P. Brust	495,217	Apr. 11	1117	279	63	225
Padlock	F. Egge	490,428	Jan. 24	2305	598	62	510

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Padlock.....	H. Horne.....	499,832	June 20	1823	443	63	1736
Padlock.....	G. W. Jopson.....	500,907	July 4	583	152	64	107
Padlock.....	F. Meinke.....	494,340	Mar. 28	2560	645	62	1897
Padlock.....	D. Melfi.....	489,022	Jan. 3	65	19	62	17
Padlock.....	J. S. Peacock.....	496,698	May 2	485	{ 129 130 }	63	707
Padlock.....	F. W. Schultze.....	492,240	Feb. 21	1880	470	62	1156
Padlock.....	F. W. Schultze.....	496,369	Apr. 25	2950	737	63	596
Padlock.....	W. F. Troast.....	496,921	May 9	875	230	63	795
Padlock.....	D. and I. Waine.....	507,948	Oct. 31	3662	{ 906 907 }	65	739
Padlock. Permutation.....	J. Baron.....	494,541	Apr. 4	4	1	63	3
Padlock. Permutation.....	W. H. Bolthoff.....	511,673	Dec. 26	3133	766	65	2031
Padlock. Permutation.....	J. J. Deal.....	490,784	Jan. 31	2899	744	62	641
Padlock. Permutation.....	J. A. Hallden.....	491,102	Feb. 7	61	17	62	760
Padlock. Permutation.....	W. Hay.....	504,034	Aug. 29	2951	739	64	1170
Padlock. Permutation.....	H. C. Lowrie.....	502,307	Aug. 1	83	19, 20	64	581
Padlock. Permutation.....	H. C. Lowrie.....	502,308	Aug. 1	86	20	64	582
Padlock. Permutation.....	B. A. Sanderson.....	495,840	Apr. 18	2119	533	63	424
Pail attachment.....	O. J. Thomas.....	494,826	Apr. 4	484	122	63	93
Pail. Berry.....	H. Sweet.....	510,723	Dec. 12	1494	369	65	1705
Pail bottom. Metal.....	D. A. Lisk.....	505,318	Sept. 19	1660	428	64	1608
Pail. Butter.....	L. Daugherty.....	491,406	Feb. 7	574	144	62	858
Pail. Dinner.....	E. B. and A. R. Anderson.....	501,313	July 11	1232	311	64	240
Pail. Dinner.....	R. E. Carroll.....	499,628	June 13	1479	353	63	1663
Pail-making mechanism.....	G. W. Laraway.....	504,881	Sept. 12	939	{ 242 243 }	64	1461
Pail. Milk.....	C. Bennett.....	500,094	June 20	2225	542	63	1806
Pail. Milk.....	W. R. Watt.....	489,352	Jan. 3	567	153	62	122
Pail. Minnow.....	F. Ruprecht.....	506,017	Oct. 3	334	89	65	65
Paint.....	W. B. Abert and W. Scherer.....	491,003	Jan. 31	3248	.....	62	710
Paint agitator. Mixed.....	C. J. McLennan.....	510,543	Dec. 12	1191	286	65	1648
Paint agitator. Mixed.....	C. J. McLennan.....	510,544	Dec. 12	1192	287	65	1649
Paint agitator. Mixed.....	C. J. McLennan.....	510,545	Dec. 12	1193	287	65	1649
Paint and cement. Fire and water proof.....	C. M. Moore.....	507,745	Oct. 31	3318	.....	65	675
Paint-filling composition.....	R. J. Parke and I. Goodman.....	496,277	Apr. 25	2780	.....	63	564
Paint. Fire or water proof.....	J. E. and G. H. McAlpine.....	500,346	June 27	2673	.....	63	1897
Paint. Fireproof.....	R. R. Graf.....	494,508	Mar. 28	2826	.....	62	1946
Paint. Manufacture of.....	J. K. Hawkins.....	493,999	Mar. 21	1996	.....	62	1777
Paint-mills. Adjustable scraper and spout for.....	C. P. Anderson.....	506,578	Oct. 10	1341	337	65	269
Paint-mixer.....	T. M. Beatty.....	507,059	Oct. 17	2128	528	65	426
Paint. Non-inflammable.....	R. J. Doyle.....	490,547	Jan. 24	2498	.....	62	549
Paint or varnish cup.....	G. W. Davis.....	491,257	Feb. 7	312	79	62	808
Paint-pot.....	W. B. Deming and H. C. Fuller. (Reissue.).....	11,302	Jan. 31	3353	856	62	732
Paint. Ship's.....	H. Gallinowsky.....	504,211	Aug. 29	3245	.....	64	1225
Paint. Ship's.....	L. Pfing.....	496,895	May 9	829	.....	63	787
Paint strainer. Mixed.....	C. J. McLennan.....	510,546	Dec. 12	1195	287	65	1649
Paints. Agitator for mixed.....	C. J. McLennan.....	500,073	June 20	2198	536	63	1802
Painting fabric materials. Machine for.....	E. Armitage.....	493,463	Mar. 14	1091	{ 279 280 }	62	1587
Painting-machine.....	W. C. Gebhardt.....	504,833	Sept. 12	871	{ 224 225 }	64	1448
Painting-machine.....	A. Glass and W. S. Grafton.....	497,318	May 16	1519	382	63	924
Painting-machine. Cloth.....	E. H. Schofield.....	494,493	Mar. 28	2800	702	62	1940
Painting. Hygroscopic.....	M. Bielefeldt.....	511,191	Dec. 19	2331	.....	65	1870
Painting, varnishing, &c. Machine for.....	W. H. Dow and D. G. Crane.....	504,672	Sept. 5	587	149	64	1380
Palette. Artist's.....	M. Connolly.....	506,160	Oct. 3	570	147	65	110
Pan: See Amalgamating-pan. Frying-pan. Ash-pan. Grinding-pan. Bake-pan. Locomotive ash-pan Baking-pan. Mud-pan. Bed-pan. Oil-drip pan. Bread or cake pan. Patty-pan. Dust-pan. Tin pan. Evaporating-pan. Vacuum-pan.							
Pan-emptying machine.....	W. G. Stevenson.....	499,366	June 13	1041	252	63	1587
Pan-lifter.....	T. S. Ligon.....	496,422	May 2	47	13	63	627
Pans. Implement for lifting.....	J. T. Watkins and W. C. Bayless.....	491,393	Feb. 7	552	140	62	854
Panels. Forming decorative.....	E. M. Wright.....	501,265	July 11	1165	.....	64	227
Panorama. Balloon.....	C. G. Rodeck.....	508,763	Nov. 14	1256	313	65	1011
Panoramic camera.....	R. W. Stewart.....	509,698	Nov. 28	2868	{ 693 694 }	65	1342
Pantaloon-hanger.....	A. Beracierto.....	511,578	Dec. 26	2984	727	65	2004
Pantograph.....	J. G. Braastad.....	503,934	Aug. 22	2774	695	64	1121
Paper and fixture therefor. Rolled.....	O. H. Hicks.....	498,900	June 6	273	63, 64	63	1441
Paper and paper-board. Manufacturing parchment- ized.....	T. Hanna.....	510,422	Dec. 12	958	.....	65	1606
Paper. Apparatus for applying color to.....	W. A. Hall.....	505,982	Oct. 3	283	74	65	55
Paper, &c. Apparatus for coating.....	F. W. Hayward, A. S. King, and A. W. Loveland.....	504,215	Aug. 29	3249	{ 810 811 }	64	1226
Paper, &c. Apparatus for cutting.....	R. W. Wilton.....	509,989	Dec. 5	249	58	65	1456
Paper. Apparatus for heating size for surfacing.....	W. C. Edwards.....	498,775	June 6	39	9	63	1395
Paper. Apparatus for making bundles of toilet.....	O. H. Hicks.....	492,204	Feb. 21	1818	455	62	1144
Paper. Apparatus for producing marks upon.....	G. P. Barnes.....	507,608	Oct. 31	3108	{ 759 760 }	65	635
Paper-bag holder.....	G. Staley.....	502,783	Aug. 8	921	224	64	750
Paper-bag holder.....	O. M. Stiehl.....	495,605	Apr. 18	1739	438	63	358
Paper-bag machine.....	J. M. and O. M. Carter.....	509,874	Dec 5	34	{ 8 9 10 }	65	1417
Paper-bag machine.....	E. E. Claussen.....	502,847	Aug. 8	1026	{ 251 252 }	64	770

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Paper-bag machine.....	L. C. Crowell.....	510,410	Dec. 12	940	226	65	1603
Paper-bag machine.....	W. Liddell.....	491,573	Feb. 14	840	213	62	932
Paper-bag machine.....	W. Liddell.....	492,498	Feb. 28	2302	571	62	1254
Paper-bag machine.....	J. Sabold.....	493,524	Mar. 14	1190	304 305	62	1605
Paper-bag machine.....	A. L. Stevens.....	502,784	Aug. 8	923	225	64	750
Paper-bag machine.....	C. B. Stilwell.....	508,060	Nov. 7	122	35	65	781
Paper-bag machine.....	C. B. Stilwell.....	508,061	Nov. 7	124	35	65	782
Paper-bag machine.....	C. B. Stilwell.....	511,171	Dec. 19	2293	561 562 563	65	1864
Paper bags. Apparatus for making.....	E. E. Claussen.....	496,860	May 9	759	201 202	63	774
Paper bags. Method of and apparatus for folding.....	E. Stanley.....	503,810	Aug. 22	2595	648 649	64	1086
Paper bags. Method of and apparatus for making.....	C. B. Stilwell.....	508,059	Nov. 7	120	34	65	781
Paper-board.....	R. B., J. L., and R. W. McEwan.....	492,927	Mar. 7	248	.....	62	1408
Paper-board-drying apparatus.....	S. E. Baker.....	493,467	Mar. 14	1097	281	62	1588
Paper-board. Manufacturing parchmentized.....	T. Hanna.....	510,421	Dec. 12	957	.....	65	1606
Paper-board. Manufacturing parchmentized.....	T. Hanna.....	510,423	Dec. 12	959	.....	65	1606
Paper-board. Manufacturing parchmentized.....	T. Hanna.....	510,424	Dec. 12	960	.....	65	1606
Paper box.....	R. P. Brown.....	504,075	Aug. 29	3008	751	64	1180
Paper box.....	D. S. Clark.....	499,655	June 13	1519	365	63	1669
Paper box.....	J. T. Craw.....	502,457	Aug. 1	349	83, 84	64	620
Paper box.....	W. Forsyth.....	503,077	Aug. 8	1394	344 345	64	637
Paper box.....	W. B. Howe and F. B. Davidson.....	511,080	Dec. 19	2143	528 529	65	1835
Paper box.....	J. J. Hoffman.....	508,570	Nov. 14	979	240	65	956
Paper box.....	J. J. Hoffman.....	508,571	Nov. 14	980	240	65	956
Paper box.....	J. G. Johnson.....	506,403	Oct. 10	1056	263	65	214
Paper box.....	J. G. Reber and J. L. Sefton.....	500,295	June 27	2578	629 630 631	63	1880
Paper box.....	T. F. W. Schmidt.....	490,167	Jan. 17	1869	487	62	414
Paper box and making same.....	J. T. Robinson.....	501,664	July 18	1802	448	64	369
Paper-box-covering machine.....	I. G. Raffel.....	490,124	Jan. 17	1801	469 470	62	400
Paper box. Folding.....	W. H. Cook.....	504,824	Sept. 12	852	218	64	1443
Paper box. Folding.....	C. A. Spittell.....	489,993	Jan. 17	1579	413	62	355
Paper-box machine.....	W. H. Coffin.....	493,979	Mar. 21	1965	501	62	1770
Paper-box machine.....	L. F. Fales.....	503,907	Aug. 22	2731	685 686	64	1113
Paper-box machine.....	F. D. Harper.....	498,975	June 6	403	94	63	1462
Paper-box machine.....	S. R. Robinson.....	507,931	Oct. 31	3630	897 898	65	737
Paper-box-making machines. Feeding device for.....	F. D. Harper.....	498,976	June 6	404	95	63	1463
Paper boxes. Machine for covering.....	M. F. Wilson.....	507,605	Oct. 31	3103	758	65	633
Paper boxes. Machine for making.....	C. R. Bannhr.....	508,594	Nov. 14	1011	248 249 250	65	962
Paper bracket. Roll.....	S. Wheeler.....	505,499	Sept. 26	1947	502	64	1676
Paper buckets. Machine for making.....	H. P. Lane.....	504,730	Sept. 12	681	173 174	64	1411
Paper, cardboard, &c. Machine for cutting.....	G. W. Zeigler.....	504,509	Sept. 5	330	84	64	1331
Paper-clamp.....	W. C. Bowry.....	507,478	Oct. 24	2853	700	65	575
Paper-clip.....	E. T. Blake.....	501,263	July 18	2112	522	64	413
Paper-clip.....	J. M. Keep.....	499,924	June 20	1968	478	63	1762
Paper coating or enameling machine.....	W. Sparks.....	510,098	Dec. 5	430	96	65	1491
Paper-creasing machine.....	J. T. Robinson.....	498,904	June 6	281	65	63	1442
Paper-cutter.....	J. S. Flowers.....	502,415	Aug. 1	278	66	64	617
Paper cutter and holder. Roll.....	J. S. Hays.....	502,400	Aug. 1	251	60	64	612
Paper-cutter. Rotary.....	H. L. Mellor.....	508,576	Nov. 14	989	242	65	958
Paper-cutting machine.....	P. A. Malm.....	508,329	Nov. 7	569	140	65	863
Paper-cutting machine.....	L. W. Morse.....	495,984	Apr. 25	2333	590	63	479
Paper-cutting machine.....	G. W. Zeigler.....	504,510	Sept. 5	333	85	64	1332
Paper-cutting machine back gage.....	A. S. Bogart and J. J. Nesmith.....	507,963	Oct. 31	3685	916	65	743
Paper. Drawing.....	C. Schaeuffelen.....	500,051	June 20	2204	538	63	1803
Paper-fastener.....	S. Dancyger.....	506,674	Oct. 17	1490	374	65	309
Paper-feeder.....	E. Paesler.....	506,605	Oct. 10	1377	345	65	276
Paper-feeder.....	H. E. Smyser.....	492,374	Feb. 21	2080	520 521	62	1197
Paper-feeding attachment.....	N. Lux.....	492,218	Feb. 21	1847	462	62	1150
Paper-feeding machine.....	T. A. Briggs.....	499,818	June 20	1793	435 436	63	1731
Paper-feeding machine.....	T. A. Briggs.....	507,308	Oct. 24	2585	636	65	523
Paper-feeding machine.....	R. Burnet.....	489,925	Jan. 17	1455	380 381	62	331
Paper fixture. Toilet.....	C. W. Gay.....	497,916	May 23	2473	617 645 546 547	63	1110
Paper-folding machine.....	A. T. Bascom.....	497,745	May 16	2182	415 416	63	1044
Paper-folding machine.....	A. H. Gale.....	495,548	Apr. 18	1648	416	63	342
Paper-folding machine.....	D. P. McLaughlin.....	490,881	Jan. 31	3043	782	62	671
Paper-folding machine.....	C. D. Van Etten.....	504,119	Aug. 29	3085	772 773	64	1196
Paper for checks, &c. Safety.....	W. Hoskins and J. B. Weis.....	511,271	Dec. 19	2461	.....	65	1894
Paper for making transfer-pictures.....	H. de Gronsilliers.....	504,835	Sept. 12	877	.....	64	1450
Paper for toilet or other purposes. Apparatus for holding and issuing.....	J. M. Keep.....	495,892	Apr. 18	2199	554	63	439
Paper-gaging device for platens.....	T. A. Briggs.....	507,986	Nov. 7	15	5	65	761
Paper. Guillotine for cutting.....	T. Furnival.....	509,522	Nov. 28	2597	628 629	65	1290

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Paper-hanging machine	A. H. Lohlker	505,109	Sept. 19	1326	342	64	1548
Paper-holder	J. Murray	496,090	Apr. 25	2502	631	63	511
Paper-holder	W. P. Stibbs	510,721	Dec. 12	1492	369	65	1704
Paper holder and cutter	E. J. Gillespie	491,883	Feb. 14	1327	328	62	1028
Paper holder and cutter	D. F. Walker	510,742	Dec. 12	1527	379	65	1711
Paper holder and cutter. Roll.	E. J. Gillespie	492,552	Feb. 28	2383	592	62	1273
Paper holder and cutter. Roll.	E. B. Weston	492,856	Mar. 7	126	32	62	1382
Paper holder and cutter. Roll.	E. B. Weston	506,451	Oct. 10	1143	284	65	231
Paper holder. Toilet.	P. A. Bowen	489,787	Jan. 10	1234	323	62	271
Paper holder. Toilet.	E. Jerome	497,005	May 9	996	257	63	216
Paper holder. Toilet.	G. W. Reed	492,894	Mar. 7	193	48	62	1397
Paper hoops Machine for making	W. E. Frost	505,421	Sept. 19	1833	471	64	1641
Paper-machine feed-regulator	N. Bryant	495,013	Apr. 11	758	193	63	160
Paper, &c. Machine for coating	F. M. Cossitt	510,564	Dec. 12	1221	297	65	1654
Paper. Machine for cross-cutting and collating	J. T. Robinson and H. J. Chamberlain.	501,027	July 4	771	202	64	141
Paper. Machine for cutting into strips and reeling or winding	F. Meisel	492,964	Mar. 7	304	77, 78	62	1419
Paper. Machine for making vegetable parchment.	G. T. Leonhard	500,915	July 4	594	{ 155 } { 156 }	64	109
Paper-machine pulp-saving device	R. B., J. L., and R. W. McEwan	495,260	Apr. 11	1194	299	63	240
Paper-machine suction-box	R. W. Moncrieff	504,885	Sept. 12	947	{ 244 } { 245 }	64	1463
Paper-machines. Making wire for	P. Tourasse	502,087	July 25	2482	624	61	496
Paper-machines. Steam-regulator for	R. Smith	508,993	Nov. 21	1656	408	65	1100
Paper-making and calendering machines. Doctor for	R. O. Moorhouse	507,746	Oct. 31	3318	813	65	675
Paper-making machine	A. Aldrich	502,266	Aug. 1	2	1	64	567
Paper-making machine	G. P. Barnes	507,643	Oct. 31	3177	{ 777 } { 778 }	65	648
Paper-making machine	A. W. Case	498,764	June 6	18	4	63	1392
Paper-making machine	A. N. Kidder	492,209	Feb. 21	1827	458	62	1146
Paper-making machine	E. R. Marshall	507,744	Oct. 31	3315	812	65	674
Paper-making machine.	J. H. Shorrocks and J. Martin	495,950	Apr. 18	2230	575	63	455
Paper-making machines. Press-roll stand for	A. Aldrich	499,696	June 20	1581	381	63	1695
Paper. Making safety.	A. Schlumberger	491,858	Feb. 14	1286		62	1021
Paper. Manufacturing blotting.	G. L. Jaeger	495,976	Apr. 25	2322	{ 586 } { 587 }	63	477
Paper, &c. Method of and apparatus for marbling or coloring	C. H. Bellamy	492,933	Mar. 7	255	65	62	1409
Paper. Ornamented	S. Wheeler	496,964	May 9	932	245	63	806
Paper. Ornamenting	S. Wheeler	497,421	May 16	1675	423	63	953
Paper. Ornamenting	S. Wheeler	502,337	Aug. 1	141	32	64	591
Paper. Ornamenting	S. Wheeler	505,259	Sept. 19	1552	405	64	1589
Paper-ornamenting mechanism	S. Wheeler	504,767	Sept. 12	755	188	64	1426
Paper-piling device	T. A. Briggs	503,576	Aug. 22	2220	{ 555 } { 556 }	64	1015
Paper-polishing machine	A. W. Case	500,191	June 27	2425	591	63	1853
Paper press. Waste.	G. W. Rexicker	497,818	May 23	2306	{ 579 } { 580 }	63	1081
Paper-pulp-beating engine	A. E. Reed	503,553	Aug. 15	2178	{ 544 } { 545 }	64	992
Paper-pulp-straining apparatus	J. White	498,041	May 23	2065	{ 666 } { 667 }	63	1143
Paper-punching device	C. D. Then	500,442	June 27	2815	694	63	1922
Paper-roll holder and changeable type-printer	F. B. Kosa	498,516	May 30	3440	{ 853 } { 854 }	63	1297
Paper-roll holder and cutter	N. R. Streeter	496,754	May 2	577	154	63	723
Paper-roll holder and cutter. Knockdown	N. R. Streeter	492,975	Mar. 7	322	81	62	1423
Paper-roll holder and fare-register	D. F. Bowen	510,392	Dec. 5	911	218	65	1584
Paper-roll spindle	A. L. Flint	494,329	Mar. 28	2538	639	62	1893
Paper scoring or cutting machine.	J. T. Robinson	503,751	Aug. 22	2517	626	64	1070
Paper-serving apparatus	T. Gaskins	510,782	Dec. 12	1595	{ 397 } { 398 }	65	1723
Paper-splitter	C. B. Macy	507,074	Oct. 17	2149	533	65	430
Paper-stock. Apparatus for the continuous preparation of	G. D. Cladin	496,814	May 2	679	179	63	740
Paper-stock. Machine for reducing	C. Kellner	489,079	Jan. 3	146	41	62	36
Paper-stock. Method of and apparatus for producing	S. W. Rowell	500,617	July. 4	130	35	64	26
Paper-stuff boxes. Machine for molding	P. Sobège	511,659	Dec. 26	3115	761	65	2027
Paper trimming and pasting machine	O. Peterson	491,586	Feb. 14	88	{ 217 } { 218 }	62	935
Paper tube.	P. Carey	489,927	Jan. 17	1461	382	62	332
Paper tubes. Machine for making	R. Spengler	507,764	Oct. 31	3351	{ 821 } { 822 }	65	680
Paper tubes. Machinery for the manufacture of non-pasted	A. E. Deconflé	508,505	Nov. 14	859	{ 212 } { 213 }	65	933
Paper twine. Making	J. F. Steward	500,627	July 4	144	38	64	28
Paper waterproofing or coating machine	J. J. Newman	497,198	May 9	1283	327	63	868
Paper-weight and clamp. Combined	I. W. Heysinger	509,900	Dec. 5	96	22	65	1428
Paper-weight and clamping device. Combined	I. W. Heysinger	506,232	Oct. 10	759	187	65	155
Paper-winding shaft	J. H. Baker, G. F. Shevlin, and F. H. Baker.	508,801	Nov. 14	1311	326	65	1021
Parachute. Aerostatic	L. Capazza	496,854	May 9	741	197	63	771
Parachute-propeller	E. Nyswanger	495,360	Apr. 11	1347	337	63	267
Paraffine-wax and apparatus therefor. Treating or purifying	N. M. Henderson	490,199	Jan. 17	1924	500	62	424
Paraphenetol-carbamide and making same	J. Berlinerblau	489,728	Jan. 10	1138		62	251
Paraphenetol-carbamide. Making	H. Thoms	502,504	Aug. 1	430		64	645
Parchments. Removing copper from textile.	C. Baswitz	506,966	Oct. 17	1975		65	399
Paring fruit or vegetables. Machine for	E. J. Lewis	508,729	Nov. 14	1207	300	65	1001
Paris-green distributor.	J. W. Roberts	495,432	Apr. 11	1461	{ 368 } { 369 }	63	288
Partition.	T. Bailey	504,858	Sept. 12	907	234	64	1455

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Partition. Fireproof	T. A. Lee	501,622	July 18	1732	432	64	347
Partition. Fireproof	F. H. Mela	497,383	May 16	1617	409	63	942
Partition. Metallic	M. Hegbom	495,036	Apr. 11	795	201	63	167
Passenger and freight elevator	W. W. Renwick	495,616	Apr. 18	1761	444	63	362
Paste. Adhesive	H. Lobdell	492,515	Feb. 28	2325	62	1250	
Pasteboard, &c. Machine for cutting	E. Saltzkorn and L. Nicolai. (Re-issue.)	11,381	Nov. 7	682	167	65	884
Patrol-box	W. Eglin	511,599	Dec. 26	3025	736	65	2010
Pattern for drafting garments. Adjustable	L. D. Frenot and J. F. Eyboullet	492,670	Feb. 28	2572	637	62	1309
Pattern for drafting garments. Adjustable	H. Horn	490,022	Jan. 17	1640	{ 426 427 321 322 }	62	366
Pattern for drafting shirt-backs	T. J. Goodwin	501,335	July 11	1279	{ 321 322 }	64	245
Pattern for drafting shirt-bosoms	T. J. Goodwin	501,339	July 11	1295	323	64	249
Pattern for drafting shirt-fronts	T. J. Goodwin	501,338	July 11	1291	323	64	248
Pattern for drafting shirt-sleeves	T. J. Goodwin	501,337	July 11	1287	322	64	247
Pattern for drafting shirt-yokes	T. J. Goodwin	501,336	July 11	1283	322	64	246
Pattern. Garment	S. S. Start, Jr., and M. A. S. Johnson	510,942	Dec. 19	1932	{ 469 470 }	65	1794
Pattern. Garment-fitting	S. Christiansen	489,793	Jan. 10	1241	325	62	272
Pattern machine. Differential	R. Cairns	507,783	Oct. 31	3393	{ 831 832 }	65	698
Patterns on woven fabrics. Producing leaf-metal	F. Lehmann	491,364	Feb. 7	510	62	845	
Patty-pan and holder	J. Dister	489,372	Jan. 3	594	160	62	128
Pavement	G. E. Blaine	511,497	Dec. 26	2559	691	65	1980
Pavement	W. F. Higgins	510,259	Dec. 5	704	170	65	1543
Pavement	W. Lake	507,683	Oct. 31	3331	791	65	658
Pavement	E. Robinson	496,099	Apr. 25	2514	635	63	514
Pavement	W. Schlichting	500,273	June 27	2546	622	63	1875
Pavement	B. F. Spry	489,105	Jan. 3	194	52	62	45
Pavement. Asphalt	C. H. Bull	505,699	Sept. 26	2345	593	64	1750
Pavements. Apparatus for repairing asphalt	A. H. Perkins	501,536	July 18	1591	400	64	321
Pavements, &c. Composition of matter for	G. S. Lee	490,667	Jan. 31	2716	698	62	606
Pavements. Making artificial-stone	W. Bussard	500,530	June 27	2947	723	63	1947
Pavements. Making concrete	G. A. Bedgood	510,233	Dec. 5	664	157	65	1536
Pavements. Repairing asphalt	A. H. Perkins	501,537	July 18	1592	401	64	321
Paving-block	H. Brunson	508,537	Nov. 14	922	226	65	944
Paving-block	E. T. Mapel	511,304	Dec. 19	2517	613	65	1904
Paving-machine	R. J. Carson	509,117	Nov. 21	1867	458	65	1140
Pawl-and-ratchet coupling for rotating tools	H. N. Parker	510,046	Dec. 5	348	78	65	1475
Pawl-and-ratchet mechanism	F. T. Farmer	497,467	May 16	1751	441	63	965
Pawl. Ratchet	D. J. Reardon	493,944	Mar. 21	1895	483	62	1758
Pea-hulling machine	R. P. Scott, C. P. and J. A. Chisholm	500,299	June 27	2589	{ 633 634 }	63	1882
Pea-sheller	H. T. Clark and C. B. Russell	489,929	Jan. 17	1462	382	62	332
Pea-shelling machine	N. Placide	496,206	Apr. 25	2663	{ 669 670 }	63	542
Peas from the vines. Gathering and hulling green	R. P. Scott	499,397	June 13	1097	{ 264 265 }	63	1597
Peanut-roaster or corn-popper	C. Cretors	506,207	Oct. 10	700	177	65	143
Peanuts from the vine and for stemming, cleaning, and grading same. Machine for separating	W. A. Crocker	502,619	Aug. 1	619	{ 148 149 }	64	680
Pearl, &c. Device for cutting	S. P. Orth and P. O'Donoghue	498,811	June 6	107	28	63	1410
Peat for fuel. Apparatus for preparing	O. G. Blunden	506,151	Oct. 3	557	{ 144 145 }	65	108
Peat. Treatment or desiccation of	J. M. A. Gérard	491,545	Feb. 14	788	201	62	920
Pedal	C. F. Pease	492,989	Mar. 7	344	87	62	1427
Pedal motor	C. Phillips. (Reissue)	11,331	May 9	1466	369	63	899
Pedal-stool	C. Zender	502,944	Aug. 8	1195	294	64	800
Peeler, cutter, and corer. Apple	J. Huefner	508,137	Nov. 7	265	65	65	807
Pegging-jack	G. O. Bjorkander	508,262	Nov. 14	1415	351	65	1039
Pegging-machine	H. H. Cummings and P. A. Coupal	493,910	Mar. 21	1829	{ 466 467 468 }	62	1745
Pegging-machine	J. F. Davey	504,311	Aug. 29	3401	{ 852 853 }	64	1255
Pegging-machine	T. Gare	500,652	July 4	189	49	64	37
Pegging-machine	R. Ley	492,906	Mar. 7	217	{ 53 54 }	62	1301
Pelts. Machine for removing the water-hairs from	A. Hedbavny and A. H. Fiala	505,104	Sept. 19	1320	{ 310 341 }	64	1546
Pelts. Machine for removing water-hairs from	A. Hedbavny	502,359	Aug. 1	184	43	64	600
Pelts. Machine for removing water-hairs from	E. R. Knowles	502,366	Aug. 1	193	{ 45 46 47 }	64	601
Pen	I. Bergmann	503,896	Aug. 22	2716	682	64	1110
Pen	F. J. W. Fischer	498,746	May 30	3855	950	63	1369
Pen	J. E. Landers	506,853	Oct. 17	1790	450	65	364
Pen and ink-reservoir. Drawing	H. Hölzel	509,905	Dec. 5	105	23	65	1429
Pen and pencil holder	A. W. Coffin	495,784	Apr. 18	2033	514	63	408
Pen and pencil holder. Combined	S. L. Lazarou	495,980	Apr. 25	2328	588	63	478
Pen and penholder. Combined	H. Byron	499,653	June 13	1517	364	63	1669
Pen. Drawing	H. P. Norton	509,137	Nov. 21	1901	465	65	1147
Pen. Electric perforating	A. D. Lewis and S. Witherell	498,519	May 30	3445	855	63	1298
Pen-extractor	J. L. Kragle	502,726	Aug. 8	830	201	64	733
Pen. Force-feed ruling	E. Dickey	490,340	Jan. 24	2171	566	62	485
Pen. Fountain	D. Beaumel	491,795	Feb. 14	1191	298	62	1001
Pen. Fountain	J. Blair	509,862	Dec. 5	19	4	65	1414
Pen. Fountain	F. C. Brown	490,862	Jan. 31	3006	771	62	664
Pen. Fountain	M. M. Fenner	503,763	Aug. 22	2533	630	64	1073
Pen. Fountain	F. Gilbert	511,134	Dec. 19	2240	550	65	1854
Pen. Fountain	G. A. Hall	498,514	May 30	3438	853	63	1296
Pen. Fountain	W. A. Leary	500,811	July 4	442	116	64	81
Pen. Fountain	M. W. Moore	501,895	July 18	2175	539	64	424
Pen. Fountain	H. O. Müller	498,213	May 23	2933	730	63	1191

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Pen. Fountain.....	G. S. Parker.....	510,439	Dec. 12	986	236	65	1611
Pen. Fountain.....	W. Post.....	510,145	Dec. 5	511	117	65	1506
Pen. Fountain.....	H. T. Reed.....	508,182	Nov. 7	326	81	65	818
Pen. Fountain.....	L. B. Woolfolk.....	494,769	Apr. 4	379	95	63	75
Pen. Fountain.....	L. B. Woolfolk.....	494,770	Apr. 4	384	95	63	76
Pen. Fountain.....	L. B. Woolfolk.....	495,238	Apr. 11	1153	289	63	232
Pen. Fountain.....	L. B. Woolfolk.....	495,647	Apr. 18	1813	455	63	370
Pen fountain attachment.....	M. M. Hitt.....	497,179	May 9	1264	320	63	864
Pen. Hog.....	B. M. Wilkinson.....	500,699	July 4	265	72	64	50
Penholder.....	C. W. Boman.....	505,384	Sept. 19	1767	457	64	1628
Penholder.....	C. W. Boman.....	510,322	Dec. 5	797	192	65	1561
Penholder.....	E. Faber.....	511,602	Dec. 26	3030	739	65	2011
Penholder.....	J. B. Geissinger.....	504,918	Sept. 12	1005	259	64	1474
Penholder.....	J. R. Macmillan.....	503,151	Aug. 15	1532	376	64	875
Penholder.....	G. McElwain.....	42,555	Feb. 28	2391	593	62	1274
Penholder.....	G. Pellingier.....	492,102	Feb. 21	1657	412	62	1110
Penholder.....	A. T. Record.....	510,092	Dec. 5	423	94	65	1490
Penholder.....	I. Thompson.....	498,495	May 30	3412	847	63	1292
Penholder.....	C. A. White.....	498,201	May 23	2916	725	63	1188
Penholder. Fountain.....	F. B. Griswold.....	495,969	Apr. 25	2309	583	63	475
Penholder guard.....	E. Dierlamm.....	500,564	July 4	45	13	64	10
Penholder-guard.....	A. Lowy.....	510,690	Dec. 12	1445	356	65	1695
Penholder-regulator.....	F. Treier.....	509,632	Nov. 28	2768	667	65	1323
Pen or pencil case.....	H. Penner.....	497,338	May 16	1550	390	63	929
Pen or pencil guard.....	H. B. Matthews.....	506,008	Oct. 3	323	85	65	63
Pen or pencil holder.....	I. H. Stattham.....	503,011	Aug. 8	1304	319	64	820
Pen or pencil holder and protector.....	C. Kertell.....	499,552	June 13	1350	323	63	1643
Pen. Printing.....	H. R. Fuller.....	510,966	Dec. 19	1968	483	65	1803
Pen. Stylographic.....	D. W. Beaumel.....	507,348	Oct. 24	2651	651	65	535
Pen. Writing.....	G. B. Hang.....	496,875	May 9	794	209 210	63	760
Pens, pins, &c. Holder for.....	L. W. Faber.....	505,823	Oct. 3	33	9	65	9
Pencil.....	A. J. Arthur.....	493,464	Mar. 14	1093	280	62	1587
Pencil.....	G. B. Bergen.....	494,001	May 23	2604	651	63	1133
Pencil.....	J. J. Gillespie.....	500,487	June 27	2875	707	63	1933
Pencil. Addition.....	A. M. Grubbs.....	508,417	Nov. 14	721	178	65	906
Pencil. Adhesive.....	C. S. Apple.....	502,163	July 25	2607	64	521	
Pencil and making it.....	R. M. Shearer.....	497,350	May 16	1574	63	934	
Pencil attachment. Lead.....	O. Mussinan.....	489,685	Jan. 10	1071	279	62	238
Pencil. Fluid-holding.....	W. B. Olmsted, H. O. Warner, and H. A. Giddings.....	501,958	July 25	2276	569	64	458
Pencil-holder.....	J. Matsuo.....	498,442	May 30	3318	826	63	1276
Pencil-holder.....	M. Olitsky.....	510,609	Dec. 12	1308	319	65	1669
Pencil-holder.....	J. S. Veal.....	497,065	May 9	1088	279	63	833
Pencil-holder.....	G. W. Washburn.....	508,791	Nov. 14	1297	323	65	1018
Pencil holder and sharpener.....	R. Mazza.....	496,269	Apr. 25	2767	692	63	561
Pencil holder. Lead.....	R. Hagenmeyer.....	197,873	May 23	2404	600	63	1098
Pencil-holder. Pocket.....	R. L. Gurney.....	501,714	July 18	1884	469	64	373
Pencil. Lead.....	A. J. Arthur.....	493,465	Mar. 14	1095	280	62	1588
Pencil. Lead.....	B. B. Goldsmith.....	500,061	June 20	2179	531	63	1799
Pencil-leads, crayons, or other articles. Automatic holder for.....	T. R. Stuart.....	501,850	July 18	2094	517	64	410
Pencil. Magazine lead.....	J. B. Smith.....	489,043	Jan. 3	98	27	62	25
Pencil or pen attachment.....	J. A. Murphy.....	494,510	Mar. 28	2830	709	62	1947
Pencil or style for writing on slates.....	D. von Sillich.....	511,468	Dec. 26	2815	65	1973	
Pencil-sharpener.....	E. H. Boehme.....	505,695	Sept. 26	2340	593	64	1749
Pencil-sharpener.....	G. Diez.....	490,272	Jan. 24	2061	539	62	462
Pencil-sharpener.....	G. Diez.....	491,536	Feb. 14	778	199	62	918
Pencil-sharpener.....	A. H. Fancher.....	491,996	Feb. 21	1498	374	62	1078
Pencil-sharpener.....	A. Fornander.....	501,043	July 4	800	200	64	146
Pencil-sharpener.....	A. Fornander.....	508,693	Nov. 14	1158	256	65	991
Pencil-sharpener.....	J. R. Foster.....	492,669	Feb. 28	2571	656	62	1309
Pencil-sharpener.....	H. W. Hopkins.....	507,437	Oct. 24	2798	685	65	585
Pencil-sharpener.....	P. McMenamin.....	502,008	July 25	2346	588	64	471
Pencil-sharpener.....	A. H. Moore.....	496,128	Apr. 25	2553	643	63	521
Pencil-sharpener.....	E. D. Moore.....	500,504	June 27	2699	713	63	1937
Pencil-sharpener.....	E. Norell.....	502,632	Aug. 1	641	153	64	685
Pencil-sharpener.....	A. P. Odell and N. E. Smith.....	491,129	Feb. 7	98	27	62	768
Pencil-sharpener.....	W. G. Price.....	492,336	Feb. 21	2024	503	62	1186
Pencil-sharpener.....	W. G. Price.....	510,518	Dec. 12	1116	270	65	1635
Pencil-sharpener and paper-weight. Combined.....	L. M. Reed.....	504,940	Sept. 12	1040	267	64	1480
Pencil-sharpener. Slate.....	E. W. Smith and J. B. Walton.....	500,257	June 27	2524	617	63	1871
Pencil-sharpener and erasing implement. Com- bined.....	O. Holben.....	503,794	Aug. 22	2576	641	64	1082
Pencil-sharpener device.....	W. C. Shipherd.....	508,055	Nov. 7	115	32	65	780
Pendulum-ball.....	A. M. Lane.....	492,030	Feb. 21	1553	387	62	1088
Pendulum-escapement.....	S. Riefler.....	508,760	Nov. 14	1252	312	65	1010
Pendulum. Mercurial compensation.....	S. Riefler.....	508,530	Nov. 14	913	294	65	942
Penman's hand-rest.....	G. S. Helenbolt.....	490,906	Jan. 31	3100	725	62	681
Penman's rest.....	C. H. Allard.....	502,218	July 25	2694	680	64	538
Penmanship. Device for assisting.....	J. D. McMeen.....	499,029	June 6	504	118	63	1479
Perambulator. Child's.....	U. McClinchie.....	506,329	Oct. 10	923	229	65	188
Perambulator. Collapsible.....	J. Martin.....	493,831	Mar. 21	1710	435 436	62	1722
Perforating and cutting machine.....	W. Liddell.....	492,871	Mar. 7	159	38	62	1370
Perforating apparatus.....	C. B. Wisner.....	494,184	Mar. 28	2309	585	62	1850
Perforating characters. Machine for.....	P. L. Koscialowski.....	505,404	Sept. 19	1798	464	64	1635
Perforating-machine.....	J. F. Craemer.....	493,753	Mar. 21	1529	404	62	1700
Perforating-machines. Automatic feed for.....	J. B. Hemsteger.....	497,178	May 9	1260	320	63	863
Perforating. Method of and apparatus for electric.....	D. M. and J. H. Garnett.....	498,973	June 6	399	94	63	1462
Perfume-delivery apparatus. Automatic.....	P. Leoni.....	504,842	Sept. 12	886	228	64	1451
Perfume essences. Extracting.....	E. Watel.....	498,830	June 6	137	33	63	1416
Perimeter.....	E. B. Meyrowitz.....	495,506	Apr. 18	1585	398 399	63	331

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Periodical holder	F. C. Doxstader	504,714	Sept. 12	658	167	64	1406
Permutation-lock	T. Averbek	489,447	Jan. 10	719	193	62	107
Permutation-lock	P. C. Brown	497,761	May 23	2228	558	63	1068
Permutation-lock	T. P. Cook	489,411	Jan. 3	647	175	62	139
Permutation-lock	L. Kaplan	494,867	Apr. 4	551	139	63	107
Permutation-lock	C. H. Morford	494,154	Mar. 28	2264	575	62	1841
Permutation-lock	J. H. Morris	495,100	Apr. 11	910	229	63	190
Permutation-lock	T. D. Morris	510,514	Dec. 12	1110	268	65	1634
Permutation-lock	L. E. Schneider	498,820	June 6	119	30.31	63	1413
Permutation-lock	G. Vogt	509,006	Nov. 21	1677	413	65	1104
Perspectives, &c. Instrument for making.	L. Dietmann	511,687	Dec. 26	3162	773	65	2036
Perspectograph	J. L. Findlay	496,558	May 2	265	71	63	667
Perspectograph	J. H. S. Jechoux	499,387	June 13	1074	261	63	1592
Pessary	J. J. Vernier	489,050	Jan. 3	108	29	62	27
Pessary-adjuster	L. F. Hatch	506,851	Oct. 17	1788	449	65	364
Petroleum and compressed-air engine for tramways. Combined	F. Neukirch	507,032	Oct. 17	2078	513	65	419
Petroleum and making such composition. Composition for purifying Canadian or similar	H. Frasch	500,252	June 27	2513	614	63	1870
Petroleum-engine	O. Brünler	507,987	Nov. 7	18	5.6	65	762
Petroleum-fluid burner	H. Bragg	505,417	Sept. 19	1821	469	64	1639
Petroleum. Means for utilizing waste products of	J. P. Engle	505,395	Sept. 19	1779	461	64	1631
Petroleum-motor	O. Brünler	507,988	Nov. 7	19	6	65	762
Petroleum-motor	O. Brünler	507,989	Nov. 7	19	6	65	762
Petroleum-motor	O. Brünler	507,990	Nov. 7	20	7	65	762
Petroleum or liquid-hydrocarbon engine	J. Roots	511,651	Dec. 26	3100	757	65	2024
Petroleum products. Obtaining sweet residual	E. G. Brown, O. N. Cammann, and O. Wilcox	510,672	Dec. 12	1417	350	65	1690
Petroleum. Refining	H. Koehler	507,441	Oct. 24	2803	666	65	565
Petroleum-refining apparatus	H. Frasch	490,144	Jan. 17	1837	479	62	407
Petroleum. Refining sulphurous	F. J. Carman	501,988	July 25	2319	579	64	467
Pew-back, &c.	W. H. and C. Roehr	491,190	Feb. 7	212	54	62	788
Pharmaceutical compound	F. Goldmann	509,617	Nov. 28	2750		65	1320
Phonograph	W. Bruening	499,370	June 13	1046	254	63	1588
Phonograph	W. Bruening	511,402	Dec. 26	2706	656	65	1952
Phonograph	T. A. Edison	496,191	Apr. 25	2640	664	63	537
Phonograph	T. A. Edison	499,879	June 20	1902	462	63	1750
Phonograph	T. A. Edison	500,280	June 27	2557	624	63	1877
Phonograph	T. A. Edison	500,281	June 27	2558	625	63	1877
Phonograph	T. A. Edison	500,282	June 27	2559	625	63	1877
Phonograph	J. W. Mackintosh	503,610	Aug. 22	2295	573	64	1027
Phonograph	J. H. White	504,380	Sept. 5	108	27	64	1291
Phonograph and coin-operated mechanism. Combined	W. S. Burnett	502,246	July 25	2749	695	64	548
Phonograph. Coin-operated	E. E. Flora	494,778	Apr. 4	400	98.99	63	78
Phonograph. Coin-operated	E. E. Flora	494,807	Apr. 4	454	112	63	87
Phonograph coin-operated mechanism	J. H. Ling	495,557	Apr. 18	1664	419	63	345
Phonograph speaking-tubes or other purposes. Support for	W. G. Henderson	493,719	Mar. 21	1518	388	62	1686
Phonographs. Automatic feed and return mechanism for	M. O. Anthony	489,519	Jan. 10	845	220	62	192
Phosphate separator and disintegrator	G. Guild	506,591	Oct. 10	1360	341	65	273
Phosphate-washer	W. A. Beatty	492,262	Feb. 21	1912	477	62	1163
Phosphates. Treating	P. C. Hoffmann	496,687	May 2	468		63	705
Photo-engravings. Holder for plates in the manufacture of	M. Levy	504,597	Sept. 5	467	119	64	1357
Photo processes. Half-tone negative for	F. J. M. Gerland	506,109	Oct. 3	481		65	94
Photogrammetry	C. B. Adams	510,758	Dec. 12	1559	389	65	1716
Photograph-displaying rack	T. E. Wood	506,893	Oct. 17	1864	464	65	378
Photograph-drier	L. A. Reid	495,102	Apr. 11	916	231	63	190
Photograph-exhibitor	J. Dewé	492,149	Feb. 21	1738	433	62	1127
Photograph-exhibitor	R. H. Nelson and T. H. Temple	489,713	Jan. 10	1116	288	62	247
Photograph-holder	G. F. Bambridge	490,059	Jan. 17	1696	441	62	377
Photograph-holder	D. T. Elmer	499,975	June 20	2041	494	63	1775
Photograph-machine. Coin-operated	P. V. W. Welsh	490,180	Jan. 17	1888	491	62	417
Photographer's changing and developing box	J. F. Snapp	506,343	Oct. 10	946	236	65	192
Photographers' use. Flash-light apparatus for	J. N. and H. J. Harrison	504,578	Sept. 5	439	112	64	1352
Photographic background	J. H. Titus	505,968	Oct. 3	258	69	65	51
Photographic camera	W. A. Armstrong	494,517	Mar. 28	2842	711	62	1948
Photographic camera	H. A. Benedict	493,747	Mar. 21	1580	402	62	1698
Photographic camera	T. H. Blair and F. H. Kelley	491,920	Feb. 14	1380	344	62	1040
Photographic camera	J. A. Davison	494,097	Mar. 21	2154	550	62	1807
Photographic camera	J. Fretwell	511,133	Dec. 19	2239	549	65	1854
Photographic camera	J. D. Garfield	501,931	July 25	2240	559	64	452
Photographic camera	F. A. Hetherington	502,857	Aug. 8	1039	255	64	772
Photographic camera	A. Klay	492,025	Feb. 21	1547	386	62	1087
Photographic camera	B. G. P. Möller	500,023	June 20	2122	514	63	1788
Photographic camera	C. G. Oesteman	502,198	July 25	2661	672	64	531
Photographic camera	J. F. Parsons	500,348	June 27	2676	656	63	1898
Photographic camera	E. W. Perry, Jr.	492,696	Feb. 28	2606	645	62	1317
Photographic camera	R. F. Rice	495,566	Apr. 18	1676	422	63	348
Photographic camera	J. M. Tracy and G. S. Hodges	494,354	Mar. 28	2590	651	62	1902
Photographic camera	A. Vanderbeek	494,400	Mar. 28	2664	668	62	1915

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Photographic camera	C. B. Withington	501,703	July 18	1866	{ 464 465 }	64	370
Photographic camera	J. Zenk	492,703	Feb. 28	2620	648	62	1319
Photographic-camera registering device	P. Tournachon	492,642	Feb. 28	2527	626	62	1301
Photographic film	T. Sault	494,306	Mar. 28	2503	632	62	1887
Photographic fixing and washing tank	A. R. Ward	491,619	Feb. 14	921	232	62	948
Photographic gallery	E. Hackh	501,340	July 11	1298	323	64	239
Photographic magazine-camera	G. D. Milburn	497,525	May 16	1847	{ 466 467 }	63	983
Photographic-negative ribbon for camera-boxes	H. C. H. Krause and H. B. Schneider	497,884	May 23	2421	604	63	1102
Photographic objective	A. B. Parvin	492,335	Feb. 21	2021	503	62	1185
Photographic-plate holder	E. R. Bullard	508,204	Nov. 7	371	91	65	827
Photographic-plate holder	R. B. Taffer	499,763	June 20	1706	409	63	1716
Photographic-plate holder	C. B. Withington	502,799	Aug. 8	949	231	64	756
Photographic-printing apparatus	R. J. Wynkoop and J. M. Kemp	500,180	June 27	2407	{ 585 586 }	63	1850
Photographic posing-chair	J. Winter, Sr.	506,025	Oct. 3	345	92	65	67
Photographic-printing device	W. Ohse	494,022	Mar. 21	2034	519	62	1785
Photographic-printing frame	G. W. Low and W. Shakespeare, Jr.	505,111	Sept. 19	1329	343	64	1548
Photographic-printing frame	J. Shutting	497,691	May 16	2109	526	63	1029
Photographic-printing machine	C. Van Buskirk	510,371	Dec. 5	870	209	65	1575
Photographic retoucher	J. R. Dake	509,721	Nov. 28	2909	704	65	1349
Photographic roll-holder	S. G. E. de Faucompré	500,875	July 4	544	141	64	99
Photographic shutter	F. A. Brownell	501,866	July 18	2116	523	64	414
Photographic shutter	J. W. Grantland	496,356	Apr. 25	2927	731	63	592
Photographic washing apparatus	S. A. Kem and E. Frederick	503,144	Aug. 15	1522	374	64	873
Photographs of moving objects. Apparatus for exhibiting	T. A. Edison	493,426	Mar. 14	1024	265	62	1575
Photographs on glass. Making transparent	F. R. Forster	494,526	Mar. 28	2866	.....	62	1952
Photography. Mirror for use in	H. P. Ranger	505,127	Sept. 19	1354	348	64	1552
Photogravure-printing plate	F. E. Ives	495,341	Apr. 11	1316	330	63	263
Phototype machine	A. C. Ferguson	497,914	May 23	2470	617	63	1109
Physician's vial-case	A. and H. Hoff	505,222	Sept. 19	1501	391	64	1579
Piano	P. Duffy	505,447	Sept. 26	1874	482	64	1662
Piano	W. P. Haines	491,423	Feb. 7	592	149	62	861
Piano	O. A. Kimball and J. Gramer	503,861	Aug. 22	2662	607	61	1099
Piano	J. W. Macy	495,678	Apr. 18	1861	465	63	377
Piano	J. W. Macy	502,524	Aug. 1	470	113	64	653
Piano	J. W. Macy	504,733	Sept. 12	697	175	64	1415
Piano	J. W. Reed	489,231	Jan. 3	387	107	62	87
Piano	G. Steck	491,607	Feb. 14	904	227	62	944
Piano-action	J. F. Conover	508,813	Nov. 14	1330	330	65	1023
Piano-action	F. A. Gnth	491,308	Feb. 7	413	107	62	826
Piano-action	E. M. Hamilton	506,225	Oct. 10	732	183	65	150
Piano-action	J. Herrburger	506,366	Oct. 10	982	244	65	198
Piano-action	S. R. Perry	498,814	June 6	111	29	63	1411
Piano-action	S. R. Perry	498,815	June 6	113	29	63	1411
Piano-action damper-regulator	E. Bornhoeft	504,906	Sept. 12	986	253	64	1471
Piano-action flange	H. P. Chapman	492,386	Feb. 28	2108	526	62	1215
Piano-action. Upright	J. F. Terew	497,992	May 23	2588	647	63	1130
Piano-agraffe	G. J. Couchois	500,562	July 4	41	12, 13	64	9
Piano-agraffe	P. J. Duggan	491,877	Feb. 14	1320	326	62	1027
Piano and organ. Combined	G. Schublein	505,235	Sept. 19	1517	396	64	1562
Piano attachment	J. R. Lomas	491,946	Feb. 14	1423	355	62	1048
Piano back. Upright	J. W. Reed	489,232	Jan. 3	388	107	62	87
Piano-case	W. J. Cordley	496,553	May 2	255	68	63	666
Piano-case	J. Reimer	494,163	Mar. 28	2276	577	62	1843
Piano. Electrically-operated	L. J. Zimmerman	507,703	Oct. 31	3262	798	65	664
Piano fall-board	F. Schimmell and S. F. Nelson	495,122	Apr. 11	971	243	63	199
Pianoforte	D. A. Barber, G. Bates, W. Mabry, and H. T. Skelton	494,051	Mar. 21	2076	531	62	1792
Pianoforte	G. A. Behrens-Senegalden	496,845	May 9	727	193	63	768
Pianoforte	A. W. Hall	501,226	July 11	1105	281	64	217
Pianoforte-action	J. Greener	508,416	Nov. 14	719	177	65	905
Pianoforte-action	G. Lyon	495,745	Apr. 18	1969	497	63	397
Pianoforte-action	H. N. Moore	493,172	Mar. 7	623	157	62	141
Pianoforte-action	A. F. S. and H. G. Osterberg	498,523	May 30	3454	856	63	1299
Pianoforte-action	G. W. Seaverns	480,615	Jan. 10	978	255	62	219
Pianoforte-actions. Machine for making parts of	E. B. Mansfield	507,020	Oct. 17	2061	509	65	416
Pianoforte key-touch adjuster	F. B. Long	489,564	Jan. 10	907	237	62	205
Pianoforte-mute	F. W. Hale	493,622	Mar. 14	1368	347	62	1640
Pianofortes. Repeating action for upright	F. W. Kringel	495,979	Apr. 25	2326	588	63	478
Piano-guard	D. L. Rice	511,240	Dec. 19	2360	576	65	1876
Piano-hammer	J. Ammon	504,192	Aug. 29	3216	801	64	1220
Piano-hammer	F. W. White	491,749	Feb. 14	1113	281	62	987
Piano-hammer-covering machine	M. Koeniges	493,274	Mar. 14	788	202	62	1530
Piano-keyboard	J. J. and W. F. Decker, E. K. Winkler, P. Friess, and A. Werner	497,426	May 16	1683	425	63	954
Piano-mute	J. A. Kieselhorst	498,352	May 30	3184	792	63	1250
Piano music-desk	J. Yuel	503,822	Aug. 22	2612	652	64	1089
Piano or organ attachment	J. W. Carter	507,883	Oct. 31	3554	875	65	718
Piano or organ keyboards. Making	S. J. Hoggson	493,027	Mar. 7	404	101	62	1438
Piano. Pedal	C. N. Rand	489,035	Jan. 3	85	24	62	22
Piano pedal attachment	F. E. Olmstead	502,261	July 25	2779	702	64	553
Piano practice-pedal	G. B. Shearer	503,880	Aug. 22	2688	674	64	1104
Piano-stringing device	A. Bollermann	493,748	Mar. 21	1582	402	62	1698
Piano tone-regulator	E. Sandner	496,171	Apr. 25	2614	658	63	532
Piano touch-regulator	A. H. Hastings	497,051	May 9	1058	271	63	827
Piano touch-regulator	H. A. Tobelman	510,729	Dec. 12	1503	371	65	1706
Piano transposing device	L. A. Ivon	502,907	Aug. 8	1124	277	64	789
Piano. Upright	H. Ziegler	509,111	Nov. 21	1859	455	65	1139
Pianos. String-frame for upright	H. Ziegler	509,110	Nov. 21	1858	{ 454 455 }	65	1138
Pianos. Stringing	L. A. Kindler	491,652	Feb. 14	968	243	62	958

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Pianos. Stringing.....	C. S. Weber.....	509,274	Nov. 21	2127	511	65	1189
Pianos. Stringing.....	C. S. Weber.....	510,944	Dec. 19	1928	471	65	1795
Pick.....	T. W. Williams and G. Z. Edwards	509,147	Nov. 21	1915	468	65	1149
Picker:							
See Berry-picker. Fruit-picker.							
Cotton-picker. Slate-picker.							
Picker-stem.....	G. N. Todd.....	502,241	July 25	2736	690	64	545
Picker-sticks. Lug connection for.....	T. H. Webster and T. Dobson.....	502,108	July 25	2515	631	64	502
Picket-barbing machine.....	N. A. Paine.....	507,687	Oct. 31	3235	792 793	65	658
Picket-mill.....	F. W. Stroh, M. J. and J. S. McIntosh.	509,405	Nov. 28	2384	577 578	65	1248
Pickets to wire. Device for securing.....	D. A. Boyle.....	496,508	May 2	184	51	63	652
Picking roller.....	J. Marshall.....	510,695	Dec. 12	1450	358	65	1696
Picks. Manufacture of.....	W. H. M. Neave.....	502,746	Aug. 8	859	209	64	739
Picture.....	J. F. Tallant.....	489,343	Jan. 3	554	150	62	119
Picture-back support.....	F. W. Strange.....	500,232	June 27	2476	604	63	1863
Picture-block.....	O. Waibel.....	510,216	Dec. 5	634	149	65	1530
Picture-exhibitor.....	R. K. Doe.....	507,529	Oct. 31	2960	726	65	607
Picture-exhibitor.....	R. C. Elliott.....	503,129	Aug. 15	1499	368 369	64	869
Picture-frame attachment.....	E. H. Patterson.....	509,626	Nov. 28	2761	665	65	1322
Picture-frame clamp.....	T. B. Baker.....	500,364	June 27	2700	663	63	1902
Picture-frame clamp.....	C. A. Wayland.....	490,519	Jan. 24	2455	633	62	540
Picture-hanger.....	J. Berbecker.....	500,365	June 27	2702	613	63	1902
Picture-hanger.....	D. A. Ferris.....	506,682	Oct. 17	1503	377	65	312
Picture-hanger.....	F. Gaisser.....	508,540	Nov. 14	926	227	65	945
Picture-hanger.....	J. Hymans.....	489,160	Jan. 3	268	74	62	62
Picture, &c., hanger.....	T. Small and A. Entwistle.....	511,655	Dec. 26	3109	759	65	2026
Picture-hanger. Corner.....	J. M. Robinson.....	505,230	Sept. 19	1510	394	64	1581
Picture-holder.....	P. A. Becker.....	498,761	June 6	12	3	63	1391
Picture-mat-cutting device.....	E. L. Gaylord.....	491,307	Feb. 7	411	105 106	62	825
Picture or card frame.....	H. Biederman.....	505,872	Oct. 3	111	28	65	22
Picture-support.....	P. Lindemeyer, Jr.....	506,59	Oct. 10	1371	344	65	275
Picture-support.....	R. L. Lynch.....	498,902	June 6	278	64	63	1441
Pictures. Apparatus for automatically displaying.....	G. Cook and C. K. Marr.....	507,785	Oct. 31	3396	832	65	689
Pictures on textile fabrics. Making colored.....	A. Ophoven.....	492,362	Feb. 21	2067	62	62	1194
Pictures. Supporting-standard for.....	C. H. Lieber.....	501,149	July 11	989	252	64	195
Pictures to watches, &c. Securing.....	E. H. Brown.....	511,678	Dec. 26	3145	769	65	2033
Pie-fillings. Preparing.....	W. D. Brewster and E. A. Abell.....	508,598	Nov. 14	1019	65	65	963
Pie pans. Crust-supporter for pot.....	A. Uniack.....	503,756	Aug. 22	2525	628	64	1072
Pie raising and lidding machine.....	W. R. Gaudie.....	492,531	Feb. 28	2348	583	62	1264
Pigment. Making sublimated lead.....	C. V. Petraeus.....	492,832	Mar. 7	92	22	62	1376
Pigment or paint. Manufacture of.....	J. W. Kridwell.....	503,424	Aug. 15	1970	64	64	954
Pigment. Preparing oxide-of-zinc.....	G. T. Lewis.....	502,822	Aug. 8	991	64	63	763
Pigments. Making sublimed-lead.....	E. O. Bartlett.....	496,038	Apr. 25	2413	610	63	494
Pigments. Manufacture of.....	J. J. Fronheiser.....	495,197	Apr. 11	1092	63	63	221
Pigments. Manufacturing oxide-of-zinc.....	C. V. Petraeus.....	496,205	Apr. 25	2662	669	63	541
Pigments or paints. Utilizing metallic and earthy oxides and salts as.....	W. N. Blakeman, Jr.....	496,990	May 9	972	63	63	812
Pile.....	W. Kennish.....	509,474	Nov. 28	2527	610	65	1276
Pile.....	D. W. McElroy.....	506,856	Oct. 17	1795	451	65	365
Pile-driver.....	J. Harpman.....	496,306	Apr. 25	2830	707	63	573
Pile-driver.....	A. W. Hubbard.....	506,637	Oct. 10	1423	357	65	285
Pile-driver.....	F. Le Blanc.....	506,834	Oct. 17	1791	450	65	364
Pile-driver.....	H. C. Sergeant.....	498,493	May 30	3402	845	63	1291
Pile-driver.....	F. E. Shaw.....	510,198	Dec. 5	599	140	65	1523
Pile-driver. Triple.....	W. Baptist.....	510,873	Dec. 12	1603	444	65	1759
Pile fabric. Woven.....	J. Raab.....	509,138	Nov. 21	1904	465	65	1147
Pile fabric. Woven.....	A. Webb.....	491,693	Feb. 14	1029	260	62	971
Pile fabrics. Apparatus for cutting the pile of weft.....	G. Roger.....	504,441	Sept. 5	210	55	64	1309
Pile fabrics. Machine for cutting the pile of weft.....	W. Gadd.....	503,658	Aug. 22	2363	590	64	1040
Pile fabrics. Machine for smoothing and polishing.....	F. Bartels.....	508,802	Nov. 14	1311	326 327	65	1021
Pile. Iron on steel.....	A. Hooven.....	508,881	Nov. 14	1440	357	65	1044
Pile or timber protector and preserver.....	G. E. Surgi.....	500,678	July 4	237	62	64	45
Pile-planting.....	A. Simon.....	500,780	July 4	395	104	64	73
Piles of material. Removing.....	J. M. Dodge.....	501,770	July 18	1984	491	64	391
Piles preparatory to rolling. Machine for reducing.....	J. Hoenig.....	490,021	Jan. 17	1638	426	62	366
Piles. Preserving.....	J. Cass.....	508,279	Nov. 7	496	120	65	850
Piles. Preserving.....	R. Sudden.....	511,372	Dec. 26	2644	643	65	1942
Pill holding and dipping apparatus.....	A. D. Stearns.....	493,604	Mar. 14	1341	342	62	1636
Pill holding and dipping apparatus.....	A. D. Stearns.....	504,505	Sept. 5	325	83	64	1330
Pill-machine.....	J. R. Clark.....	497,532	May 16	1860	469	63	985
Pills. Method of and apparatus for manufacturing.....	S. E. Heineman.....	499,542	June 13	1444	319	63	1640
Pillow. Ice.....	J. Bomgardner.....	505,873	Oct. 3	112	28	65	22
Pillow-sham holder.....	N. W. Stearns.....	499,858	June 20	1866	453	63	1743
Pillow. Spring.....	W. H. Lewis.....	490,447	Jan. 24	2327	604	62	515
Pin:							
See Bowling-alley pin. Safety-pin.							
Clothes-pin. Scarf pin.							
Insulator-pin.....							
Pin.....	E. Le Gresley-Cox.....	497,801	May 23	2280	573	63	1077
Pin-gage.....	A. Pieczka.....	499,035	June 6	510	120	63	1480
Pin-lock.....	J. V. Smith.....	489,272	Jan. 3	450	124	62	99
Pins or brooches. Stock for hinge-joints of.....	B. A. Ballou.....	507,254	Oct. 24	2486	612	65	503
Pins. Safety-catch for.....	C. du Bus.....	501,184	July 11	1044	264	64	205
Pinch-bar.....	S. D. Combs and R. A. Frates.....	491,986	Feb. 21	1483	369	62	1075
Pinch-bar.....	J. McDonald.....	498,677	May 30	3721	919	63	1346
Pinking-machine.....	E. W. Silsby.....	499,445	June 13	1188	283	63	1612
Pinking-shears.....	L. Austin.....	489,406	Jan. 3	642	174	62	138

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Pipe:							
See Drain-pipe.	Locomotive exhaust-pipe.						
Dredger suction-pipe.	Sheet-metal pipe.						
Double-lap pipe.	Supply and waste pipe.						
Cigar-pipe.	Tobacco-pipe.						
Furnace-grate blast-pipe.	Vent-pipe.						
Heating-pipe.	Waste-pipe.						
Hot-air pipe.	Wood water-pipe.						
	Wooden pipe.						
Pipe and monkey wrench.	Combined	W. S. Bemis	501,860	July 18	2109	521	64 413
Pipe and tube testing apparatus		A. O'Brien	496,438	May 2	81	23	63 613
Pipe-bell lock-joint.	Sheet-metal	C. S. Hamlin	498,210	May 23	2929	729	63 1190
Pipe-bending machine		O. H. Lawrence and E. M. Letts	498,126	May 23	2791	698	63 1167
Pipe-burr-removing implement		H. Comstock	499,098	June 6	603	145	63 1496
Pipe cap. Sewer and other		H. Bradley, Jr.	510,884	Dec. 19	1821	450	65 1775
Pipe-clips. Machine for making		S. Vanstone	494,535	Mar. 28	2878	720 721	62 1954
Pipe-clips. Machine for making		S. Vanstone	494,536	Mar. 28	2881	721 722	62 1955
Pipe collar. Soil-		A. W. Cram	499,658	June 13	1522	366	63 1670
Pipe-connection lock		J. H. Lane	509,742	Nov. 28	2944	712	65 1355
Pipe-core		P. Clifford	491,527	Feb. 14	765	194 195	62 916
Pipe-cores. Apparatus for molding		L. W. Anderson	491,973	Feb. 21	1465	365	62 1071
Pipe coupler. Combination hard and soft metal		S. M. Friede	502,665	Aug. 1	699	167	64 694
Pipe-coupling		R. Herman	502,038	July 25	2402	605	64 481
Pipe-coupling		W. S. Johnson	502,671	Aug. 1	723	173	64 699
Pipe-coupling		J. H. Lane	509,743	Nov. 28	2945	712	65 1355
Pipe-coupling		J. C. Mitchell	510,437	Dec. 12	983	235	65 1610
Pipe-coupling		T. W. Moran	502,234	July 25	2732	686	64 542
Pipe-coupling		W. W. Simrell	497,990	May 23	2536	647	63 1130
Pipe-coupling		O. M. Sweet	494,284	Mar. 28	2474	624	62 1880
Pipe-coupling		A. S. Vogt	491,299	Feb. 7	396	102	62 823
Pipe coupling. Air.		J. B. Thomas	496,758	May 2	581	155	63 724
Pipe coupling. Flexible-steam.		J. E. Marble	495,896	Apr. 18	2205	555	63 440
Pipe coupling or fitting		G. W. Harrington	492,159	Feb. 21	1754	437	62 1130
Pipe coupling. Train.		Z. F. Lightner	510,806	Dec. 12	1634	406	65 1730
Pipe-covering		G. Edwards and R. Blacklodge	493,489	Mar. 14	1133	290	62 1594
Pipe-covering. Steam.		A. W. Shearer	505,560	Sept. 26	2101	533	64 1705
Pipe-cutter		T. B. Brien	511,501	Dec. 26	2863	693	65 1981
Pipe-cutter		D. W. French	492,579	Feb. 28	2425	604	62 1282
Pipe-cutter		J. Porter	492,833	Mar. 7	93	23	62 1376
Pipe ends. Tool for reaming		E. Scholz	505,960	Oct. 3	241	65	65 48
Pipe-expander		S. D. Robertson	497,820	May 23	2309	580	63 1081
Pipe-fitting		J. McIntyre	500,412	June 27	2767	682	63 1914
Pipe-fitting		J. McIntyre	503,432	Aug. 15	1981	491	64 956
Pipe-fitting		J. McIntyre	503,433	Aug. 15	1983	492	64 956
Pipe-hanger		A. J. Beaton	497,512	May 16	1831	461	63 979
Pipe-hanger		J. H. Cain	508,914	Nov. 21	1537	374	65 1076
Pipe-hanger		J. H. Hunter and F. Cajal	499,549	June 13	1356	322	63 1642
Pipe-hanger beam-clamp.		A. Newbury	497,679	May 16	2084	520	63 1025
Pipe-hanger for water-conductors		E. G. Minnemeyer	489,083	Jan. 3	151	42	62 36
Pipe-heating device. Iron		J. H. McRae	494,484	Mar. 28	2782	593	62 1937
Pipe-holder		F. Engel, Jr.	500,230	June 27	2487	607	63 1865
Pipe-joint		R. T. Bells	498,876	June 6	228	54	63 1433
Pipe joint and coupler		J. A. Murray	504,739	Sept. 12	707	177	64 1416
Pipe joint. Earthenware-sewer		R. Ewing	506,484	Oct. 10	1206	299	65 242
Pipe-joint. Expansion		W. A. Pearson	506,335	Oct. 10	930	231 232	65 189
Pipe joint. Gas or water		G. W. Lloyd	494,147	Mar. 28	2254	574	62 1840
Pipe joint or soldering nipple. Lead.		N. Barry, Jr.	497,622	May 16	1995	499	63 1009
Pipe-junction. Closet-safe		P. J. Burke	506,842	Oct. 17	1776	447	65 362
Pipe-lifter		C. M. Danielson	496,641	May 2	398	108	63 691
Pipe-machine		F. M. Speed	503,102	Aug. 8	1442	355	64 846
Pipe. Machine for corrugating sheet-metal.		C. J. Colling	494,626	Apr. 4	160	38	63 33
Pipe. Method of and apparatus for forming lined		G. W. Harrington	489,950	Jan. 17	1508	394	62 340
Pipe or gutter forming machine		E. G. Watrous and H. A. Riley	494,936	Apr. 4	640	164	63 124
Pipe or hose coupling		H. Winkenwerder	496,468	May 2	123	33	63 641
Pipe or nut wrench		P. Armantrout	501,985	July 25	2316	579	64 466
Pipe or nut wrench		W. H. Conner	503,124	Aug. 15	1489	366	64 867
Pipe plug. Waste.		H. S. Chase	506,872	Oct. 17	1821	456	65 370
Pipe stop or shut-off.		J. Gilligan	509,575	Nov. 28	2684	649	65 1307
Pipe-support.		G. Taylor	492,593	Feb. 28	2448	609	62 1285
Pipe-thimble.		R. Z. Cassel	489,068	Jan. 3	131	36	62 33
Pipe-thread protector		M. Blakey	509,115	Nov. 21	1865	457	65 1140
Pipe-threading machine.		L. B. Curtis	509,878	Dec. 5	56	13, 14	65 1420
Pipe-threading machine.		R. P. Curtis	497,002	May 9	993	256	63 815
Pipe-threading machine.		R. P. and L. B. Curtis	505,593	Sept. 26	2160	546	64 1717
Pipe-threading machine.		F. W. Smith, Jr.	508,581	Nov. 14	995	244	65 959
Pipe-threading machine.		F. W. Smith, Jr.	508,582	Nov. 14	996	244	65 959
Pipe. Tool for cutting lead-lined iron		G. W. Harrington	492,158	Feb. 21	1753	436	62 1130
Pipe-trap cleaner. Waste.		E. Helfensteller, Jr.	507,435	Oct. 24	2794	664	65 564
Pipe-turner		A. F. Foster	510,169	Dec. 5	546	127	65 1513
Pipe-union		J. T. Bibb	489,784	Jan. 10	1230	322	62 270
Pipe-wrench		J. C. Booth and W. C. Redfield	499,508	June 13	1299	305	63 1631
Pipe-wrench		G. W. Buford and J. E. Kitson	489,455	Jan. 10	737	196	62 171
Pipe-wrench		W. Craig	498,048	May 23	2675	669	63 1145
Pipe-wrench		L. Dahlstrom	508,920	Nov. 21	1546	378	65 1078
Pipe-wrench		R. S. Gillespie and H. James	489,803	Jan. 10	1255	329	62 275
Pipe-wrench		R. S. Gillespie and H. James	508,302	Nov. 7	530	120	65 856
Pipe-wrench		H. F. Jenks	494,529	Mar. 28	2870	718	62 1953
Pipe-wrench		W. A. Jennings	509,909	Dec. 5	109	24	65 1430

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Pipe-wrench	H. Martini	510,182	Dec. 5	572	133	65	1518
Pipe-wrench	C. B. Merritt	511,155	Dec. 19	2271	556	65	1860
Pipe-wrench	G. W. Morrill	491,850	Feb. 14	1275	316	62	1019
Pipe-wrench	T. H. Oxnam, J. Joyce, and J. Francis.	503,215	Aug. 15	1643	402	64	896
Pipe-wrench	G. W. Porter	492,834	Mar. 7	94	23	62	1376
Pipe-wrench	S. B. Rittenhouse	492,435	Feb. 28	2182	545	62	1230
Pipe-wrench	J. Smith and C. H. Gage	496,753	May 2	577	154	63	723
Pipe-wrench	J. A. Smith	493,737	Mar. 21	1560	398	62	1695
Pipe-wrench	R. T. Torkelson	509,408	Nov. 28	2387	579	65	1248
Pipe-wrench	F. L. Twiss and L. A. Barber	489,048	Jan. 3	106	29	62	27
Pipe-wrench	A. E. Upton	499,765	June 20	1708	409	63	1716
Pipe-wrench	W. J. Walker	491,255	Feb. 7	309	78	62	808
Pipe-wrench	G. P. Woelfel	497,260	May 9	1382	350	63	885
Pipe-wrench	E. Wright	505,869	Oct. 3	104	27	65	21
Pipe wrench and cutter. Combined	T. H. Anderson	503,077	Nov. 7	158	44	65	788
Pipe wrench and cutter. Combined	G. Plante	506,070	Oct. 3	421	110	65	82
Pipe-wrench, monkey-wrench, and flange-holder. Combined	J. Wensing	494,310	Mar. 28	2507	633	62	1887
Pipes, car-axles, &c. Tool for turning	G. Englund	493,638	May 30	3651	903	63	1334
Pipes. Clean-out for drainage	R. Garvie	496,561	May 2	269	72	63	668
Pipes. Composition of matter for water	G. W. Bedbury and E. F. Badgley	506,356	Oct. 10	968		65	196
Pipes. Detachable jacket for steam	W. A. Macan	507,145	Oct. 24	2298	565	65	470
Pipes. Device for preventing water from freezing in	C. H. Keeney	503,932	Aug. 22	2769	694	64	1120
Pipes. Device for protecting steam	R. C. Forsyth	504,871	Sept. 12	927	239	64	1459
Pipes. Double testing-plug for soil	J. F. McCartney	491,184	Feb. 7	903	52	62	786
Pipes. Electrically-operated machine for molding clay or cement	R. Boeklen	507,671	Oct. 31	3216	787	65	655
Pipes, &c. External joint for escape	F. R. Nies and F. J. Linnehan	506,930	Oct. 17	1927	477	65	390
Pipes. Floor and ceiling plate for	A. T. Bishop	511,036	Dec. 19	2070	513	65	1821
Pipes. Floor or ceiling plate for steam or water	G. C. Blackmore	510,833	Dec. 12	1686	419	65	1740
Pistol for discharging coins	A. H. Ramey	497,059	May 9	1080	277	63	821
Pipes for jointing. Preparing the ends of lined	G. W. Harrington	489,949	Jan. 17	1507	394	62	340
Pipes from powerful electric currents. Protector for	F. Egner	505,822	Oct. 3	32	9	65	9
Pipes in streets. Device for use when repairing or laying	F. M. Ashley	506,868	Oct. 17	1817	455	65	369
Pipes. Manufacture of fireproof coverings for steam	P. Carey	506,870	Oct. 17	1819		65	369
Pipes, &c. Material for covering	J. L. Covell	491,336	Feb. 14	1249	311	62	1014
Pipes. Method of and means for screwing sockets upon	W. S. McManus and J. A. Hock	502,691	Aug. 1	756	182	64	705
Pipes of cement, clay, &c. Machine for making	J. Sharpe	506,557	Oct. 10	1312	328	65	263
Pipes or tubes. Machine for making	G. H. Winsor	504,687	Sept. 5	612	156	64	1385
Pipes. Roof-collar clamp for vent	W. H. Berger and E. Newman	507,777	Oct. 31	3383	828	65	686
Pipes. Screwing sockets upon	W. S. McManus and J. A. Hock	506,531	Oct. 10	1274	319	65	256
Piperazin	W. Majert and A. Schmidt	511,303	Dec. 19	2517		65	1904
Piperazin hydrate	W. Majert and A. Schmidt	505,113	Sept. 19	1332		64	1549
Piperazin. Making	W. Majert	509,087	Nov. 21	1823		65	1131
Piperazin. Obtaining	W. Marckwald	500,665	July 4	920		64	42
Piston	J. Cooper and T. Pattinson	501,560	July 18	1635	409	64	330
Piston	T. Goulding	510,910	Dec. 19	1859	457	65	1782
Piston	T. Jellinghaus	502,462	Aug. 1	356	85	64	631
Piston	M. M. Smith	490,724	Jan. 31	2800	718	62	623
Piston	G. S. Strong	497,358	May 16	1583	399	63	935
Piston	S. M. Vauclain	499,064	June 6	556	132	63	1488
Piston-head	H. M. Lee	490,913	Jan. 31	3111	798	62	633
Piston-returning device. Automatic	C. E. Ongley	508,044	Nov. 7	95	27	65	776
Piston-rod protector	S. Kave	502,402	Aug. 1	255	60	64	613
Pitch-board	C. G. Van Alstine	493,048	Mar. 7	431	109	62	1444
Pitchfork and band-cutter. Combined	F. Duggan	501,773	July 18	1987	491	64	391
Pitman	J. C. Maloney	491,727	Feb. 14	1081	273	62	981
Pitman	G. B. Porter	497,815	May 23	2297	577	63	1020
Placard. Mirror	G. Barthels	506,580	Oct. 10	1345	337	65	270
Plaiting-machine	C. C. Emmons	498,637	May 30	3649	903	63	1333
Plane	L. Hardt	502,906	Aug. 8	1123	277	64	788
Plane	O. R. Hayworth	508,386	Nov. 7	666	163	65	821
Plane	E. Maddox	496,267	Apr. 25	2765	692	63	560
Plane	H. Merz	511,349	Dec. 26	2605	633	65	1934
Plane. Bench	E. J. McCulloch	505,119	Sept. 19	1344	346	64	1551
Plane. Bench	J. Siegle	510,096	Dec. 5	429	96	65	1491
Plane. Bench	G. W. Wright	493,903	Mar. 21	1816	462	62	1743
Plane-guide	J. McKnight	507,378	Oct. 24	2702	664	65	545
Plane. Joiner's	J. M. Cole	504,562	Sept. 5	417	106	64	1347
Planer. Buzz	E. F. Gordon	499,290	June 13	898	217	63	1561
Planer-cutter	H. Ernsberger	497,713	May 16	2139	535	63	1035
Planer. Plow-beam	G. W. Ream	492,338	Feb. 21	2026	504	62	1146
Planers and matchers. Cutter-head hood for	J. Roberts	495,912	Apr. 18	2229	561	63	445
Planers. Hanging and adjusting pressure-bars of	D. P. Ross	489,038	Jan. 3	91	25	62	23
Planing cycloidal surfaces. Machine for	J. T. Wilkin	497,997	May 23	2593	649	63	1131
Planing-machine	J. S. Graham	508,516	Nov. 14	889	219	65	938
Planing-machine	E. and B. Holmes and E. F. Beugler	509,435	Nov. 28	2446	589	65	1262
Planing-machine belt-tightener	S. A. Woods and H. R. Tillison	495,445	Apr. 11	1483	373	63	292
Planing-machine channel-cutting tool	W. C. Rolston	508,982	Nov. 21	1641	403	65	1097
Planing-machine for blower-pistons	E. D. Johnston	509,086	Nov. 21	1821	446	65	1131
Planing-machine sheathing-lath attachment	T. H. Brown	492,369	Feb. 21	2074	518	62	1196
Planing machine. Wood	J. B. Mahaffey	510,693	Dec. 12	1448	357	65	1695
Planimeter	J. Goodman	496,562	May 2	270	72	63	668
Planimeter	J. Goodman	500,202	June 27	2441	596	63	1856
Plant cover or protector	S. Reichart	489,500	Jan. 10	817	214	62	167
Plant or tree protector	B. F. Gilman	502,559	Aug. 1	522	125	64	682
Plant-protector	L. Bricker	499,203	June 13	772	183	63	1539
Plant-protector	A. C. Davis	508,209	Nov. 7	381	93	65	829

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Plant-protector	J. Garbesi	505,354	Sept. 19	1711	441	64	1618
Plant-protector	L. Gruetzmacher	493,400	Mar. 14	987	254	62	1568
Plant-setting machine	C. O. and E. C. Moore and T. J. Fitzsimmons.	510,925	Dec. 19	1885	462	65	1788
Plant-sprinkler	L. Middleton	506,708	Oct. 17	1546	386	65	319
Plant-supporter	G. Kruger	500,140	June 27	2339	565	63	1839
Plants. Contrivance for training growing hop-	J. A. Partridge	492,516	Feb. 28	2326	577	62	1259
Plants. Device for destroying noxious.	J. Shaw and M. Clancy, Jr	489,167	Jan. 3	278	78	62	64
Plants. Receptacle for growing	C. Hoffman	499,996	June 20	2075	503	63	1781
Planter	D. J. Bowser	492,383	Feb. 28	2103	524	62	1214
Planter	J. M. King	495,495	Apr. 18	1569	395	63	328
Planter	R. Murphy	492,096	Feb. 21	1645	409	62	1107
Planter	J. V. Plyler	502,993	Aug. 8	1279	313	64	815
Planter	W. G. Sayr	502,832	Aug. 8	1006	245	64	767
Planter	E. H. Suhl	507,048	Oct. 17	2112	523	65	424
Planter	S. K. Turner	501,385	July 11	1376	344	64	264
Planter	W. E. Whitman	495,144	Apr. 11	1006	251	63	205
Planter-actuating mechanism	L. Scofield	509,453	Nov. 28	2481	598	65	1268
Planter and cultivator. Combined	J. B. Burke and J. F. Badger	493,063	Mar. 7	451	114	62	1448
Planter and cultivator. Seed.	T. F. Baird	491,510	Feb. 14	744	189	62	911
Planter and distributor. Combined	J. A. Simmons	499,856	June 20	1864	453	63	1743
Planter and fertilizer-distributor.	E. Brewster	510,498	Dec. 12	1086	262	65	1630
Planter and fertilizer-distributor. Combined.	J. Pipes	502,379	Aug. 1	216	51	64	605
Planter and fertilizer-distributor. Combined.	J. Pipes	506,251	Oct. 10	790	195	65	162
Planter and fertilizer-distributor. Combined.	C. C. Taylor	501,113	July 11	934	239	64	184
Planter and fertilizer-distributor. Corn.	L. Middleton	510,698	Dec. 12	1454	359	65	1696
Planter and fertilizer-distributor. Seed.	S. L. Allen	509,856	Dec. 5	2	1	65	1411
Planter and fertilizer-distributor. Seed.	A. J. Kemp	496,362	Apr. 25	2936	733	63	594
Planter and fertilizer-distributor. Seed.	J. R. McCord	493,872	Mar. 21	1769	451	62	1735
Planter and fertilizer-distributor. Seed.	C. R. Reid	501,362	July 11	1335	334	64	256
Planter attachment. Check-row corn.	J. B. Jarmin	496,415	May 2	38	11	63	625
Planter attachment. Corn.	O. P. Brinker	490,266	Jan. 24	2051	536	62	460
Planter attachment. Corn.	K. L. Kammerer	510,069	Dec. 5	386	85	65	1482
Planter attachment. Corn.	W. D. Wallace and V. C. Osborn	495,858	Apr. 18	2147	539	63	429
Planter. Check-row	A. G. Anderson	499,697	June 20	1582	381	63	1695
Planter. Check-row	E. C. C. Krogh	497,799	May 23	2276	572	63	1076
Planter. Check-row corn	J. C. Benedict	506,462	Oct. 10	1160	288	65	234
Planter. Check-row corn	J. B. Jarmin	493,362	Mar. 14	937	240	62	1558
Planter. Check-row corn	F. C. Peck	505,251	Sept. 19	1542	402	64	1587
Planter check-rower. Corn	J. C. Miner	500,408	June 27	2762	680	63	1913
Planter. Combined cotton and corn	J. D. Schofield	497,688	May 16	2101	524	63	1028
Planter. Corn	J. Anderson	489,446	Jan. 10	718	193	62	167
Planter. Corn	J. W. Barlow	510,231	Dec. 5	661	157	65	1535
Planter. Corn	D. J. Bowser	504,321	Sept. 5	13	4	64	1273
Planter. Corn	R. Boyd	499,958	June 20	2014	489	63	1770
Planter. Corn	E. L. Caraway	503,944	Aug. 29	2790	699	64	1141
Planter. Corn	F. X. Craft	509,792	Nov. 28	3025	731	65	1371
Planter. Corn	L. C. Evans	489,182	Jan. 3	304	84	62	69
Planter. Corn	L. C. Evans	508,568	Nov. 14	972	239	65	954
Planter. Corn	A. J. Fisher	496,114	Apr. 25	2532	639	63	517
Planter. Corn	A. J. Fisher	498,954	June 6	359	86	63	1455
Planter. Corn	D. M. Forsyth	508,930	Nov. 21	1532	383	65	1081
Planter. Corn	C. E. Kessler	500,909	July 4	585	153	64	107
Planter. Corn	S. T. Lamb	490,665	Jan. 31	2711	697	62	605
Planter. Corn	L. J. Lindsey	494,926	Apr. 4	630	160	63	121
Planter. Corn	W. E. Matthew	504,929	Sept. 12	1022	263	64	1477
Planter. Corn	C. J. Miller	505,168	Sept. 19	1419	365	64	1564
Planter. Corn	J. S. Mulhollen	511,354	Dec. 26	2615	635	65	1937
Planter. Corn	F. A. Newell	510,186	Dec. 5	578	134	65	1519
Planter. Corn	A. S. Parker	493,781	Mar. 21	1629	415	62	1708
Planter. Corn	J. H. Peters	497,339	May 16	1551	390	63	930
Planter. Corn	F. F. Shanks	501,449	July 11	1462	367	64	281
Planter. Corn	M. P. Upp and J. C. Young	499,862	June 20	1870	454	63	1744
Planter. Corn	I. F. J. D., and C. C. Yockey	511,260	Dec. 19	2443	595	65	1891
Planter. Corn and cotton	J. D. Schofield	509,950	Dec. 5	170	40	65	1441
Planter. Corn or potato	W. Williams	490,092	Jan. 17	1748	455	62	359
Planter. Cotton	L. M. Rhodes	501,026	July 4	770	202	64	140
Planter fertilizer-distributor	T. W. Sample	506,552	Oct. 10	1304	326	65	261
Planter. Grain	O. F. Yarbrough	491,459	Feb. 7	659	165	62	874
Planter. Hand	C. O. Garman	500,198	June 27	2434	594	63	1855
Planter. Hand corn	E. Mowry	489,491	Jan. 10	794	209	62	182
Planter. Hand corn	G. S. Sheffield	502,239	July 25	2734	689	64	544
Planter marker. Corn	C. Council	505,266	Sept. 19	1564	408	64	1591
Planter marker. Corn	G. E. McCune	496,744	May 2	564	151	63	720
Planter. Potato	E. F. Chubbuck	503,695	Aug. 22	2423	603	64	1051
Planter. Potato	J. P. Davenport	498,773	June 6	32	8	63	1394
Planter. Potato	S. H. Fish	505,877	Oct. 3	118	30	65	24
Planter. Potato	A. G. Gekeler	490,555	Jan. 24	2507	645	62	551
Planter. Potato	A. G. Gekeler	507,428	Oct. 24	2783	681	65	561
Planter. Potato	J. Horscroft	503,854	Aug. 22	2654	665	64	1097
Planter. Potato	O. Ihle and R. Rothe	492,021	Feb. 21	1539	384	62	1026

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Planter. Potato.	C. Irish	500,133	June 27	2327	{ 562 563 }	63	1837
Planter. Potato.	N. Sturdy	496,707	May 2	498	133	63	710
Planter. Seed.	F. W. Banan	503,938	Aug. 29	2783	698	64	1140
Planter. Seed.	J. Hansson	492,920	Mar. 7	239	60	62	1406
Planter. Seed.	T. J. Hathaway	499,110	June 6	624	{ 149 150 }	63	1499
Planter. Seed.	A. Learmonth and A. A. Beltman	491,363	Feb. 7	509	131	62	845
Planter. Seed.	F. W. Ohlinger	507,924	Oct. 31	3621	895	65	730
Planter. Seed.	I. Y. Palmer	504,848	Sept. 12	894	230	64	1453
Planter. Seed.	R. M. Phillips	494,592	Apr. 4	107	25	63	22
Planter. Seed.	J. W. Robb	489,268	Jan. 3	444	123	62	98
Planter. Seed.	G. A. Stine	491,863	Feb. 14	1207	320	62	1023
Planter. Seed.	J. W. Tuggle	492,479	Feb. 28	2254	563	62	1245
Planter seed-dropping mechanism. Corn.	L. Z. Preston	498,727	May 30	3823	{ 942 943 }	63	1363
Planter split wheel. Corn.	J. C. Tunnick	506,750	Oct. 17	1621	408	65	334
Planters. Anchor for check-row	D. Aumiller	510,463	Dec. 12	1033	247	65	1620
Planters. Furrow-closing attachment for corn.	A. W. Trotter	491,390	Feb. 7	549	139	62	853
Planting and seeding machine	N. Racz	494,795	Apr. 4	432	{ 106 107 }	63	84
Planting machine. Potato.	G. Hoffmann	491,887	Feb. 14	1331	329	62	1030
Plaster-board	J. D. Baker	493,961	Mar. 21	1936	493	62	1764
Plaster composition	T. J. Heller	502,096	July 25	2493		64	499
Plaster composition	T. J. Heller	502,097	July 25	2494		64	499
Plaster, &c. Composition for	B. D. Stafford	507,942	Oct. 31	3648		65	735
Plaster. Electro-galvanic adhesive	F. A. Barret	496,244	Apr. 25	2730	{ 683 684 }	63	554
Plaster. Manufacturing retarders for	J. R. McIlvried	511,740	Dec. 26	3246		65	2051
Plaster. Wall.	J. Dirnberger	494,981	Apr. 4	709		63	136
Plaster. Wall.	J. K. Jones	511,735	Dec. 26	3235		65	2049
Plastering-finish	E. A. Bronson	499,710	June 20	1602		63	1699
Plastic composition. Non-corrodible	J. W. Kidwell	503,425	Aug. 15	1971		64	954
Plastic material. Apparatus for making hollow articles from	R. Kieserling	505,362	Sept. 19	1731	{ 447 448 }	64	1621
Plastic material. Machine for molding	F. C. Damm	496,399	May 2	18	5	63	622
Plastic material. Machine for molding	H. F. Parker	495,228	Apr. 11	1135	{ 283 284 285 }	63	228
Plastic material. Machine for molding oval or other shapes from	M. E. Hunter and J. O. Clark	492,206	Feb. 21	1822	457	62	1145
Plastic material. Making hollow objects from	R. Kieserling and M. Möller	502,196	July 25	2656	{ 671 672 }	64	531
Plastic material. Manufacturing articles of	J. E. West and C. O. Whipple	508,494	Nov. 14	845	209	65	930
Plastic materials. Machine for molding and shaping	J. J. Denbeigh	498,206	May 23	2923	728	63	1189
Plate. Beer.	E. Koch	508,140	Nov. 7	271	67	65	808
Plate supporter or holder. Decorated.	E. E. Brothington	502,548	Aug. 1	508	121	64	660
Plated ware, &c. Manufacture of oval or oblong shells for	W. McAusland	493,108	Mar. 7	526	131	62	1463
Plates for the purpose of utility and ornament. Preparing	H. Goodwin	509,124	Nov. 21	1879	460	65	1142
Platform:							
<i>See</i> Loading-platform. Wood-chopper's platform.							
Unloading-platform.							
Pliers	L. E. Mellen	499,638	June 13	1493	358	63	1666
Pliers	F. C. Neubaus	511,091	Dec. 19	2163	533	65	1839
Pliers	S. O. Root	496,902	May 9	839	223	63	788
Pliers	A. L. Schollborn	500,105	June 20	2243	546	63	1809
Pliers. Hose-band	C. F. Halstead	511,732	Dec. 26	3233	793	65	2048
Pliers, nippers, or similar tool.	C. Eisele	505,217	Sept. 19	1494	389	64	1577
Pliers. Parallel	F. L. Vonhaus and H. Becker	491,231	Feb. 7	278	70	62	801
Pliers. Watchmaker's	H. M. Kulp and C. H. Laird	505,835	Oct. 3	51	14	65	12
Plotter	D. C. Hudson	492,682	Feb. 28	2587	640	62	1312
Plotter	F. C. Stowell	509,335	Nov. 21	2243	542	65	1211
Plow	W. H. Ammons	491,397	Feb. 7	559	141	62	855
Plow	G. Baldwin	504,294	Aug. 29	3377	244	64	1251
Plow	F. Bartels	508,908	Nov. 21	1529	372	65	1074
Plow	J. Blunck	502,697	Aug. 8	767	1-6	64	722
Plow	H. von Bosse	509,509	Nov. 28	2582	624	65	1287
Plow	T. W. Boyle	500,750	July 4	347	92	64	65
Plow	T. E. C. Brinly	494,456	Mar. 28	2744	688	62	1930
Plow	A. M. Chavez	493,246	Mar. 14	744	191	62	1522
Plow	H. O. Cheney	502,877	Aug. 8	1070	264	64	778
Plow	C. W. Clark	490,542	Jan. 24	2491	642	62	547
Plow	E. S. Cook	491,529	Feb. 14	768	195	62	916
Plow	D. B. English	490,276	Jan. 24	2067	{ 540 541 }	62	464
Plow	A. R. Fancher	510,125	Dec. 5	480	109	65	1500
Plow	C. H. Gerrard	493,080	Mar. 7	477	120	62	1453
Plow	J. R. Gladney and J. C. Mayfield	492,263	Feb. 21	1941	4-5	62	1169
Plow	F. A. Graham and A. R. Griffin	511,135	Dec. 19	2241	550	65	1854
Plow	C. Hartzell	492,724	Feb. 28	2651	656	62	1326
Plow	W. T. Hogg	507,271	Oct. 24	2519	621	65	509
Plow	A. F. Jackson	501,945	July 25	2257	{ 563 564 }	64	455
Plow	W. A. Keahey	507,819	Oct. 31	3453	848	65	701
Plow	G. A. Kelly	506,236	Oct. 10	766	189	65	156
Plow	J. P. Kirk	489,015	Jan. 3	56	16	62	15
Plow	E. A. Koch	493,168	Mar. 7	618	155	62	1460
Plow	T. H. Lancaster	501,011	July 4	749	196	64	136
Plow	J. E. and E. M. Mitchell	506,710	Oct. 17	1548	387	65	320
Plow	J. L. Pearson	507,282	Oct. 24	2538	625	65	512
Plow	N. B. Pumphrey	491,904	Feb. 14	1358	338	62	1035
Plow	T. J. and W. Rawls	496,538	May 2	234	62	63	661

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Plow	R. G. Rivero	495,837	Apr. 18	2114	532	63	423
Plow	F. B. Rowland	491,137	Feb. 7	115	31	62	770
Plow	N. C. Sample	500,513	June 27	2924	718	63	1942
Plow	H. G. Schmitt	491,599	Feb. 14	893	224	62	941
Plow	A. S. Seeley	500,691	July 4	253	68	64	48
Plow	J. W. Smith	500,244	June 27	2505	612	63	1868
Plow	G. W. Stow	505,732	Sept. 26	2396	505	64	1759
Plow	H. Symmank and E. Matthijez	507,854	Oct. 31	3514	864	65	710
Plow	W. M. Taylor	507,509	Oct. 24	2916	717	65	586
Plow	W. B. Wherry	498,095	May 23	2744	685	63	1158
Plow. Adjustable double	J. B. Darby	491,675	Feb. 14	1000	252	62	964
Plow and cultivator. Combined gang	M. A., W. C., and R. L. Randolph	498,697	May 30	3753	926	63	1351
Plow and harrow. Combined	G. W. Lee	495,895	Apr. 18	2204	555	63	440
Plow and harrow. Combined	E. D. Moser	492,043	Feb. 21	1572	391	62	1092
Plow and planter. Lister	L. Roadhouse	489,037	Jan. 3	88	24, 25	62	22
Plow and pulverizer. Rotary	G. F. Whitmore	502,214	July 25	2685	678	64	536
Plow and seeder. Combined	K. Reichwein	509,946	Dec. 5	164	38	65	1140
Plow attachment	G. I. Bjorneby	507,475	Oct. 24	2-51	699	65	574
Plow attachment	J. M. Chadwick	491,009	Jan. 31	3261	833	62	712
Plow attachment	E. H. Maloon and M. E. Blake	494,212	Mar. 28	2358	597	62	1860
Plow attachment	A. J. Petch	499,577	June 13	1400	334	63	1649
Plow attachment	L. E. Pridgen	508,119	Nov. 7	234	60	65	802
Plow attachment	W. W. Speer	495,916	Apr. 18	2236	563	63	446
Plow. Bedding	M. T. Hancock	506,429	Oct. 10	1107	274	65	223
Plow. Black-land	W. B. Vestal	494,309	Mar. 23	2505	632	62	1887
Plow-cleaner	F. Wolke	490,420	Jan. 24	2295	596	62	508
Plow. Combination heel-sweep	J. R. Dean	492,462	Feb. 28	2230	558	62	1240
Plow compensating lever	H. Lindeström	489,426	Jan. 10	786	207 208	62	181
Plow-coupling	J. Johnson	507,909	Oct. 31	3595	887	65	725
Plow. Cultivator gang	A. S. Seeley	506,556	Oct. 10	1310	327 328	65	262
Plow. Ditching	J. J. Larimer	507,913	Oct. 31	3603	889	65	727
Plow draft apparatus. Corn	E. B. Parker	502,751	Aug. 8	864	211	64	740
Plow. Electric	C. H. Roberts	509,556	Nov. 28	2651	641 642	65	1300
Plow-fender	M. L. Adams	493,236	Mar. 14	727	187	62	1519
Plow-fender	A. M. Ellington	489,941	Jan. 17	1494	390	62	338
Plow. Gang	A. J. and A. C. D. Andresen	503,515	Aug. 15	2110	529	64	979
Plow. Gang	J. S. Butler	498,741	May 30	3848	949	63	1368
Plow. Gang	N. J. Johnson	510,871	Dec. 12	1798	442 443	65	1758
Plow. Gang	A. F. McMillan and T. Gormley	490,210	Jan. 17	1947	510 511	62	428
Plow. Gang or cultivator	J. T. Lucas	500,405	June 27	2757	679	63	1912
Plow. Gang or sulky	W. J. Browne	501,180	July 11	1036	262	64	203
Plow. Garden-hoe	C. C. Stockard, Sr.	492,120	Feb. 21	1685	420	62	1115
Plow heel-sweep	H. D. Terrell	504,375	Sept. 5	103	26	64	1290
Plow. Hill	J. F. Grieve	507,614	Oct. 31	3120	763	65	638
Plow knife attachment	E. Murphy	511,636	Dec. 26	3084	753	65	2021
Plow marking attachment	G. W. Freeman	502,712	Aug. 8	812	196	64	729
Plow or cultivator tooth	W. M. Hewitt	494,420	Mar. 28	2689	675	62	1921
Plow or cultivator tooth	W. B. Lee	505,425	Sept. 19	1839	473	64	1642
Plow. Orchard	C. W. Winston and F. Throop	491,033	Jan. 31	3310	844 845	62	723
Plow-point	C. H. and F. G. Heimlich	504,727	Sept. 12	674	172	64	1410
Plow-point	E. C. Westervelt	489,401	Jan. 3	637	173	62	137
Plow. Reversible	M. Myers	492,821	Mar. 7	78	18	62	1373
Plow. Reversible	A. Pirch	499,853	June 20	1859	451 452	63	1742
Plow. Riding	D. Thom	502,106	July 25	2512	630	64	502
Plow. Rotary	M. T. Hancock	504,779	Sept. 12	778	196 197	64	1429
Plow. Rotary	M. T. Hancock	506,815	Oct. 17	1731	435	65	354
Plow. Rotary	M. T. Hancock, E. C. Atkins, and N. H. Roberts	496,119	Apr. 25	2539	641	63	518
Plow. Rotary	N. H. Roberts	506,443	Oct. 10	1128	281	65	228
Plow. Rotary-disk	L. D. Railsback	505,777	Sept. 26	2468	622	64	1773
Plow. Rotary-disk	L. D. Railsback	510,992	Dec. 19	2014	497 498	65	1810
Plow. Scraper	A. J. Burr	511,583	Dec. 26	2991	729	65	2006
Plow-sharpening tool	E. Nelson	502,747	Aug. 8	860	210	64	739
Plow-shield	A. Campbell	489,145	Jan. 3	250	69	62	58
Plow-shovel	J. F. Shultz	493,389	Mar. 14	974	251	62	1566
Plow. Side-hill	H. L. Cumming	496,398	May 2	16	4	63	622
Plow. Side-hill	W. S. Stone and G. W. Ream	507,693	Oct. 31	3246	795	65	661
Plow-standard	M. J. McBurnett	496,946	May 9	910	238	63	802
Plow-standard	H. J. and J. F. Washburn	491,621	Feb. 14	924	232	62	948
Plow-standard. Steel	C. H. Deere	506,420	Oct. 10	1087	270	65	220
Plow subsoil attachment	G. Moore	499,888	June 20	1919	466	63	1753
Plow. Sulky	C. Anderson	499,868	June 20	1882	457 458	63	1746
Plow. Sulky	S. E. Calif	508,811	Nov. 14	1326	320	65	1023
Plow. Sulky	W. H. Holsclaw	501,787	July 18	2008	495	64	395
Plow. Sulky	N. P. Lehr and J. H. Wolfe	494,530	Mar. 28	2871	718	62	1953
Plow. Sulky	S. D. Poole and B. Cross	510,363	Dec. 5	851	205	65	1572
Plow. Sulky	P. Ries	498,030	May 23	2648	662	63	1141
Plow. Sulky	H. H. Sater	501,607	July 18	1707	425	64	343
Plow. Sulky	G. R. Shelhamer	508,992	Nov. 21	1653	407	65	1100
Plow. Sulky	S. H. Shipman	511,168	Dec. 19	2289	560	65	1863
Plow. Sulky	S. H. Tinsman	496,458	May 2	111	30	63	639
Plow. Sulky	C. E. Tower	510,733	Dec. 12	1510	373 374	65	1707
Plow. Sulky	J. Willmann	500,090	June 20	2218	541	63	1805

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Plow. Sulky gang.	W. J. Browne.	501,179	July 11	1035	262	64	203
Plow. Sulky or riding.	N. Swager. (Reissue)	11,361	Aug. 15	2205	551	64	997
Plow sweep and shovel.	J. W. Ball	490,798	Jan. 31	2919	750	62	645
Plow. Turning shovel.	J. A. Urquhart	507,668	Oct. 31	3214	786	65	654
Plow. Wheel.	W. L. Casaday	498,704	May 30	3768	929 930	63	1353
Plow. Wheel.	A. Dalke and G. Wiens	495,312	Apr. 11	1274	318	63	254
Plow. Wheel.	H. Lindstrom	504,531	Sept. 5	368	93	64	1338
Plows. Propelling attachment for garden.	S. F. Crull	504,712	Sept. 12	655	166	64	1406
Plug or stopper for lavatory apparatus.	J. W. Hale	492,012	Feb. 21	1528	381	62	1083
Plumber's hook.	G. Reznor	501,439	July 11	1446	362	64	272
Plumber's hook.	G. Reznor	501,484	July 11	1511	380	64	291
Plumber's portable furnace.	F. C. and G. E. Loeble	500,239	June 27	2498	611	63	1867
Plumber's trap.	N. Barry, Jr.	492,260	Feb. 21	1909	477	62	1163
Plumber's trap.	J. Hartford	496,975	May 9	945	248	63	808
Plumber's tool.	C. E. Eckel	510,682	Dec. 12	1433	354	65	1693
Plumbing purposes. Air-inlet for	L. Shuster, Jr.	503,509	Aug. 22	2594	648	64	1086
Plunger for creasing or creasing and folding machines.	J. and E. R. Corbett	497,949	May 23	2522	629	63	1118
Push-shearing machine.	J. Pearson, W. Stead, and W. J. Monk.	496,532	May 2	218	57, 58	63	658
Pneumatic alarm.	S. P. Hasey.	493,712	Mar. 21	1506	385	62	1668
Pneumatic conveyer.	W. E. Vernon	489,348	Jan. 3	562	152	62	121
Pneumatic dispatch apparatus.	S. E. Hughes	504,164	Aug. 29	3159	789	64	1209
Pneumatic dispatch or transit system.	H. Clay	489,931	Jan. 17	1466	383 384 385	62	333
Pneumatic dispatch or transit system.	H. Clay.	489,932	Jan. 17	1475	385 386	62	335
Pneumatic dispatch-tube.	W. G. Collins.	510,470	Dec. 12	1043	250	65	1622
Pneumatic dispatch-tube.	N. D. Wells.	497,845	May 23	2349	589	63	1088
Pneumatic elevator.	G. Miles	494,217	Mar. 28	2365	598	62	1861
Pneumatic power apparatus.	S. G. Mills	489,193	Jan. 3	326	89	62	74
Pneumatic press.	A. Bornholdt	489,409	Jan. 3	645	175	62	139
Pneumatic regulating device.	A. Barker	491,794	Feb. 14	1190	295	62	1001
Pneumatic signal.	G. V. Steeb	508,252	Nov. 7	450	110	65	841
Pneumatic-tired wheel.	L. Holt	509,902	Dec. 5	101	23	65	1429
Pneumatic tool.	E. W. R. von Bühler	510,155	Dec. 5	528	122	65	1510
Pneumatic tool.	J. G. Carlinet.	498,742	May 30	3850	949	63	1368
Pneumatic tool.	D. Drawbaugh	504,802	Sept. 12	813	207	64	1436
Pneumatic tool.	D. Drawbaugh	504,803	Sept. 12	816	207	64	1436
Pneumatic ventilator.	W. R. Macdonald.	509,231	Nov. 21	2065	498	65	1178
Pneumatic wheel.	R. Perkins	509,940	Dec. 5	156	36	65	1438
Pocket-book.	J. Frontezak	505,040	Sept. 12	1206	311	64	1512
Pocket-book.	J. S. Huey	500,901	July 4	577	150	64	105
Pocket-book.	V. Le Brun.	510,072	Dec. 5	391	86	65	1483
Pocket-book.	I. Scheuer	502,143	July 25	2569	644	64	513
Pocket-book closure or cover.	O. A. Lehman	489,710	Jan. 10	1112	287	62	246
Pocket-book fastening.	J. E. Orthman	492,521	Feb. 28	2333	579	62	1260
Pocket-book frame.	L. Messer	490,154	Jan. 17	1852	483	62	410
Pocket-book frame.	C. G. Pfingsten	502,137	July 25	2556	640	64	511
Pocket-book or case.	H. Meyer	504,884	Sept. 12	946	244	64	1462
Pocket-book protector.	J. A. S. Bohlin	492,911	Mar. 7	226	56	62	1403
Pocket-books, &c. Frame for	S. Rosenzweig	509,688	Nov. 28	2857	690	65	1340
Pocket-books, &c. Frame for	A. W. Scheuber	507,457	Oct. 24	2824	691	65	569
Pocket-box.	J. I. Covington	494,249	Mar. 28	2414	609	62	1869
Pocket-case and making the same	R. D. Knight	489,125	Jan. 3	222	60	62	51
Pocket. Garment.	H. Mason	501,229	July 11	1109	281	64	217
Pocket-guard.	C. Thibodeau	496,709	May 2	502	134	63	711
Pocket-knife.	C. C. Balston	492,620	Feb. 28	2494	619	62	1294
Pocket-knife.	H. M. Brigham	492,084	Feb. 21	1629	404	62	1104
Pocket-knife.	J. C. Larson	509,228	Nov. 21	2059	497	65	1177
Pocket-knife.	G. F. Lundquist	510,038	Dec. 5	335	75	65	1472
Pocket-knife.	H. Schickler	498,697	May 23	2443	610	63	1106
Pocket-knife.	V. Slater	499,047	June 6	532	125	63	1484
Pocket or bag. Hanging	I. A. Margesson	508,893	Nov. 14	1454	360 361	65	1046
Pocket. Safety.	H. C. Diefenbach	497,638	May 16	2020	503	63	1013
Pocket. Safety watch.	H. J. Martin	495,820	Apr. 18	2083	525	63	417
Pocket. Ticket and change.	M. Ralph	505,001	Sept. 12	1144	293	64	1500
Pocket. Trousers.	B. Bissinger	503,363	Aug. 15	1888	468	64	939
Poison-feeding device.	M. Kelly	503,268	Aug. 15	1720	424	64	910
Poke. Animal.	J. E. Brown	494,754	Apr. 4	361	91	63	71
Poke. Animal.	A. W. McWilliams	506,603	Oct. 10	1375	345	65	276
Pole. Adjustable carriage.	N. L. Holmes	496,609	May 2	339	92, 93	63	681
Pole and shaft. Combined.	O. O. Ness and P. J. Setbacken.	495,995	Apr. 25	2346	593	63	482
Pole attachment for various implements.	E. A. Ovenshire	496,892	May 9	823	218	63	786
Pole. Carriage.	W. D. Rumsey	500,218	June 27	2470	602	63	1862
Pole. Carriage.	J. Shand	498,581	May 30	3547	879	63	1315
Pole changer. Electric.	C. E. Kells, Jr.	502,300	Aug. 1	75	17	64	580
Pole coupling. Vehicle.	A. J. Taylor	499,404	June 13	1115	268	63	1599
Pole or shaft support for vehicles.	J. J. Randolph	489,614	Jan. 10	978	254	62	218
Pole or thill coupling.	P. Weidner	489,579	Jan. 10	928	240	62	208
Pole-splitting machine.	D. Murray and A. Robbins.	497,333	May 16	1541	388	63	922
Pole-strap coupler.	G. D. Hayes	499,225	June 13	799	190	63	1544
Pole switch. Double.	C. W. Gartside and R. E. Wood	504,523	Sept. 5	353	90	64	1335
Pole switch. Double.	C. A. Pfinger	500,423	June 27	2783	686	63	1917
Pole switch. Two.	C. Hoffmann	502,519	Aug. 1	456	110	64	650
Pole-tip.	J. O. Hebert	498,548	May 30	3504	866	63	1308
Pole tip. Vehicle.	L. P. Gorrow	490,805	Jan. 31	2928	752	62	647
Pole tip. Vehicle.	T. J. Houghton	510,022	Dec. 5	312	70	65	1468
Pole. Vehicle.	J. Drader	505,820	Oct. 3	29	8	65	9
Pole. Vehicle.	H. L. Kingsley	503,605	Aug. 22	2284	570	64	1026
Pole. Vehicle.	J. H. Osborne	500,602	July 4	97	28	64	20
Pole. Vehicle.	W. L. Pike	497,387	May 16	1623	410	63	943

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Pole. Vehicle.....	F. G. Rohn.....	501,255	July 11	1152	292	64	224
Pole. Vehicle.....	G. W. Smith.....	505,964	Oct. 3	254	68	65	50
Poles. Neck-yoke connection for vehicle.....	C. E. Frizzell.....	503,657	Aug. 22	2362	589	64	1040
Police and fire alarm system.....	J. B. Gill.....	509,524	Nov. 28	2603	629 630	65	1291
Police-patrol system.....	J. H. Ring.....	494,596	Apr. 4	114	27	63	24
Police-man's club.....	A. W. Nelson.....	503,977	Aug. 29	2860	717	64	1154
Polishing and grinding machine.....	H. Geisenhöner.....	492,768	Feb. 28	2724	678	62	1340
Polishing-tools. Feeding-up machine for.....	L. W. Kimble.....	504,593	Sept. 5	460	117	64	1355
Polishing-wheel.....	M. Swenson.....	497,063	May 9	1086	279	63	833
Polycycle.....	E. T. Noonan and J. V. Schmill.....	498,484	May 30	3380	842	63	1287
Pool-ball.....	G. H. Burt.....	507,880	Oct. 31	3550	874	65	718
Pool-table rack and tally.....	G. F. Goss.....	507,900	Oct. 31	3580	883	65	723
Pool-triangle register.....	C. F. Brown.....	509,424	Nov. 28	2413	584	65	1253
Popping or bursting barley, &c. Process of and apparatus for.....	J. White.....	508,125	Nov. 7	241	61	65	803
Portable boat.....	C. W. King.....	507,439	Oct. 24	2801	685 686	65	565
Portable drill.....	J. G. Timolat and C. Jacobson.....	506,954	Oct. 17	1956	484 485	65	396
Portable furnace.....	R. Reach.....	503,494	Aug. 15	2079	519	64	974
Portable gate.....	J. Losey.....	490,077	Jan. 17	1723	449 450	62	384
Portable house.....	C. F. Hodsdon.....	507,680	Oct. 31	3327	790	65	657
Portable nesting boat.....	J. M. Clark and C. W. Hamilton.....	494,288	Mar. 28	2478	625	62	1881
Portfolio.....	C. M. Carnahan.....	499,906	June 20	1946	472	63	1758
Portière. Rope.....	B. Dreyfus.....	510,590	Dec. 12	1272	309	65	1662
Position-finder.....	B. A. Fiske.....	510,418	Dec. 12	952	229 230	65	1605
Post: See Bridge-post. Lamp-post. Fence-post. Metallic post. Gate-post.							
Post.....	J. W. Carver.....	493,068	Mar. 7	460	116	62	1450
Post-base.....	R. E. Poindexter.....	503,804	Aug. 22	2586	645	64	1084
Post-driver.....	S. G. Harris.....	495,800	Apr. 13	2054	520	63	412
Post-driver.....	J. H. Hogg.....	502,075	July 25	2461	618	64	493
Post-driver.....	T. S. Wagoner.....	500,170	June 27	2392	580	63	1848
Post-hole digger.....	R. Budd.....	499,962	June 20	2021	490	63	1771
Post-hole digger.....	L. Gibbs.....	493,700	Mar. 21	1490	381	62	1680
Post-hole digger.....	H. Paulson.....	509,487	Nov. 28	2544	614	65	1280
Post-hole digger.....	J. H. Sublett.....	509,778	Nov. 28	3004	726	65	1368
Post-hole digger.....	J. Tipton.....	493,536	Mar. 14	1213	310	62	1609
Post-office box.....	H. A. Sheldon.....	510,199	Dec. 5	600	140	65	1523
Post-office lock-box.....	F. R. Ridell.....	491,495	Feb. 7	706	179	62	884
Post-support.....	N. Hansen.....	490,651	Jan. 31	2686	692	62	600
Postal-note.....	E. A. Curley.....	508,601	Nov. 14	1024	252 253	65	964
Pot: See Coffee-pot. Paint-pot. Coffee or tea pot. Tea-pot. Flower-pot. Tea or coffee pot. Glue-pot.							
Pot for molten metal.....	C. Bush.....	503,783	Aug. 22	2561	638	64	1079
Potassium chlorate. Electrolytically producing.....	E. B. Cutten.....	491,701	Feb. 14	1044		62	974
Potato-chopper.....	C. F. Compton.....	493,684	Mar. 21	1470	374	62	1676
Potato-cutter.....	L. A. Aspinwall.....	499,002	June 6	455	107	63	1471
Potato-cutter.....	I. and W. B. Dunn, Jr.....	499,101	June 6	605	145	63	1496
Potato cutter and planter.....	J. J. Simon.....	492,243	Feb. 21	1883	471	62	1157
Potato cutter. Seed.....	J. Colgrove.....	505,095	Sept. 19	1306	336 337	64	1544
Potato-digger.....	B. Blanchard.....	508,201	Nov. 7	367	90	65	826
Potato-digger.....	A. B. Bryant.....	491,981	Feb. 21	1476	367	62	1073
Potato-digger.....	W. Danby.....	497,069	May 9	1092	280 281	63	834
Potato-digger.....	O. L. Goss.....	504,128	Aug. 29	3099	776	64	1198
Potato-digger.....	E. A. Hoffmann.....	42,016	Feb. 21	1533	382	62	1084
Potato-digger.....	J. A. Hogg and H. G. Green.....	489,650	Jan. 10	1021	266	62	228
Potato-digger.....	L. W. Hugelmeyer.....	509,378	Nov. 28	2322	562	65	1237
Potato-digger.....	G. H. Kidney.....	510,070	Dec. 5	387	85, 86	65	1482
Potato-digger.....	H. Krebs.....	492,332	Feb. 21	2014	501 502	62	1184
Potato-digger.....	D. J. McDougall.....	509,760	Nov. 28	2969	719	65	1361
Potato-digger.....	W. and T. Menzie.....	511,348	Dec. 26	2604	633	65	1934
Potato-digger.....	E. and W. Mercer.....	498,885	June 6	242	56	63	1435
Potato-digger.....	T. N. Nicholson.....	494,684	Apr. 4	242	61, 62	63	49
Potato-digger.....	A. Olmsted.....	498,522	May 30	3452	856	63	1299
Potato-digger.....	J. D. Perry.....	506,069	Oct. 3	419	110	65	81
Potato-digger.....	G. M. D. Pomeroy and G. H. Webber.....	490,924	Jan. 31	3122	801	62	666
Potato-digger.....	H. Pray.....	502,998	Aug. 8	1284	314	64	816
Potato-digger.....	D. J. Roush.....	511,550	Dec. 26	2935	715	65	1995
Potato-digger.....	L. S. Strepey.....	494,533	Mar. 28	2874	719	62	1954
Potato-digger.....	I. H. Van Horn and W. Neel.....	497,148	May 9	1215	310	63	855
Potato digger and loader.....	L. Desmarais.....	507,087	Oct. 17	2170	538	65	434
Potato-digging machine.....	E. Paulus.....	505,954	Oct. 3	233	61, 62	65	46
Potato-digging machine.....	G. Wragg.....	508,460	Nov. 14	780	192	65	917
Potato separating and grading machine.....	A. J. McDonough.....	495,945	Apr. 18	2272	572 573	63	453
Potential-indicator.....	G. A. Lintner.....	495,225	Apr. 11	1129	281 282	63	227
Potential-indicator.....	G. A. Lintner.....	509,578	Nov. 28	2688	650	65	1307
Pottery-kiln.....	C. F. Wohlschlegel.....	510,223	Dec. 5	646	152 153	65	1532
Pottery-kiln furnace.....	L. Lawton.....	491,569	Feb. 14	835	212	62	931

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Pottery. Molding	J. Schellhorn	499,148	June 6	677	162	63	1508
Pottery-ware. Treating clay for	W. M. Brewer	491,074	Feb. 7	19		62	752
Pouncing-roll	B. G. Berrien, Jr.	499,703	June 20	1592	{ 384 385 }	63	1697
Powder:							
See Smokeless powder.							
Powder and fuse warmer	A. Price	510,160	Dec. 19	2277	558	65	1861
Powder-box. Automatic	I. H. Twining	511,565	Dec. 26	2960	721	65	2000
Powder cap. Self-fastening giant	A. B. Rhude	501,440	July 11	1447	363	64	278
Powder-duster	D. O. Tuttle	506,889	Oct. 17	1856	462	65	376
Power:							
See Baling-press power. Motive power.							
Churn-power. Ocean-power.							
Crank-power. Pump-power.							
Horse-power. Tread-power.							
Mechanical power.							
Power-applying mechanism	G. W. and M. G. Gillette	500,710	July 4	286	77	64	53
Power-converting machine	H. R. Gratiot	507,583	Oct. 31	3069	751	65	627
Power driving mechanism	T. F. Gaffney	500,484	June 27	2869	{ 706 707 }	63	1932
Power. Electrical transmission of	C. S. Bradley	491,465	Feb. 7	667	{ 167 168 }	62	876
Power. Electrical transmission of	N. Tesla	511,559	Dec. 26	2949	718	65	1998
Power from river-currents. Apparatus for obtaining motive	A. A. Raubold	500,947	July 4	635	167	64	116
Power from the sun. Apparatus for obtaining continuous	M. L. Severy	495,163	Apr. 11	1036	{ 258 259 }	63	210
Power. System of electrical transmission of	C. J. Van Depoele	507,945	Oct. 31	3657	905	65	737
Power transmission	A. L. Ide	500,579	July 4	64	18, 19	64	13
Power. Transmission of	T. A. Edison	493,858	Mar. 21	1750	446	62	1731
Power transmission. System of electrical	N. Tesla	511,560	Dec. 26	2950	{ 718 719 }	65	1998
Power-transmitter	A. V. Abercrombie and W. A. Mack	508,075	Nov. 7	156	44	65	787
Power-transmitter	R. Hahnel	494,331	Mar. 28	2518	{ 641 642 }	62	1895
Power-transmitting and speed-regulating mechanism.	W. Cooper and G. P. Hampton	511,289	Dec. 19	2496	609	65	1901
Power transmitting and stopping device	J. H. Ward	493,457	Mar. 14	1084	278	62	1586
Power-transmitting device	E. Prouty	491,759	Feb. 14	1129	{ 284 285 }	62	990
Power-transmitting mechanism	A. A. Fisher and W. G. Nelson	511,415	Dec. 26	2727	660	65	1956
Power-transmitting mechanism	J. C. Henry	500,069	June 20	2191	534	63	1801
Precious-metal-bearing slimes. Treating	D. K. Tuttle and C. Whitehead	509,633	Nov. 28	2769		65	1323
Precious metal from ore. Composition of matter for the extraction of	E. D. Kendall	500,137	June 27	2334		63	1838
Precious metals from ores. Separating	F. W. Cleghorn	497,014	May 9	1012	259	63	819
Precious metals from their ores. Method of and apparatus for extracting	F. Webb	495,385	Apr. 11	1388	346	63	274
Precious metals from their ores. Process of and solvent for separating	W. A. G. Birkin	494,054	Mar. 21	2081		62	1793
Precious metals. Recovering	W. P. Miller	492,040	Feb. 21	1567	390	62	1091
Precious stones. Apparatus for cutting and polishing	E. Passmore	510,817	Dec. 12	1660	412	65	1735
Precious stones. Device for polishing	I. Grasset	494,715	Apr. 4	297	75	63	60
Precipitating apparatus	J. Davis	497,169	May 9	1246	317	63	861
Prescription-case	J. Lamb	489,652	Jan. 10	1025	267	62	228
Prescription-glass	J. O. Adsit	493,851	Mar. 21	1740	442	62	1729
Preservative drier	T. G. Hojer	501,227	July 11	1107		64	217
Preserving apparatus. Fruit	H. I. Blits	507,778	Oct. 31	3385	825	65	687
Preserving can	G. P. Herndon	499,734	June 20	1649	397	63	1706
Preserving clam extracts	G. W. Scollay	511,551	Dec. 26	2935		65	1995
Preserving compound. Food	A. J. Greiner	504,724	Sept. 12	671		64	1409
Preserving farinaceous products	L. Fromm	496,780	May 2	618		63	730
Preserving food	J. A. Trillat	507,084	Oct. 17	2165		65	433
Preserving foods. Apparatus for	A. Baker	489,916	Jan. 17	1436	{ 377 378 }	62	327
Preserving fruits or vegetables	M. B. Wever	500,450	June 27	2825		63	1925
Preserving perishable articles. Vessel for	W. B. Frantz	494,099	Mar. 21	2158	551	62	1807
Preserving provisions on ice. Pot for	E. Feuerherd	509,572	Nov. 28	2680	648	65	1306
Press:							
See Bale-press. Hand-press.							
Baling-press. Hay-press.							
Barrel-heading press. Hay or cotton press.							
Bending press. Hydraulic press.							
Bookbinding-press. Letter-press.							
Brick-press. Meat-press.							
Cheese-press. Mold-press.							
Cigar-press. Mosaic and tile press.							
Clothes-press. Paper-press.							
Copying-press. Pneumatic press.							
Cotton-press. Printing-press.							
Drawing or stamping press. Printing-plate-bending press.							
Drill-press. Seal-press.							
Embossing and printing press. Sheet metal press.							
Fruit-press. Soap-press.							
Glue-press. Stamping-press.							
Grain-press. Tobacco-press.							
	Wheel-press.						
Press	J. A. Deiss	499,416	June 13	1141	273	63	1604
Press	C. C. Lockstaedt	502,523	Aug. 1	466	112	64	652
Press-board and support for same	E. J. Richardson	498,083	May 23	2726	681	63	1154
Press drill	J. L. Ashurst	492,255	Feb. 21	1902	475	62	1161
Press for expressing moisture	P. H. Grimm	500,490	June 27	2880	708	63	1934
Press for pressing cheese, &c.	H. Kempkens	489,151	Jan. 3	258	71	62	60

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Press for removable lids or followers for receptacles, &c.	B. Goldenberger, Sr	508,304	Nov. 7	533	131	65	856
Press-operating mechanism. Automatic locking device for	W. Krutzsch	503,090	Aug. 8	1418	350	64	842
Presses. Attachment for cylinder	F. W. Wicht	501,752	July 18	1947	482	64	384
Pressing garments. Machine for	W. Choen	501,327	July 11	1264	317	64	242
Pressing hosiery, &c. Machine for	A. Murray	508,333	Nov. 7	575	141	65	865
Pressure brake. Fluid	R. W. Bayley	493,904	Mar. 21	1818	462	62	1744
Pressure brake. Fluid	J. T. Hayden	496,200	Apr. 25	2654	667	63	540
Pressure brake. Fluid	A. H. Moyes	507,447	Oct. 24	2810	688	65	567
Pressure brake mechanism. Automatic fluid	J. A. Hoff	495,088	Apr. 11	884	224	63	185
Pressure brake mechanism. Fluid	C. Schlarred	509,330	Nov. 21	2231	539	65	1209
Pressure devices. Apparatus for operating fluid	T. J. Hogan	499,735	June 20	1651	397	63	1707
Pressure engine. Fluid	R. A. Parke	508,525	Nov. 14	904	222	65	941
Pressure-gage	R. Kohlhepp	494,678	Apr. 4	235	59	63	48
Pressure-gage	H. Rauser, C. Wieber, and A. Sokoloff	507,387	Oct. 24	2714	667	65	548
Pressure generator. Fluid	J. H. Nolan	495,140	Apr. 11	998	250	63	203
Pressure-indicator	M. Greene	505,652	Sept. 26	2261	572	64	1735
Pressure-regulator	J. Acton	497,295	May 16	1480	373	63	917
Pressure-regulator	N. Curtis	500,994	July 4	723	190	64	132
Pressure-regulator	E. E. Gold	508,133	Nov. 7	255	63	65	805
Pressure-regulator	E. E. Gold	508,135	Nov. 7	261	64	65	806
Pressure-regulator	J. G. W. Hartmann	500,126	June 27	2312	559	63	1834
Pressure-regulator	A. N. Lucas, B. Zindel, and M. S. Schmit	500,145	June 27	2345	567	63	1840
Pressure-regulator	C. R. Ord	492,100	Feb. 21	1651	411	62	1109
Pressure-regulator	J. Rothchild	505,850	Oct. 3	71	18	65	16
Pressure-regulator	J. Schneible	492,111	Feb. 21	1671	416	62	1112
Pressure-regulator	E. Unger and P. F. Krug	498,996	June 6	443	104	63	1469
Pressure-regulator	E. Webb	504,507	Sept. 5	327	84	64	1331
Pressure regulator and cut-off. Fluid	F. E. Youngs	501,814	July 18	2045	504	64	401
Pressure regulator. Fluid	T. R. Bell	489,176	Jan. 3	292	81	62	67
Pressure regulator. Fluid	H. Brier	489,646	Jan. 10	1016	264	62	227
Pressure regulator. Fluid	E. Evans	504,973	Sept. 12	1098	280	64	1491
Pressure regulator or governor	R. B. Lincoln	498,014	May 23	2623	656	63	1137
Pressure-regulator. Thermostatic	O. Gasset	510,017	Dec. 5	303	*68	65	1467
Prime mover	W. M. Jewell	494,782	Apr. 4	410	102	63	80
Printed matter for the blind. Producing	T. C. Orndorff	506,718	Oct. 17	1568	392	65	324
Printed sheets. Associating and folding	W. Scott	498,033	May 23	2653	663	63	1142
Printer and indicator. Automatic time	J. C. Hinchman	496,310	Apr. 25	2836	708	63	574
Printer and recorder. Check	W. W. and W. H. Wythe	491,626	Feb. 14	928	233	62	949
Printer's cabinet	G. M. Williams	489,665	Jan. 10	1041	271	62	232
Printer's case-stand	L. L. Lomer	508,143	Nov. 7	274	68	65	808
Printer's chase	H. S. Foster	506,992	Oct. 17	2015	498	65	407
Printer's chase	J. W. Osborne	503,251	Aug. 15	1692	417	64	904
Printers' chases. Lock-up for	F. Wesel	493,848	Mar. 21	1735	442	62	1728
Printers' chases. Making	O. W. Slocum	508,250	Nov. 7	448	110	65	841
Printer's drying-rack	H. T. Koerner	504,985	Sept. 12	1124	288	64	1496
Printer's furniture	J. C. Wolfe	508,263	Nov. 7	473	114	65	845
Printer's galley	D. R. Enright	499,912	June 20	1953	474	63	1760
Printer's galley	W. T. Near and D. J. Deegan	494,644	Apr. 4	182	46	63	37
Printer's galley	E. L. Shattuck	489,572	Jan. 10	918	239	62	207
Printer's lock-up	C. Jesinghaus	498,935	June 6	328	77	63	1450
Printer's quoin	W. Wickersham	496,547	May 2	244	64	63	663
Printer's rule and lead cutter	A. W. Preece	509,764	Nov. 28	2976	720	65	1362
Printer's-roller cabinet	S. H. Bradbury	497,855	May 23	2364	592	63	1091
Printing	C. B. Woodward	493,850	Mar. 21	1737	442	62	1728
Printing and folding mechanism	L. C. Crowell	509,877	Dec. 5	46	10	65	1419
Printing aniline-black	J. Bracewell	500,558	July 4	34	11	64	8
Printing apparatus. Ticket	A. R. Abbott	490,939	Jan. 31	3145	807	62	690
Printing attachment for envelope-machines	H. L. Newell	510,043	Dec. 5	341	77	65	1474
Printing attachment. Paper-roll	J. M. Frey	494,675	Apr. 4	231	57, 58	63	47
Printing block or roller	F. Beck	490,061	Jan. 17	1699	443	62	378
Printing carpet-yarns. Apparatus for	W. Shaw	510,939	Dec. 19	1913	468	65	1793
Printing colors with aniline-black	W. Browning	491,673	Feb. 14	997	469	62	964
Printing colors with aniline-black	G. Donald	491,961	Feb. 14	1444	.....	62	1053
Printing colors with aniline-black	F. P. Pearson	491,951	Feb. 14	1430	.....	62	1050
Printing cotton fabrics	O. Osterseizer	501,156	July 11	1006	.....	64	197
Printing device. Chromatic	T. J. Tarley	500,784	July 4	400	106	64	74
Printing device. Chromatic	T. J. Tarley	500,785	July 4	402	106	64	74
Printing device. Color	W. J. Smith	496,914	May 9	865	228	63	794
Printing folded fabrics, &c. Mechanism for	R. J. Linton	500,770	July 4	380	98, 99	64	71
Printing-machine	A. C. North	489,981	Jan. 17	1554	406	62	350
Printing-machine	W. Scott	505,961	Oct. 3	242	65, 66	65	48
Printing-machine	W. Scott	507,753	Oct. 31	3340	818	65	678
Printing-machine	W. Scott	510,193	Dec. 5	588	137	65	1521
Printing-machine	W. Scott	511,095	Dec. 19	2167	534	65	1840
Printing-machine	W. M. D. Turton	508,535	Nov. 14	919	225	65	944

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Printing-machine. Bed and cylinder	S. W. Brainerd, L. C. and T. E. Mann.	498,530	May 30	3465	{ 858 859 116	63	1301
Printing-machine. Bed and cylinder	J. Brooks	491,334	Feb. 7	453	{ 117 118	62	834
Printing-machine. Bed and platen	O. S. Bowman	501,319	July 11	1243	313	64	240
Printing machine. Box	G. Z. Lower	495,420	Apr. 11	1436	{ 362 363	63	283
Printing machine. Card	J. B. Dennis	503,833	Aug. 22	2623	{ 656 657	64	1091
Printing machine. Chromatic	T. J. Turley	508,067	Nov. 7	135	38	65	784
Printing-machine. Cylinder	J. Brooks	489,431	Jan. 3	684	184	62	147
Printing-machine gripper-operating mechanism	W. Scott	508,053	Nov. 7	107	31	65	779
Printing-machine folding and staple-binding delivery mechanism	L. C. Crowell	510,840	Dec. 12	1694	{ 421 422	65	1741
Printing-machine ink-roller supporting device	J. M. Fairfield	491,046	Jan. 31	3331	849	62	727
Printing-machine inking device	O. Riese and H. Pohl	495,142	Apr. 11	1003	250	63	204
Printing-machine inking mechanism	L. C. Crowell	492,759	Feb. 28	2702	671	62	1335
Printing machine. Label	N. M. P. Close	498,843	June 6	164	39, 40	63	1421
Printing machine. Multicolor	W. Scott	490,456	Jan. 24	2344	607	62	518
Printing-machine offset mechanism	W. H. K. Toye	503,391	Aug. 15	1926	478	64	946
Printing machine. Oil-cloth	G. F. Eisenhardt	492,902	Mar. 7	206	50, 51	62	1399
Printing-machine. Platen	C. E. Sawyer	510,146	Dec. 5	512	{ 117 118	65	1506
Printing machine. Rotary web	J. J. Clause	501,921	July 25	2228	556	64	449
Printing-machine sheet-guide	G. P. Fenner	505,353	Sept. 19	1710	441	64	1618
Printing-machine staple-binding delivery mechanism	L. C. Crowell	510,841	Dec. 12	1704	{ 422 423 424	65	1743
Printing-machine staple-binding delivery mechanism	L. C. Crowell	510,842	Dec. 12	1712	{ 424 425 426	65	1744
Printing-machine staple-binding delivery mechanism	L. C. Crowell	510,843	Dec. 12	1722	{ 426 427 427	65	1746
Printing-machine staple-binding delivery mechanism	L. C. Crowell	510,844	Dec. 12	1729	{ 427 428	65	1747
Printing-machine staple-binding delivery mechanism	L. C. Crowell	510,845	Dec. 12	1735	{ 428 248	65	1748
Printing machine. Wad	C. R. Richards	506,374	Oct. 10	997	{ 249 250	65	202
Printing machine. Web	L. C. Crowell	508,918	Nov. 21	1542	{ 376 377 631	65	1077
Printing machines. Blanket-controller for calico	W. Duncan	497,953	May 23	2528	{ 632 632	63	1119
Printing machines. Doctor-blade for fabric	G. Crompton	491,240	Feb. 7	290	72	62	804
Printing oil-cloths. Machine for	G. F. Eisenhardt	509,569	Nov. 28	2674	647	65	1305
Printing on cotton	G. Donald	499,161	June 6	699		63	1512
Printing on matches. Machine for	M. Küstermann and H. Gottschalk	495,095	Apr. 11	897	{ 227 228	63	187
Printing. Photomechanical	W. Kurtz	498,396	May 30	3244	807	63	1262
Printing-plate-bending press	A. Gray	507,431	Oct. 24	2786	682	65	562
Printing plates. Device for securing zinc or other	E. S. Jones	495,466	Apr. 11	1523	381	63	301
Printing-plates. Screen for making photomechanical	M. Levy	498,127	May 23	2793	699	63	1167
Printing-press	E. A. Blake	503,713	Aug. 22	2451	{ 609 610 611	64	1057
Printing-press	H. Breuer	511,113	Dec. 19	2201	540	65	1847
Printing-press	C. A. Corbitt	507,466	Oct. 24	2863	702	65	577
Printing-press	H. Grumbach	496,305	Apr. 25	2828	707	63	573
Printing-press	J. M. Jones	498,851	June 6	178	44	63	1424
Printing-press	W. B. Lawrence. (Reissue)	11,352	July 18	2197	{ 546 547 403	64	906
Printing-press	J. R. McDonald	499,749	June 20	1623	{ 404 405	63	1712
Printing-press	S. J. Murray	492,893	Mar. 7	189	46, 47	62	1396
Printing-press addressing attachment	I. W. Newman	496,484	May 2	141	39	63	644
Printing-press chases. Machine for dressing	W. H. Price, Jr	509,824	Nov. 28	3080	744	65	1382
Printing-press delivery apparatus	S. G. Goss	495,481	Apr. 18	1546	388	63	324
Printing-press delivery apparatus	S. G. Goss	495,483	Apr. 18	1550	389	63	325
Printing-press delivery apparatus	S. D. Sandel	492,054	Feb. 21	1584	394	62	1095
Printing-press feed-gage	E. L. Megill	511,154	Dec. 19	2270	556	65	1860
Printing-press feeder	L. Orser	503,063	Aug. 8	1371	{ 339 340	64	833
Printing-press feeding and cutting mechanism	W. Scott	506,798	Oct. 17	1700	427	65	348
Printing-press feeding mechanism	F. H. Van Loozen	509,974	Dec. 5	212	49, 50	65	1450
Printing-press gage. Plate	C. A. Huston	494,955	Apr. 4	667	172	63	129
Printing-press gripper	F. X. Müller	509,090	Nov. 21	1828	448	65	1133
Printing-press ink-distributing apparatus	G. F. McIndoe	502,575	Aug. 1	544	{ 129 130	64	666
Printing-press inking apparatus	J. L. Cox	494,096	Mar. 21	2152	550	62	1806
Printing-press inking apparatus	J. L. Cox	502,618	Aug. 1	617	148	64	679
Printing-press inking apparatus	G. E. Martin	493,892	Mar. 21	1800	459	62	1740
Printing-press inking-plate and attachment	W. H. Price, Jr	509,825	Nov. 28	3081	744	65	1382
Printing-press numbering attachment	W. B. Carr	507,416	Oct. 24	2762	677	65	557
Printing-press paper-folding-machine attachment	T. C. Dexter	504,825	Sept. 12	853	519	64	1443
Printing-press paper-folding-machine attachment	T. C. Dexter	505,509	Sept. 26	1983	209	64	1682
Printing-press paper-folding-machine attachment	T. C. Dexter	506,392	Oct. 10	1031	257	65	209
Printing-press pasting mechanism	W. Scott	494,233	Mar. 28	2393	604	62	1865
Printing-press perforating attachment	C. T. Chaucey	505,623	Sept. 26	2200	556	64	1724
Printing-press perforating attachment	G. C. B. Graham	492,794	Mar. 7	35	8	62	1366
Printing-press register	H. D. Clayton	503,452	Aug. 15	2008	498	64	960
Printing-press registering device	H. A. W. Wood	492,505	Feb. 28	2313	{ 573 574	62	1256
Printing-press sheet-splitting attachment	G. P. Fenner	505,352	Sept. 19	1709	441	64	1617

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Printing-press web-feeding device.....	J. L. Cox.....	508,814	Nov. 14	1333	330	65	1024
Printing-presses. Clamp for holding printers' chases on beds of.....	G. H. Pratt and A. I. Paine.....	501,231	July 11	1111	282	64	217
Printing-presses. Web-looping mechanism for.....	J. L. Cox.....	501,456	July 11	1472	369	64	283
Printing-roll.....	D. Engel and J. Koob.....	499,185	June 6	742	176	63	1520
Printing. Screen for photomechanical.....	L. E. and M. Levy.....	492,333	Feb. 21	2017	502	62	1185
Printing show-bills or similar articles.....	F. G. Annison.....	508,497	Nov. 14	850		65	931
Printing transfers from engraved rolls. Machine for.....	T. Harper.....	509,528	Nov. 28	2611	{ 631 632 }	65	1292
Prison cage or cell.....	P. E. Glafcke.....	494,252	Mar. 28	241	{ 609 610 }	62	1870
Prison cell and guard. Electric.....	W. S. Hull.....	489,902	Jan. 10	1407	364	62	304
Prison-cell, safe, or other depository.....	P. E. Glafcke.....	494,253	Mar. 28	2420	610	62	1870
Profiling-machine.....	G. E. Hunter.....	508,716	Nov. 14	1191	{ 293 294 295 296 }	65	997
Projectile.....	L. Gathmann.....	502,713	Aug. 8	813	197	64	729
Projectile.....	L. Gathmann.....	511,418	Dec. 26	2735	662	65	1957
Projectile.....	D. B. Wesson.....	499,487	June 13	1249	298	63	1623
Projectile-exploder.....	J. Clark.....	502,348	Aug. 1	164	38	64	596
Projectile. Pyrotechnic.....	S. Staught and C. Wiebach.....	508,152	Nov. 7	286	71	65	811
Projectiles. Machine for forming.....	J. S. Griffin.....	509,730	Nov. 28	2924	{ 707 708 }	65	1351
Propagating-box.....	J. C. Lyon.....	495,049	Apr. 11	814	205	63	171
Propeller.....	R. P. Ambler.....	502,061	July 25	2441	613	64	488
Propeller.....	A. W. Case.....	496,857	May 9	753	200	63	773
Propeller.....	M. Davies.....	509,204	Nov. 21	2007	488	65	1168
Propeller.....	A. P. Gordon.....	508,383	Nov. 7	662	162	65	880
Propeller.....	T. B. Heathorn.....	510,970	Dec. 19	1973	{ 484 485 }	65	1804
Propeller.....	F. J. Leisen.....	508,324	Nov. 7	563	138	65	862
Propeller.....	T. O'Brien.....	502,910	Aug. 8	1130	279	64	790
Propeller.....	L. D. B. Shaw.....	507,459	Oct. 24	2826	691	65	570
Propeller.....	N. Wagener.....	506,572	Oct. 10	1335	335	65	268
Propeller for floating vessels.....	C. F. Osborne.....	508,334	Nov. 7	576	142	65	865
Propeller for vessels. Revolving-hull.....	H. Thibault.....	506,748	Oct. 17	1618	407	65	333
Propeller or blower.....	C. E. A. Rateau.....	500,080	June 20	2202	{ 537 538 }	63	1803
Propeller. Screw.....	J. Cardy.....	496,812	May 2	676	179	63	739
Propeller. Screw.....	A. D. Hall and G. B. Sloan.....	505,402	Sept. 19	1795	464	64	1634
Propeller. Screw.....	H. C. Happold.....	507,320	Oct. 24	2609	642	65	527
Propeller. Screw.....	R. McGlasson.....	494,014	Mar. 21	2022	{ 515 516 }	62	1783
Propeller. Screw.....	J. D. Muller.....	507,502	Oct. 24	2901	713	65	583
Propeller. Scull.....	G. O. Adams.....	503,026	Aug. 8	1325	325	64	824
Propeller shafts. Stern-bearing for screw.....	H. MacColl.....	505,666	Sept. 26	2281	579	64	1739
Propeller shafts. Thrust-bearing for.....	M. Immisch.....	508,170	Nov. 7	313	77	65	816
Propeller. Ship's.....	A. T. Elford.....	495,727	Apr. 18	1946	490	63	392
Propeller-wheel.....	L. O. Boostrom.....	502,545	Aug. 1	505	121	64	659
Propellers. Apparatus for molding.....	L. His.....	495,804	Apr. 18	2060	521	63	413
Propellers. Apparatus for revolving and elevating screw.....	W. H. Thompson.....	496,495	May 2	160	46	63	648
Propelling apparatus. Boat.....	T. D. Clapham.....	510,117	Dec. 5	465	105	65	1497
Propelling apparatus. Vessel.....	L. Beyer.....	505,785	Sept. 26	2479	625	64	1776
Propelling canal-boats by electricity. System of.....	S. W. Gear.....	499,321	June 13	946	229	63	1569
Propelling mechanism.....	A. Lang.....	504,274	Aug. 29	3345	836	64	1244
Propelling mechanism. Boat.....	J. R. Mahoney.....	509,133	Nov. 21	1897	464	65	1146
Propelling mechanism. Vessel.....	F. Taft.....	510,725	Dec. 12	1496	370	65	1705
Proportional meter.....	W. D. Hawley and S. J. Hogan.....	496,827	May 2	695	{ 183 184 }	63	743
Propulsion for steamships. Water-jet.....	F. W. Richardson.....	498,572	May 30	3537	{ 874 875 }	63	1313
Proscenium-adjuster.....	S. Mackaye.....	490,482	Jan. 24	2390	619	62	527
Protective system. Electro-.....	F. G. Storey, E. R. Andrews, J. P. Cushing, and H. F. Eaton.....	507,569	Oct. 31	3033	{ 743 744 }	65	621
Protector:							
See Cable-protector. Plant-protector.							
Current-protector. Shirt-bosom protector.							
Dress-protector. Skirt-protector.							
Face-protector. Tree-protector.							
Protractor.....	B. H. Colby.....	507,216	Oct. 24	2432	600	65	494
Prunes or plums. Machine for pricking.....	J. B. Burrell and W. J. Doidge.....	499,182	June 6	737	175	63	1519
Pruning implement.....	I. B. Beekly.....	499,701	June 20	1589	384	63	1696
Pruning implement.....	D. Behmer.....	500,526	June 27	2942	722	63	1946
Pruning implement.....	P. Kamphaus.....	508,022	Nov. 7	65	19	65	770
Puddling-furnace.....	F. C. Roberts.....	511,162	Dec. 19	2280	558	65	1862
Puff. Reed.....	C. Bush.....	503,827	Aug. 22	2616	654	64	1090
Pug-mill.....	J. L. Bowles.....	499,413	June 13	1136	272	63	1603
Pug-mill.....	T. B. Campbell.....	509,360	Nov. 28	2288	555	65	1231
Pug-mill.....	A. R. Miller.....	490,611	Jan. 24	2593	668	62	567
Pugging-mill.....	W. H. Hall.....	495,485	Apr. 18	1554	391	63	325
Puller:							
See Bush or weed puller. Stump-puller.							
Nail-puller. Tack-puller.							
Rail-puller. Tack or nail puller.							
Skewer-puller.							
Pulley.....	W. R. Fox.....	504,208	Aug. 29	3242	808	64	1325
Pulley.....	P. H. Holmes.....	492,801	Mar. 7	47	11	62	1368
Pulley.....	C. A. Johnson.....	504,588	Sept. 5	452	115	64	1354
Pulley.....	W. Muron.....	495,749	Apr. 18	1975	498	63	398
Pulley.....	F. Siebert.....	490,835	Jan. 31	2970	762	62	656
Pulley.....	B. L. Toquet.....	496,328	Apr. 25	2869	716	63	580
Pulley-arm pattern.....	O. C. Little.....	494,257	Mar. 28	2429	612	62	1872

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Pulley-block	L. Grandpré.	497,654	May 16	2046	510	63	1018
Pulley-block. Differential	E. Y. Moore.	492,609	Feb. 28	2474	615	62	1291
Pulley-block. Self-tripping	C. Matheson.	504,928	Sept. 12	1621	263	64	1477
Pulley-brake	B. F. Radford	500,611	July 4	123	33	64	24
Pulley. Clutch	F. L. McKillip.	500,289	June 27	2569	627	63	1879
Pulley. Clutch	C. H. Waterous, Jr.	499,617	June 13	1465	350	63	1661
Pulley. Clutch	C. H. Waterous	499,618	June 13	1466	351	63	1661
Pulley-coupling	C. Schlickeysen	490,313	Jan. 24	2131	555	62	477
Pulley-covering	G. Seitz and W. B. McNulty	499,758	June 20	1700	407	63	1714
Pulley. Differential	W. Chapman	511,505	Dec. 26	2868	695	65	1982
Pulley. Differential	W. T. Eades.	506,166	Oct. 3	581	150	65	111
Pulley. Drop-press	F. Mossberg	502,930	Aug. 8	1171	289	64	797
Pulley. Expansion	F. X. Black and J. L. Carey	498,613	May 30	3597	801	63	1325
Pulley for sand-reels. Friction	W. Richards.	492,632	Feb. 23	2512	622	62	1298
Pulley. Friction clutch	C. Johnson	493,775	Mar. 21	1619	412	62	1706
Pulley-line hanger	H. Reichwein	508,758	Nov. 14	1250	311	65	1009
Pulley. Loose	H. R. Tillison	496,919	May	873	229	63	795
Pulley lubricator. Loose	H. J. Chamberlain	503,902	Aug. 22	2723	683	64	1111
Pulley lubricator. Loose	G. L. Perkins	492,831	Mar. 7	91	22	62	1375
Pulley. Self-locking	B. R. Sockman	497,731	May 16	2164	541	63	1040
Pulley. Sash	W. R. Fox.	506,684	Oct. 17	1506	378	65	312
Pulley. Speed	W. M. McIntyre	510,283	Dec. 5	741	179	65	1550
Pulley. Split	W. S. Miller	502,310	Aug. 1	88	20	64	582
Pulley. Split	G. D. Rowell	493,523	Mar. 14	1188	304	62	1604
Pulleys. Facing	C. T. J. Vautin	507,467	Oct. 24	2838	694	65	572
Pulleys. Making mine	C. C. Steck	507,723	Oct. 31	3290	805	65	669
Pulp articles. Machine for forming hollow	F. E. Keyes	503,284	Aug. 15	1750	432	64	915
Pulp beating and mixing engine	E. W. Barton	503,069	Aug. 8	1384	342	64	835
Pulp boxes. Apparatus for manufacturing	H. Carmichael	503,738	Aug. 22	2495	621	64	1066
Pulp-digester	J. Norton, Jr.	496,275	Apr. 25	2778	695	63	563
Pulp-drying or paper-making machine	H. Parker, G. F. Cushman, and H. Fairbanks.	491,717	Feb. 14	1065	270	62	978
Pulp from vegetable substances. Making	A. T. Denison and H. L. Palmer	496,400	May 2	19		63	622
Pulp-grinding machine. Wood	F. André	503,304	Aug. 15	1783	440	64	920
Pulp. Machine for forming hollow articles from	W. W. McEwan	490,037	Jan. 17	1662	432	62	371
Pulp. Machine for washing and reducing wood	J. Norton, Jr.	495,262	Apr. 11	1196	300	63	240
Pulp manufacture. Treating black-ash residuum of wood	L. S. Langville	506,051	Oct. 3	387		65	76
Pulp-molding machine	C. D. Ormiston	494,789	Apr. 4	424	109	63	83
Pulp. Press for making vessels from fibrous	E. Hubbard	495,039	Apr. 11	799	202	63	168
Pulp-screen	E. Meurer	492,039	Feb. 21	1567	390	62	1091
Pulp-screening machine	G. D. Rowell	493,787	Mar. 21	1638	417	62	1710
Pulp-strainer	J. H. Baker, G. F. Shevlin, and F. H. Baker	495,769	Apr. 18	2010	508	63	404
Pulp-strainer	P. Reinicke	501,214	July 11	1084	275	64	213
Pulp-strainer	D. W. Rounds.	505,483	Sept. 26	1922	495	64	1672
Pulping engine	G. Miller	503,734	Nov. 14	1215	303	65	1003
Pulpit or rostrum	D. C. Eberhart	506,588	Oct. 10	1356	340	65	272
Pulverizer	W. Beiser	509,357	Nov. 28	2284	554	65	1230
Pulverizer	A. Stevens	502,021	July 25	2375	597	64	477
Pulverizer and leveler	S. L. Allen	493,958	Mar. 21	1918	459	62	1762
Pulverizer and roller. Combined	G. R. Farmer	510,166	Dec. 5	542	126	65	1512
Pulverizer and roller. Soil	E. Over	500,418	June 27	2777	684	63	1916
Pulverizer and stalk-cutter	C. E. Rife	489,690	Jan. 10	1082	281	62	241
Pulverizer. Clod	G. D. Heldebrant.	492,399	Feb. 28	2125	530	62	1218
Pulverizer. Ground	J. Buchanan	495,105	Apr. 11	932	233	63	192
Pulverizer. Land	B. S. Sexson	503,006	Aug. 8	1295	317	64	818
Pulverizer or harrow	M. Bruner	509,068	Nov. 21	1774	437	65	1122
Pulverizer. Soil	S. W. Barclay and C. W. Shively	500,109	June 27	2255	549	63	1823
Pulverizing and drying apparatus. Marl	C. W. Doughty	495,153	Apr. 11	1023	255	63	207
Pulverizing-machine	R. W. F. Abbe	496,031	Apr. 25	2402	608	63	492
Pulverizing-machine	G. S. Emerick	506,364	Oct. 10	980	243	65	198
Pulverizing-mill	E. C. Griffin	507,432	Oct. 24	27-8	683	65	562
Pulverizing or disintegrating apparatus	S. Straker	503,504	Aug. 15	2096	524	64	977
Pump	J. H. Branson	503,523	Aug. 15	2122	532	64	982
Pump	J. W. Clayton	495,878	Apr. 18	2180	547	63	435
Pump	C. S. Cox	500,856	July 4	511	133	64	93
Pump	L. G. Cunningham	504,122	Aug. 29	3089	773	64	1196
Pump	B. Elmore	496,683	May 2	464	125	63	704
Pump	H. A. French	491,801	Feb. 14	1202	300	62	1004
Pump	H. A. French	491,802	Feb. 14	1203	301	62	1004
Pump	S. M. Fulton and A. T. Ames	505,599	Sept. 26	2167	548	64	1718
Pump	W. E. Good	507,537	Oct. 31	2974	729	65	610
Pump	W. E. Good	507,582	Oct. 31	3065	750	65	626
Pump	J. W. Gregory	499,105	June 6	612	147	63	1497
Pump	J. J. Hahn	507,811	Oct. 31	3442	845	65	698
Pump	T. W. Heermans	510,859	Dec. 12	1774	435	65	1754
Pump	H. F. Herbert	496,653	May 2	421	113	63	695
Pump	E. R. Hill	492,678	Feb. 28	2582	639	62	1311
Pump	O. G. Howell and J. M. Horn	490,657	Jan. 31	2694	693	62	602
Pump	A. Kroll	497,670	May 16	2071	517	63	1023
Pump	B. Mellor	510,983	Dec. 19	1999	494	65	1807
Pump	L. Nasi	506,533	Oct. 10	1277	320	65	256
Pump	W. H. Poulek	490,9e5	Jan. 31	3224	824	62	705
Pump	F. H. Romans	504,366	Sept. 5	86	22	64	1287

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Pump.....	D. D. Shaw.....	489,419	Jan. 3	662	179	62	142
Pump.....	C. C. Shelburn. (Reissue).....	11,392	Nov. 28	3139	759	65	1393
Pump.....	M. D. Temple.....	490,776	Jan. 31	2888	741	62	639
Pump.....	H. S. Thomas.....	504,140	Aug. 29	3121	780 781	64	1202
Pump.....	L. L. Ullrich.....	494,970	Apr. 4	694	177	63	133
Pump. Air.....	H. C. Reagan, Jr.....	496,898	May 9	833	221	63	787
Pump. Air.....	W. C. Whitacre.....	508,495	Nov. 14	847	209	65	930
Pump. Air-compressor.....	A. Locker and E. F. Gennert.....	501,090	July 11	882	227	64	176
Pump. Ammonia or other.....	N. Johnson and J. Stocker.....	494,956	Apr. 4	668	172 173	63	129
Pump and ventilator. Centrifugal.....	F. Pelzer.....	490,922	Jan. 31	3120	800	62	686
Pump attachment.....	G. M. Yarnell.....	489,403	Jan. 3	639	173	62	137
Pump. Automatic railway.....	H. D. Layman.....	506,241	Oct. 10	775	191	65	158
Pump. Centrifugal.....	E. J. Hawley.....	505,790	Sept. 26	2488	628	64	1777
Pump. Centrifugal.....	E. Seitz.....	495,760	Apr. 18	1990	503 504	63	401
Pump. Compression.....	W. F. Davis.....	497,092	May 9	1130	289	63	840
Pump. Compression and vacuum.....	P. I. Schmaltz.....	504,093	Aug. 29	3041	759	64	1187
Pump. Compression and vacuum.....	P. I. Schmaltz.....	504,094	Aug. 29	3043	760 761	64	1188
Pump-controlling apparatus.....	C. I. Hall.....	492,723	Feb. 28	2649	656	62	1325
Pump-controlling device. Automatic.....	A. E. Burrows and W. E. Clark.....	507,211	Oct. 24	2427	598 599	65	492
Pump-curb.....	W. Kegl.....	505,047	Sept. 12	1216	313	64	1513
Pump. Deep-well.....	L. M. Ford.....	490,142	Jan. 17	1835	479	62	407
Pump. Delivery.....	H. Jandin.....	495,344	Apr. 11	1320	331	63	262
Pump. Double-acting.....	W. Craig.....	505,441	Sept. 26	1662	479	64	1660
Pump. Double-acting force.....	E. A. Vaughan.....	492,699	Feb. 28	2611	646	62	1318
Pump drain-valve attachment.....	O. E. Beardsley.....	507,961	Oct. 31	3682	915	65	742
Pump. Duplex rotary force.....	I. P. Lambing.....	508,574	Nov. 14	983	241	65	957
Pump. Duplex steam.....	C. A. Goyno.....	509,659	Nov. 28	2816	679 680	65	1332
Pump. Duplex steam.....	C. M. Miller.....	502,737	Aug. 8	843	204 205	64	735
Pump. Electric.....	F. W. Merritt.....	510,921	Dec. 19	1881	461	65	1786
Pump. Electro-magnetic reciprocating.....	C. J. Van Depoele.....	496,331	Apr. 25	2875	718	63	581
Pump-engine.....	L. Holben.....	511,426	Dec. 26	2749	664	65	1959
Pump foot-valve.....	J. H. Gibson.....	493,378	Mar. 14	958	247	62	1562
Pump for moving gaseous bodies.....	W. F. Garrison.....	501,614	July 18	1718	428	61	346
Pump for refrigerating apparatus. Compression.....	S. S. and C. W. Miles.....	507,025	Oct. 17	2067	511	65	417
Pump-gearing.....	S. L. Fulford.....	498,109	May 23	2762	690 691	63	1162
Pump-governor.....	A. J. Saxe.....	503,776	Aug. 22	2552	636	64	1077
Pump-governor. Electric.....	C. R. Whittier.....	497,563	May 16	1910	481	63	994
Pump governor. Steam.....	A. P. Massey.....	501,018	July 4	757	199	64	138
Pump. Gravity.....	W. A. Hartt.....	504,922	Sept. 12	1008	260 261	64	1475
Pump-handle.....	C. A. Sellon.....	503,990	Aug. 29	2890	733	64	1158
Pump. Hydraulic.....	W. Cameron.....	502,950	Aug. 8	1205	296	64	802
Pump. Hydraulic air.....	E. H. Weatherhead.....	503,819	Aug. 22	2608	651 652	64	1088
Pump. Hydraulic air.....	E. H. Weatherhead.....	504,097	Aug. 29	3051	763	64	1189
Pump. Hydraulic air compressing or exhausting.....	O. Dälisch.....	508,921	Nov. 21	1548	378 379	65	1078
Pump. Lift.....	J. N. Moehn.....	505,276	Sept. 19	1587	413	64	1595
Pump. Measuring.....	S. T. Dutton.....	503,529	Aug. 15	2133	536	64	984
Pump. Oil.....	E. English.....	493,694	Mar. 21	1485	380	62	1679
Pump. Oil.....	R. O. Graham and F. C. Smith.....	497,653	May 16	2045	510	63	1018
Pump. Oil-can siphon.....	E. A. Franklin.....	503,232	Aug. 15	1665	409	64	899
Pump. Oil-well.....	G. D. Bumpus.....	491,674	Feb. 14	998	252	62	964
Pump. Oil-well.....	J. H. Gibson and T. D. Sutton.....	504,679	Sept. 5	598	152	64	1383
Pump. Oil-well.....	J. C. and J. Lorenz.....	494,927	Apr. 4	631	160 161	63	122
Pump or ventilator. Centrifugal.....	A. Rateau.....	494,890	Apr. 4	579	146	63	113
Pump-plunger.....	A. D. Cook.....	493,249	Mar. 14	747	191 192	62	1523
Pump. Pocket air.....	H. Guest.....	497,050	May 9	1057	271	63	827
Pump. Portable electric.....	C. J. Van Depoele.....	507,946	Oct. 31	3659	905	65	738
Pump. Portable force.....	M. B. Brooks.....	489,367	Jan. 3	589	159	62	126
Pump-power.....	P. Fricchette.....	495,322	Apr. 11	1286	323	63	256
Pump-regulator.....	J. M. Foster.....	489,297	Jan. 3	480	133	62	105
Pump-regulator.....	W. S. Griffith.....	491,101	Feb. 7	59	17	62	760
Pump-regulator.....	E. J. Wood.....	489,516	Jan. 10	841	220	62	191
Pump-regulator. Windmill.....	P. A. Myers.....	501,354	July 11	1317	329	64	253
Pump-rod coupler.....	E. C. Guerrant.....	491,551	Feb. 14	803	203	62	923
Pump. Rotary.....	E. Boening and J. Sjöström.....	501,864	July 18	2113	522 523	64	413
Pump. Rotary force.....	F. Wankel.....	500,361	June 27	2696	661 662	63	1901
Pump. Rotary reciprocating.....	W. Cooper and G. P. Hampton.....	511,044	Dec. 19	2080	515 516	65	1823
Pump. Single-cylinder double-acting force.....	W. L. Hippert.....	498,978	June 6	407	95	63	1463
Pump-spring. Compensating.....	W. L. Black.....	495,294	Apr. 11	1250	312	63	249
Pump. Steam.....	T. C. Eicher.....	490,141	Jan. 17	1833	479	62	407
Pump. Steam.....	L. W. Hardy.....	492,797	Mar. 7	39	9	10	62
Pump. Steam.....	E. C. Johnson.....	502,043	July 25	2408	606	64	482
Pump. Steam.....	G. R. Kendrick.....	494,207	Mar. 28	2352	595	62	1859
Pump. Steam.....	W. B. Mason.....	500,590	July 4	78	23	64	16
Pump. Steam.....	W. Watkins.....	492,950	Mar. 7	279	71	62	1414
Pump. Submerged force.....	T. C. Workman.....	495,447	Apr. 11	1486	374	63	293
Pump. Suction and force.....	J. H. Lawless.....	510,180	Dec. 5	570	132	65	1517
Pump. Vacuum.....	J. W. Fraser and J. D. Wilson.....	496,559	May 2	266	71	63	668
Pump. Vacuum.....	G. E. O. Lange.....	509,541	Nov. 28	2628	636	65	1295

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Pump. Vacuum.....	W. S. Moore.....	501,954	July 25	2270	567	64	457
Pump. Vacuum.....	J. A. Vandegrift.....	495,173	Apr. 11	1055	263	63	213
Pump. Vacuum.....	W. H. Worthen.....	491,912	Feb. 14	1368	341	62	1037
Pump-valve.....	H. F. Frisbie.....	491,543	Feb. 14	786	200	62	920
Pump-valve.....	J. Kennedy.....	491,286	Feb. 7	362	90	62	817
Pump valve. Direct-acting steam.....	M. Misic.....	504,844	Sept. 12	889	228 229	64	1452
Pump valve. Gas.....	W. F. Garrison.....	509,158	Nov. 21	1929	471	65	1152
Pump valve mechanism. Steam.....	J. W. and J. L. Templin.....	503,883	Aug. 22	2691	675	64	1104
Pump valve mechanism. Steam.....	H. H. Westinghouse.....	494,612	Apr. 4	140	32, 33	63	29
Pump valve. Oil-well.....	J. O'Neil.....	502,750	Aug. 8	863	210	64	740
Pump valve. Steam.....	T. C. Eicher.....	490,140	Jan. 17	1830	478	62	406
Pumps for locomotives. Apparatus for cleaning air- pumping apparatus for the manufacture of carbon- ized waters.	A. Whyte.....	493,670	Mar. 21	1447	369	62	1671
	H. Carse.....	505,090	Sept. 19	1300	334	64	1543
Pumping apparatus. Portable.....	D. Noble.....	491,186	Feb. 7	205	52, 53	62	787
Pumping apparatus. Portable.....	D. Noble.....	494,221	Mar. 28	2374	599 600	62	1863
Pumping-engine.....	W. Clarkson.....	496,294	Apr. 25	2801	701	63	568
Pumping-engine.....	H. Denney.....	499,013	June 6	480	111 112	63	1475
Pumping-engine.....	A. B. Landis.....	492,870	Mar. 7	157	38	62	1359
Pumping-engine.....	G. de Laval.....	502,521	Aug. 1	460	110 111	64	651
Pumping-engine.....	J. D. P. Schenck.....	490,312	Jan. 24	2130	554	62	477
Pumping-engine. Direct-acting.....	C. C. Worthington.....	504,644	Sept. 5	527	136	64	1370
Pumping-engine. Non-rotative.....	L. D'Auria.....	493,153	Mar. 7	592	149	62	1475
Pumping-engine. Steam.....	C. C. Webber.....	494,668	Mar. 21	1442	368	62	1670
Pumping-engines. Tappet for duplex steam.....	M. M. Moore.....	489,655	Jan. 10	1027	268	62	229
Pumping oil-wells. Machinery for.....	H. S. Edwards.....	489,073	Jan. 3	138	39	62	34
Pumping water. Portable machinery for.....	H. J. Adams.....	500,460	June 27	2838	698 699	63	1927
Punch.....	C. B. Brooks.....	507,672	Oct. 31	3217	787	65	655
Punch.....	E. B. Cornell.....	500,534	June 27	2952	725	63	1948
Punch.....	G. H. Kavanaugh.....	489,534	Jan. 10	865	526	62	196
Punch.....	G. Rosenwald.....	507,042	Oct. 17	2102	521	65	422
Punch and stamp. Combined ticket.....	W. S. Eiseman.....	508,821	Nov. 14	1343	332	65	1026
Punch. Check.....	E. R. Beach and H. A. Berger.....	490,894	Jan. 31	3064	787	62	675
Punch. Check.....	L. L. Driggs.....	493,547	Mar. 14	1230	315	62	1613
Punch. Check.....	W. F. Judy.....	495,553	Apr. 18	1656	417	63	343
Punch. Check.....	M. O. Smith.....	500,676	July 4	234	62	64	44
Punch. Check.....	J. Stewart.....	505,577	Sept. 26	2132	540	64	1711
Punch. Hand.....	E. J. Brooks.....	489,430	Jan. 3	683	184	62	147
Punch. Hand.....	W. Carey.....	499,094	June 6	598	144	63	1495
Punch. Hydraulic.....	F. H. Stillman.....	507,666	Oct. 31	3211	785	65	654
Punch. Portable hand.....	R. Davis and W. Butler.....	503,109	Aug. 8	1454	358	64	848
Punch. Registering ticket.....	W. W. Colley.....	506,158	Oct. 3	567	147	65	109
Punch. Ticket.....	J. Gillespie.....	498,259	May 30	3014	751	63	1221
Punch. Ticket bell.....	J. M. Black.....	509,287	Nov. 21	2156	518	65	1195
Punching and riveting apparatus.....	J. A. Rogers.....	499,331	June 13	968	233	63	1573
Punching and riveting machine.....	R. J. Shipley.....	489,547	Jan. 10	881	230 231	62	200
Punching and shearing machine.....	S. G. Williams and J. C. Burges.....	490,007	Jan. 17	1598	417	62	359
Punching-cutter.....	A. J. Bird.....	506,661	Oct. 17	1469	370	65	305
Punching-machine.....	A. Hoolahan.....	493,890	Mar. 21	1796	458	62	1739
Punching-machine.....	J. Mohr.....	501,152	July 11	992	253 254	64	195
Punching-machine.....	A. M. Parks.....	509,761	Nov. 28	2972	719	65	1361
Punching-machine.....	H. Schurig.....	493,791	Mar. 21	1642	419	62	1711
Punching machine. Check.....	J. N. Williams.....	511,313	Dec. 19	2533	616	65	1907
Punching or perforating apparatus. Multiple.....	A. Meyer.....	509,134	Nov. 21	1898	464	65	1146
Punching, shearing, and forging machine.....	H. A. Schneekloth.....	490,401	Jan. 24	2266	589	62	504
Purifier.....	E. R. Stilwell.....	510,301	Dec. 5	768	186 187	65	1555
Purifier and separator.....	G. A. and J. P. Culver and W. D. Otis.....	493,756	Mar. 21	1593	405	62	1700
Purse.....	S. Nathan.....	496,130	Apr. 25	2556	643	63	521
Purse and frame therefor.....	A. Goertz.....	490,434	Jan. 24	2311	600	62	512
Purse and making same.....	A. Ritter.....	490,165	Jan. 17	1867	487	62	413
Push-button.....	W. H. Berrigan, Jr.....	500,110	June 27	2256	549	63	1823
Push-button.....	J. S. George, Jr.....	500,199	June 27	2434	594 595	63	1855
Push-button cut-out.....	J. S. George, Jr.....	500,200	June 27	2437	595	63	1856
Push-button. Electric annunciating.....	J. King.....	494,337	Mar. 28	2557	644	62	1896
Push-button switch.....	F. S. Gregory.....	497,411	May 16	1661	419	63	950
Purse. Coin.....	G. Topham.....	505,145	Sept. 19	1384	354	64	1557
Purse. Coin.....	C. B. Woodbury and O. Greenbaum.....	503,447	Aug. 15	2000	496	64	959
Purse. Coin.....	W. J. Worden.....	509,504	Nov. 28	2572	621	65	1285
Purse or case. Coin.....	L. T. Condon.....	505,192	Sept. 19	1453	374	64	1570
Purse or pocket-book.....	S. Nathan.....	501,728	July 18	1902	474	64	376
Purse. Safety.....	W. M. Ward.....	509,341	Nov. 21	2251	544	65	1212
Purse. Puzzle.....	F. F. Chesak.....	506,843	Oct. 17	1777	447	65	362
Push-button.....	W. H. Berrigan, Jr.....	504,148	Aug. 29	3132	783	64	1204
Push-button.....	R. M. Hunter.....	510,540	Dec. 12	1186	286	65	1647
Push-button. Electric.....	B. F. Rex.....	506,729	Oct. 17	1589	401	65	327
Putty-knife.....	F. J. Brauch.....	508,273	Nov. 7	486	117	65	848
Putty-knife.....	J. M. Newton.....	503,098	Aug. 8	1433	354	64	844
Puzzle.....	T. H. Apgar.....	504,823	Sept. 12	851	218	64	1443
Puzzle.....	G. T. and M. H. Bradley.....	492,605	Feb. 28	2469	614	62	1290
Puzzle.....	G. T. and M. H. Bradley.....	500,795	July 4	422	111	64	78
Puzzle.....	W. Churchill.....	507,215	Oct. 24	2431	599	65	493
Puzzle.....	C. I. Dayton.....	495,724	Apr. 18	1942	489	63	392
Puzzle.....	T. Dorgan and A. Bridges.....	490,069	Jan. 17	1712	446	62	381
Puzzle.....	J. B. Douglas.....	510,904	Dec. 19	1850	456	65	1780

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Puzzle	J. C. Field	498,639	May 30	3652	903	63	1334
Puzzle	J. Green	493,768	Mar. 21	1611	409	62	1704
Puzzle	W. P. Groves	504,347	Sept. 5	53	15	64	1281
Puzzle	J. Kinney	496,263	Apr. 25	2759	690	63	559
Puzzle	W. H. Leighton	496,202	Apr. 25	2658	667	63	540
Puzzle	W. H. Lincoln	505,603	Sept. 26	2174	549	64	1719
Puzzle	C. A. McFadden, Jr.	509,934	Dec. 5	148	34	65	1437
Puzzle	A. Nembach, Jr.	493,941	Mar. 21	1889	401	62	1757
Puzzle	M. Pennybacker	495,997	Apr. 25	2352	594	63	483
Puzzle	J. C. Pratt	508,339	Nov. 7	581	143	65	866
Puzzle	C. N. Robinson	508,245	Nov. 7	435	105	65	839
Puzzle	J. A. Schaffer	490,757	Jan. 31	2853	732	62	632
Puzzle	G. H. Taylor	507,667	Oct. 31	3213	786	65	654
Puzzle	E. L. Thurston	490,689	Jan. 31	2748	707	62	612
Puzzle	N. S. Worley	505,210	Sept. 19	1485	387	64	1576
Puzzle card-case	A. F. Smith	507,244	Oct. 24	2471	609	65	501
Puzzle. Columbian egg	M. Benitez	496,716	May 2	514	137	63	712
Puzzle. Composite	H. C. Hanson	499,383	June 13	1067	259	63	1591
Puzzle. Egg	E. Niehoff	491,021	Jan. 31	3286	839	62	718
Puzzle-lock for pocket-books, &c.	J. Meyer	506,325	Oct. 10	920	228	65	187
Pyralin. Machine for cutting sheets or films of	J. R. France	498,257	May 30	3009	750	63	1220
Pyro-electric battery	T. G. Hall	494,199	Mar. 28	2334	592	62	1855
Pyrolignites. Purifying	F. H. and R. H. Pickles	490,497	Jan. 24	2424		62	534
Pyrometer	E. Brown	494,244	Mar. 28	2407	607	62	1868
Pyrometer	E. Brown	494,245	Mar. 28	2409	608	62	1868
Pyrometer	T. M. Eynon	497,268	May 9	1400	354	63	888
Pyrometer	W. R. Roney	490,723	Jan. 31	2798	718	62	623
Pyrometer	E. A. Uehling and A. Steinbart	503,337	Aug. 15	1843	457	64	931
Pyrometer	J. G. Wiborgh	499,884	Jan. 10	1366	355	62	298
Pyrotechnic device	H. J. Pain	503,383	Aug. 15	1915	475	64	944
Pyroxyline collars. Machine for making	G. A. Goldsmith and A. K. Merrill	505,399	Sept. 19	1790	463	64	1633
Pyroxyline compound	C. L. Borgmeyer	502,547	Aug. 1	508		64	660
Pyroxyline compound	L. Paget	494,792	Apr. 4	428		63	83
Pyroxyline compound	L. Paget	494,793	Apr. 4	430		63	83
Pyroxyline compounds and their products. Making	L. Paget	494,791	Apr. 4	427		63	83
Pyroxyline compounds. Manufacture of	C. L. Borgmeyer	502,546	Aug. 1	507		64	659
Pyroxyline compounds. Manufacture of	C. L. Borgmeyer	502,921	Aug. 8	1157		64	794
Pyroxyline compounds. Manufacture of	J. H. Stevens and F. C. Axtell	510,617	Dec. 12	1320		65	1671
Pyroxyline solution	L. Paget	507,749	Oct. 31	3323		65	676
Pyroxyline solution or compound	C. L. Borgmeyer	503,402	Aug. 15	1938		64	949
Pyroxyline solvent and its compounds	C. L. Borgmeyer	503,401	Aug. 15	1938		64	949
Pyroxyline solvent and its compounds	C. L. Borgmeyer	504,905	Sept. 12	986		64	1471
Pyroxyline solvent and its compounds	C. L. Borgmeyer and L. Paget	507,964	Oct. 31	3686		65	743
Pyroxyline solvents and their products. Preparing	L. Paget	495,263	Apr. 11	1197		63	240
Pyroxyline solvents. Making	L. Paget	494,790	Apr. 4	426		63	83
Quadruplex engine	E. W. Harden	507,433	Oct. 24	2791	683	65	503
Quicksand. Method of and apparatus for handling or controlling	C. Horton	508,714	Nov. 14	1188	293	65	997
Quilting-machine	A. J. Mitchell	504,229	Aug. 29	3271	817	64	1230
Quilting-machine	L. Schultz	507,757	Oct. 31	3337	817	65	677
Quinine. Making salts of	E. Grimaux	501,066	July 11	838		64	168
Quinolin compound	J. Ziegler	497,740	May 16	2175		63	1043
Quoin	J. F. Perry	502,990	Aug. 8	1276	312	64	814
Quoit-peg	F. A. O. Bedingfield	493,746	Mar. 21	1579	402	62	1698
Race-course. Coin-controlled	C. Carroll	504,812	Aug. 29	3403	853	64	1255
Races. Time-indicator and signal for	A. Bartlett	495,770	Apr. 18	2012	509	63	405
Racing book, sheet, or card	J. A. Lapeyre	497,189	May 9	1272	323	63	866
Rack:							
See Book-rack.	Hay or hog rack.						
Braid-rack.	Hay or stock rack.						
Broom-rack.	Keg or tool rack.						
Cable-rack.	Lumber-drying rack.						
Chimney-rack.	Meat-rack.						
Cloak-rack.	Music-rack.						
Cue-rack.	Photograph-displaying rack.						
Display-rack.	Pool-table rack.						
Feed-rack.	Printer's drying rack.						
Firearm-rack.	Refrigerator ice-rack.						
Gun-rack.	Rotating rack.						
Harness-rack.	Stock-rack.						
Hat-rack.	Stovepipe-rack.						
Hat and clothes rack.	Tobacco-curing rack.						
Hat and coat rack.	Towel-rack.						
Hay-rack.	Whip-rack.						
Hay and stock rack.							
Radial drill	A. Mill	496,273	Apr. 25	2775	694	63	563
Radiator	J. De Laney	499,417	June 13	1143	273	63	1604
Radiator	J. F. Donahoe	510,244	Dec. 5	677	274	65	1538
Radiator	J. H. Hutchinson	493,590	Mar. 14	1312	161	62	1630
Radiator	J. W. Pertz	511,027	Dec. 19	2056	335	65	1818
Radiator	G. W. R. Pollock	494,888	Apr. 4	577	149	63	112
Radiator	T. Tangney	503,813	Aug. 22	2600	649	64	1087

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Radiator	M. A. Wilcox	495,284	Apr. 11	1237	309	63	246
Radiator attachment	A. J. Bennett	505,589	Sept. 26	2155	545	64	1716
Radiator-case	H. H. Welker	499,686	June 13	1561	377	63	1677
Radiator. Electric	S. B. Jenkins	497,791	May 23	2268	570	63	1075
Radiator. Electrically-heated	W. Mitchell	494,301	Mar. 28	2496	630	62	1885
Radiator for heating buildings	W. C. Baker	499,181	June 6	736	175	63	1518
Radiator. Gas	H. Ruppel	497,460	May 16	1740	439	63	963
Radiator. Heat	F. Keiser	501,479	July 11	1503	379	64	289
Radiator. Hot-water heat	G. W. Hawes	498,849	June 6	176	44	63	1423
Radiator-leg	E. E. Mann	498,131	May 23	2798	700	63	1168
Radiator or heater. Portable steam	C. R. Harris	510,067	Dec. 5	383	84	65	1482
Radiator. Portable combined steam and hot-air	H. Flint	510,852	Dec. 12	1745	431	65	1751
Radiator-shelf	A. J. Bennett	502,871	Aug. 8	1060	260	64	777
Radiator. Steam	E. E. Gold	496,117	Apr. 25	2536	640	63	518
Radiator. Steam	E. E. Gold	508,134	Nov. 7	258	64	65	806
Radiator, stove, &c	A. T. Orton	489,874	Jan. 10	1349	351	62	295
Radiators. Auxiliary steam-pipe for	J. B. Smith	505,136	Sept. 19	1370	351	64	1555
Rag-engine	H. Schulte	492,239	Feb. 21	1879	469	62	1156
Rail-bond. Electric	B. C. Seaton	503,101	Aug. 8	1440	355	64	845
Rail-brace	E. W. Bryant and S. Kinkarter	500,376	June 27	2716	667	63	1905
Rail brace and fastener. Combined	W. R. Gerhart	510,419	Dec. 12	954	230	65	1605
Rail-brace and tie-plate. Combined	C. T. Schoen	509,607	Nov. 28	2734	660	65	1317
Rail-brace and tie-plate. Combined	C. T. Schoen	509,608	Nov. 28	2735	660	65	1317
Rail brace-chair. Girder	M. M. Suppes	489,508	Jan. 10	830	217	62	189
Rail-broom attachment. Street	A. E. Wilson	503,024	Aug. 8	1318	323	64	822
Rail-chair	M. Maloney	500,589	July 4	78	22	64	15
Rail-chair. Interlocking	W. M. Brown	492,458	Feb. 28	2223	555	62	1239
Rail chair-sleeper and tie	W. G. Olpherts	494,074	Mar. 21	2119	541	62	1800
Rail-circuit-closing contact	F. von Hefner-Alteneck	495,674	Apr. 18	1855	404	63	376
Rail-clamp	F. H. Heath	495,001	Apr. 4	737	187	63	141
Rail-cleaning brush. Street	J. A. Gowans	498,785	June 6	53	12, 13	63	1398
Rail. Continuous	A. Bagley	493,233	Mar. 7	714	183	62	1498
Rail-curving machine	F. C. Weir and E. W. Harden	494,450	Mar. 28	2734	685	62	1928
Rail-fastener	C. C. Holt	502,361	Aug. 1	187	44	64	600
Rail fastener. Guard	G. L. Cummins	509,203	Nov. 21	2007	487	65	1167
Rail-fastening	L. A. Miller	507,824	Oct. 31	3463	852	65	702
Rail-fastening	B. F. and M. F. Sparr	503,442	Aug. 15	1994	495	64	959
Rail for use on common roads. Steel	G. M. Ramsey	492,365	Feb. 21	2070	517	62	1195
Rail-frog. Automatic	H. W. Byers	508,867	Nov. 14	1425	353	65	1041
Rail frog. Wing	D. F. Higgins	501,070	July 11	842	218	64	169
Rail. Guard	L. J. Baker	509,788	Nov. 28	3020	730	65	1371
Rail-heating device	C. S. Smith and E. E. Knowles	505,135	Sept. 19	1369	351	64	1555
Rail-joint	F. C. Balch	509,422	Nov. 28	2409	583	65	1252
Rail-joint	G. A. Bartholomew	506,899	Oct. 17	1871	465	65	379
Rail-joint	J. D. Blanton	493,816	Mar. 21	1693	431	62	1719
Rail-joint	J. H. Crosby	594,711	Sept. 12	655	166	64	1406
Rail-joint	J. T. Evans	502,004	Nov. 7	40	13	65	765
Rail-joint	F. H. Heath	495,002	Apr. 4	738	187	63	141
Rail-joint	F. H. Heath	500,388	June 27	2735	672	63	1908
Rail-joint	F. H. Heath and E. P. Caldwell	500,389	June 27	2737	672	63	1909
Rail-joint	F. H. Heath and E. P. Caldwell	500,390	June 27	2738	673	63	1909
Rail-joint	A. Lawes	494,680	Apr. 4	239	60	63	49
Rail-joint	A. J. Moxham	495,988	Apr. 25	2336	591	63	480
Rail-joint	A. J. Moxham	505,990	Oct. 3	296	76	65	58
Rail-joint	F. Mulville	493,939	Mar. 21	1886	460	62	1756
Rail-joint	M. C. Niles	501,093	July 11	894	230	64	178
Rail-joint	M. C. Niles	507,382	Oct. 24	2706	665	65	546
Rail-joint	M. C. Niles	509,581	Nov. 28	2691	651	65	1308
Rail-joint	M. J. Pechin	507,751	Oct. 31	3330	816	65	676
Rail-joint	J. M. Price	501,161	July 11	1012	257	64	198
Rail-joint	G. R. Root	506,076	Oct. 3	429	112	65	84
Rail-joint	J. Schuler	508,580	Nov. 14	994	244	65	959
Rail-joint	C. T. Stagg, Jr	506,082	Oct. 3	439	115	65	85
Rail-joint	J. M. Stamp	494,235	Mar. 28	2396	605	62	1865
Rail-joint	C. E. Swingle	510,724	Dec. 12	1495	370	65	1706
Rail-joint	R. G. Ward	502,153	July 25	2588	651	64	517
Rail-joint	O. O. Winter	505,181	Sept. 19	1437	370	64	1567
Rail-joint and nut-lock. Combined	J. M. D. Bland	505,564	Sept. 26	2107	534	64	1706
Rail-joint and tie. Combined	E. P. Caldwell and F. H. Heath	496,218	Apr. 25	2689	674	63	546
Rail-joint. Truss	J. M. Price	503,254	Aug. 15	1700	418	64	906
Rail-joints. Die for manufacturing	F. H. Heath	498,791	June 6	61	14, 15	63	1400
Rail-puller	D. C. Bowen	490,383	Jan. 24	2242	583	62	499
Rail-securing device	J. L. Pope	502,830	Aug. 8	1002	244	64	765
Rail-securing device	J. L. Pope	508,047	Nov. 7	100	28, 29	65	777
Rail shoe and brace	A. B. Snider and W. H. Roberts	511,170	Dec. 19	2292	560	65	1864
Rail-support	W. N. Morrison and T. P. Swin	498,072	May 23	2710	678	63	1151
Rail-support	W. N. Morrison and T. P. Swin	498,073	May 23	2711	678	63	1152
Rail-support and cross-tie. Combined	F. P. Reilly	508,049	Nov. 7	102	29	65	778
Rail-sweeper	H. A. Bruhns	509,871	Dec. 5	30	7	65	1416
Rail tie and chair. Combined	E. M. Howard and T. J. Eagan	498,883	June 6	239	56	63	1435
Rails. Apparatus for unloading and distributing	H. W. Byers	508,868	Nov. 14	1426	354	65	1041
Rails from spreading. Device for preventing	T. H. Dahill	501,678	July 18	1826	455	64	363
Railings. Bracket or support for foot	S. A. Stone and J. Philipps	490,995	Jan. 31	3240	827	62	708
Railway	B. S. Henning	504,351	Sept. 5	57	16	64	1282
Railway	T. James	498,274	May 30	3011	757	63	1225
Railway	E. Perrody	505,478	Sept. 26	1916	493	64	1671
Railway	L. S. Widmeyer and J. F. Fields	490,868	Jan. 31	3018	776	62	667
Railway-alarm	A. T. Roberts	507,226	Oct. 24	2541	626	65	513
Railway and tramway crossing	J. E. Billups	510,399	Dec. 12	925	222	65	1600

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Railway and tramway rail cleaner	H. Conradi	489,120	Jan. 3	215	{ 56 57 58 125 126 610 611	62	50
Railway apparatus. Cable.....	W. T. Smith.....	499,048	June 6	533	{ 125 126 610 611	63	1484
Railway appliance	J. Wayland.....	492,598	Feb. 28	2455	{ 611	62	1287
Railway. Automatic aerial.....	H. W. Libbey.....	491,572	Feb. 14	839	{ 213	62	931
Railway block-signal	F. B. Burt.....	493,228	Mar. 7	708	{ 182	62	1497
Railway block-signal	F. W. Kline.....	506,005	Oct. 3	318	{ 84	65	62
Railway block-signal	R. D. Peters.....	494,077	Mar. 21	2123	{ 542	62	1801
Railway block-signal system.....	E. Fontaine.....	494,525	Mar. 28	2857	{ 715 716	62	1951
Railway block signaling system.....	A. S. McCaskey	498,290	May 30	3069	{ 764 765	63	1230
Railway block signaling system and apparatus.....	H. Floyd and W. H. Douty	490,192	Jan. 17	1908	{ 497 498	62	421
Railway block system. Electric.....	F. O. Blackwell.....	492,457	Feb. 28	2921	{ 555	62	1238
Railway-brake	T. H. Allen.....	506,298	Oct. 10	867	{ 214	65	177
Railway-brake. Automatic continuous	J. J. S. List.....	495,499	Apr. 18	1575	{ 396	63	329
Railway-brake. Electric.....	A. de Bovet.....	508,805	Nov. 14	1316	{ 327	65	1022
Railway-brake. Elevated.....	W. L. Reynolds.....	510,292	Dec. 5	754	{ 183	65	1552
Railway-brake. Elevated.....	J. N. Valley.....	496,237	Apr. 25	2720	{ 681	63	552
Railway-brake. Fluid-pressure	W. T. Bothwell.....	498,364	Nov. 7	627	{ 151	65	874
Railway-brake slack-adjuster	H. Hinckley.....	507,905	Oct. 31	3588	{ 885 886	65	721
Railway. Cable	J. W. Dotson.....	503,366	Aug. 15	1893	{ 469	64	940
Railway. Cable	C. I. Earll.....	511,596	Dec. 26	3013	{ 734 735 736	65	2009
Railway. Cable	C. I. Earll.....	511,597	Dec. 26	3019	{ 736 737	65	2010
Railway. Cable	J. B. Smithman.....	496,236	Apr. 25	2716	{ 680 681	63	551
Railway-carriages. Metallic under frame for.....	G. W. Ettenger.....	506,652	Oct. 10	1449	{ 363 364	65	290
Railway cattle-guard	J. J. Burke.....	493,972	Mar. 21	1955	{ 498	62	1768
Railway cattle-guard	D. H. Mahoney and H. D. Hanover	495,098	Apr. 11	907	{ 229	63	189
Railway cattle-guard	N. P. Walters.....	511,477	Dec. 26	2829	{ 684	65	1975
Railway-chair.....	C. H. Earle.....	503,835	Aug. 22	2627	{ 657	64	1092
Railway-chair.....	H. A. Iddings.....	495,340	Apr. 11	1315	{ 330	63	262
Railway-chair.....	F. C. Weir.....	499,154	June 6	689	{ 165	63	1510
Railway chairs and fish-plates. Mandrel for combined	D. A. Chapin.....	501,989	July 25	2321	{ 580	64	467
Railway. Closed-conduit electric.....	O. B. Benton.....	508,199	Nov. 7	363	{ 89	65	826
Railway. Closed-conduit electric.....	W. P. Patton.....	495,996	Apr. 25	2348	{ 593 594	63	483
Railway. Closed-conduit electric.....	W. S. Smith.....	511,254	Dec. 19	2427	{ 592	65	1888
Railway. Closed-conduit electric.....	C. A. Stark.....	489,835	Jan. 10	1303	{ 340	62	286
Railway. Closed-conduit electric.....	R. Weir.....	507,339	Oct. 24	2634	{ 648	65	532
Railway-coach vestibule	R. K. Ortt and M. A. Shearer	505,324	Sept. 19	1667	{ 430	64	1610
Railway collisions. Means for preventing.....	E. M. de Monte and C. Jost	505,669	Sept. 26	2223	{ 580 581	64	1740
Railway-conductor. Conduit.....	J. W. Grantland.....	507,806	Oct. 31	3432	{ 843	65	696
Railway conductor. Electric.....	H. A. Miner.....	490,297	Jan. 24	2099	{ 547	62	470
Railway conductor system. Electric.....	R. Hayden.....	490,597	Jan. 24	2564	{ 660	62	562
Railway conductors. Subway for electric.....	I. L. Johnson.....	502,821	Aug. 8	929	{ 211	64	763
Railway. Conduit.....	F. B. Rae.....	492,106	Feb. 21	1664	{ 413 414	62	1111
Railway conduit and contact. Electric.....	J. Davis and R. M. Huntington	493,618	Mar. 14	1362	{ 345	62	1639
Railway-conduit cleaning device	J. C. Love.....	511,341	Dec. 26	2586	{ 630	65	1931
Railway. Conduit electric.....	J. H. Bates.....	492,737	Feb. 28	2667	{ 661 662	62	1329
Railway. Conduit electric.....	B. Bidwell.....	504,549	Sept. 5	398	{ 102	64	1344
Railway. Conduit electric.....	F. W. Brann.....	492,265	Feb. 21	1917	{ 479	62	1164
Railway. Conduit electric.....	W. R. De Voe.....	495,456	Apr. 11	1499	{ 377	63	295
Railway. Conduit electric.....	W. R. De Voe.....	499,374	June 13	1052	{ 255	63	1589
Railway. Conduit electric.....	W. R. De Voe.....	510,061	Dec. 5	374	{ 83	65	1480
Railway. Conduit electric.....	C. O. Ehlert.....	505,081	Sept. 12	1282	{ 331	64	1526
Railway. Conduit electric.....	H. P. Feltrow.....	493,695	Mar. 21	1485	{ 380	62	1679
Railway. Conduit electric.....	E. H. Johnson.....	509,622	Nov. 28	2755	{ 664	65	1320
Railway. Conduit electric.....	L. A. McCarthy.....	505,841	Oct. 3	60	{ 15	65	14
Railway. Conduit electric.....	J. P. Micheli.....	510,647	Dec. 12	1376	{ 336	65	1682
Railway. Conduit electric.....	G. F. Moffett.....	498,135	May 23	2801	{ 701	63	1168
Railway. Conduit electric.....	H. D. Oler.....	504,847	Sept. 12	893	{ 230	64	1453
Railway. Conduit electric.....	J. Pawolowski.....	508,236	Nov. 7	421	{ 102	65	836
Railway. Conduit electric.....	G. Westinghouse, Jr.....	497,394	May 16	1634	{ 413 414	63	945
Railway. Conduit electric.....	A. Wörner.....	509,421	Nov. 28	2407	{ 583	65	1252
Railway conduit. Electric.....	I. J. Cook.....	501,676	July 18	1824	{ 454	64	363
Railway conduit. Electric.....	W. R. De Voe.....	510,634	Dec. 12	1349	{ 331	65	1677
Railway conduit. Electric.....	S. H. Flagg.....	504,676	Sept. 5	594	{ 151	64	1382
Railway conduit. Electric.....	H. H. Franklin.....	506,993	Oct. 17	2016	{ 498	65	407
Railway conduit. Electric.....	G. F. Green.....	507,493	Oct. 24	2878	{ 706	65	579
Railway conduit. Electric.....	A. H. Heatzman.....	498,169	May 23	2847	{ 712	63	1177
Railway conduit. Electric.....	H. D. Oler.....	511,452	Dec. 26	2791	{ 675	65	1967
Railway conduit. Electric.....	J. L. Reynolds.....	498,189	May 23	2888	{ 720	63	1184
Railway conduit. Electric.....	A. J. Robertson.....	508,578	Nov. 14	992	{ 243	65	958
Railway conduit. Electric.....	G. T. Woods.....	509,065	Nov. 21	1760	{ 434 435	65	1120
Railway conduit. Electric.....	R. R. Zell.....	502,842	Aug. 8	1019	{ 248	64	769
Railway construction	R. W. King.....	499,925	June 20	1970	{ 479	63	1762
Railway converter system	A. Du Bois-Reymond	493,914	Mar. 21	1841	{ 469 470	62	1747

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Railway converter system. Electric.	G. W. von Siemens	502,538	Aug. 1	488	117	64	656
Railway cross-tie	G. Lindenthal	500,266	June 27	2536	620	63	1873
Railway cross-tie. Keyed-spike cast-iron.	B. C. J. McGuire	509,387	Nov. 28	2338	566	65	1240
Railway-crossing	W. S. East	499,455	June 13	1204	287	63	1616
Railway-crossing	H. Elliot	500,706	July 4	277	75	64	52
Railway-crossing	W. C. Fletcher	492,770	Feb. 28	2726	679	62	1340
Railway-crossing	F. A. Johnson	501,721	July 18	1893	470	64	375
Railway-crossing	M. J. Keenan	511,624	Dec. 26	3065	749	65	2017
Railway-crossing	H. O'Shea	498,724	May 30	3817	941	63	1362
Railway-crossing	J. R. Pfanz	492,228	Feb. 21	1865	466	62	1153
Railway-crossing	J. Volk	497,694	May 16	2115	527	63	1030
Railway-crossing alarm	C. T. Frasher	504,719	Sept. 12	665	169	64	1408
Railway-crossing alarm	S. H. Tinsman and C. M. Goold	498,587	May 30	3555	882	63	1317
Railway-crossing alarm or signal	E. C. Potter	501,438	July 11	1444	362	64	278
Railway crossing. Electric.	J. Nelson	504,276	Aug. 29	3347	836	64	1245
Railway-crossing gate	H. W. Albright and S. B. Lenhart	502,341	Aug. 1	148	34, 35	64	592
Railway-crossing gate	B. F. Teal	496,960	May 9	926	243	63	805
Railway-crossing gate and signal	I. Briggs	489,365	Jan. 3	586	158	62	126
Railway-crossing plate	C. Vogt	491,616	Feb. 14	917	231	62	947
Railway-crossings. Automatic safety-gate for	R. C. Rohrer	506,187	Oct. 3	636	162	65	123
Railway-crossings. Combined switch and signal device for	J. Boucher	490,736	Jan. 31	2816	723	62	626
Railway-crossings. Danger-signal for	J. S. Savage, Jr.	495,913	Apr. 18	2230	562	63	445
Railway curve. Cable.	E. S. Hildebrandt	494,635	Apr. 4	172	42	63	35
Railway curve device. Cable.	J. H. Pendleton and C. Tiers	495,056	Apr. 11	822	209	63	172
Railway danger-signal	A. W. Berne	495,193	Apr. 11	1087	270	63	220
Railway danger signal and bell. Electric.	P. Seiler	493,125	Mar. 7	550	137	62	1468
Railway devices. Actuating mechanism for	E. Fontaine	508,928	Nov. 21	1558	382	65	1080
Railway. Electric	M. Cattori	492,659	Feb. 28	2557	633	62	1306
Railway. Electric	J. H. Dale	509,072	Nov. 21	1782	439	65	1124
Railway. Electric	T. A. Edison	509,518	Nov. 28	2591	627	65	1289
Railway. Electric	J. C. Henry	494,477	Mar. 28	2771	695	62	1935
Railway. Electric	J. C. Henry	508,615	Nov. 14	1040	257	65	967
Railway. Electric	R. M. Hunter	497,024	May 9	1023	262	63	820
Railway. Electric	R. M. Hunter	508,388	Nov. 7	669	164	65	882
Railway. Electric	D. E. Kimball	489,563	Jan. 10	906	236	62	204
Railway. Electric	E. W. Mitchell	490,975	Jan. 31	3205	819	62	701
Railway. Electric	J. H. Vail	509,002	Nov. 21	1671	411	65	1103
Railway electric conduit	J. I. Conklin	504,104	Aug. 29	3066	767	64	1192
Railway. Electric elevated	A. L. Rutter	489,330	Jan. 3	528	143	62	114
Railway electric signal. Automatic	B. A. Karr and C. H. Bradrick	508,946	Nov. 21	1591	389	65	1086
Railway. Elevated	A. C. Albertsen	496,505	May 2	174	49	63	651
Railway. Elevated	J. F. Cranston	506,770	Oct. 17	1656	415	65	340
Railway. Elevated	L. Johnston	508,478	Nov. 14	816	203	65	924
Railway. Elevated	J. G. D. Tucker	493,132	Mar. 7	559	139	62	1469
Railway. Elevated	J. N. Valley	506,570	Oct. 10	1330	333	65	267
Railway. Elevated	J. N. Valley	511,179	Dec. 19	2313	566	65	1868
Railway. Elevated bicycle	G. F. Brott	495,927	Apr. 18	2247	566	63	448
Railway. Elevated cable	W. R. Heylman	493,500	Mar. 14	1151	294	62	1597
Railway. Elevated friction cable	L. F. Cook	496,188	Apr. 25	2636	663	63	537
Railway-express robberies. Means for preventing	T. Schmid and W. Kinkel	493,600	Mar. 14	1336	340	62	1634
Railway-ferry	J. A. and J. E. Irons	496,831	May 2	701	185	63	744
Railway fish-joint	W. Sandford, W. Thornley, and E. Silcocks	507,595	Oct. 31	3090	754	65	630
Railway foot-guard	O. L. Durdinger	501,927	July 25	2235	558	64	450
Railway foot-guard	W. B. Mitchell and F. Benberger	490,560	Jan. 24	2535	653	62	556
Railway foot-guard	M. Riley	493,649	Mar. 21	1412	358	62	1664
Railway-frog	C. C. Andress	494,115	Mar. 28	2197	561	62	1829
Railway-frog	N. W. Boyd	505,022	Sept. 12	1172	301	64	1506
Railway-frog	N. W. Boyd	505,023	Sept. 12	1175	301	64	1506
Railway-frog	D. Horrie	491,642	Feb. 14	1261	313	62	1016
Railway-frog	J. McKinnon	489,979	Jan. 17	1552	406	62	349
Railway-frog	J. Neafie	497,455	May 16	1732	437	63	962
Railway-frog	A. W. Paige	497,456	May 16	1733	437	63	962
Railway-frog	I. B. West	501,033	July 4	784	205	64	143
Railway-frog	J. Wood	494,768	Apr. 4	377	94	63	75
Railway-frog clamp	F. C. Weir	507,863	Oct. 31	3528	867	65	713
Railway-frog foot-guard	C. H. Triphagen	498,199	May 23	2914	725	63	1188
Railway-frog pattern	S. H. Stupakoff	492,638	Feb. 28	2521	624	62	1300
Railway-frog. Spring	O. F. Jordan	501,946	July 25	2258	564	64	455
Railway-frogs, &c. Foot-guard for	W. A. Brownson	506,413	Oct. 10	1077	267	65	217
Railway-frogs. Machine for the manufacture of	J. R. Moore	509,442	Nov. 28	2462	592	65	1265
Railway-gate	E. Currier	493,577	Mar. 14	1294	330	62	1627
Railway-gate	R. C. Douglass	499,878	June 20	1900	461	63	1750
Railway-gate	R. C. Douglass	501,926	July 25	2234	558	64	450
Railway-gate	J. H. Fitzgerald	504,974	Sept. 12	1099	281	64	1492
Railway-gate	J. Harper	499,360	June 13	1032	249	63	1585
Railway-gate	J. Mills	489,131	Jan. 3	228	61	62	52
Railway-gate	W. J. O'Beirne	495,361	Apr. 11	1349	338	63	267
Railway-gate	C. K. Stearns	492,452	May 30	3339	831	63	1279
Railway-gate. Automatic	E. A. Chapel	490,801	Jan. 31	2921	751	62	645

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Railway-gate. Automatic	F. A. Curtis	491,472	Feb. 7	677	170	62	875
Railway grade-crossing device. Electric	J. B. Stewart	499,805	June 20	1771	429	63	1728
Railway. Gravity	W. R. Rightor	494,595	Apr. 4	113	26	63	24
Railway grip. Cable	J. B. Mahaffey	489,870	Jan. 10	1344	351	62	294
Railway gripper. Cable	P. T. Taylor	498,325	May 30	3134	781	63	1242
Railway gripping device. Cable	R. A. McCauley	491,439	Feb. 7	624	156	62	867
Railway guard. Elevated	J. H. Sullivan	495,850	Apr. 18	2134	536	63	427
Railway guard-rail	E. A. Trapp	490,325	Jan. 24	2147	560 561	62	480
Railway-heating apparatus	N. W. Williams	492,129	Feb. 21	1696	423	62	1117
Railway-indicator. Conductor's	B. W. Carrington	499,517	June 13	1309	308	63	1633
Railway-joint	J. S. Brown	503,071	Aug. 8	1336	342	64	836
Railway-joint box	E. E. Smith	491,787	Feb. 14	1178	295	62	999
Railway-joint connection	M. Hubbell	503,239	Aug. 15	1673	411	64	901
Railway joints. Joint-box for street	E. O. Evans	492,885	Mar. 7	180	43, 44	62	1394
Railway lock-switch	J. Wilson and H. Hain	510,750	Dec. 12	1541	382 383	65	1714
Railway. Marine	E. Kaye	494,066	Mar. 21	2102	536	62	1796
Railway motor. Electric	E. D. Priest	508,633	Nov. 14	1071	265	65	974
Railway. Overhead electric	J. C. Henry	499,112	June 6	627	150 151	63	1499
Railway. Overhead electric	J. C. Henry	501,009	July 4	747	196	64	136
Railway. Overhead electric	R. M. Hunter	497,025	May 9	1025	262	63	821
Railway. Overhead electric	W. D. Patterson	497,337	May 16	1547	389 390	63	929
Railway-point and signal apparatus. Interlocking	W. G. Scott	506,266	Oct. 10	810	200	65	165
Railway pumping machinery. Automatic	H. D. Layman	490,666	Jan. 31	2714	698	62	606
Railway pumping mechanism. Automatic	H. D. Layman	489,962	Jan. 17	1523	398	62	344
Railway rack-rail	M. M. Suppes	496,017	Apr. 25	2379	602	63	489
Railway-rail	E. R. Esmond	500,688	July 4	249	67	64	47
Railway-rail	H. Greer	489,948	Jan. 17	1507	393	62	340
Railway-rail	M. J. Keenan	507,012	Oct. 17	2050	506	65	414
Railway-rail	C. L. Travis	510,391	Dec. 5	909	218	65	1583
Railway rail and chair	H. C. Evans	492,464	Feb. 28	2232	558 559	62	1241
Railway rail and chair and uniting same	H. E. Ford	495,967	Apr. 25	2307	583	63	474
Railway rail and chair and uniting same	A. J. Moxham	498,074	May 23	2712	678	63	1152
Railway-rail and metallic cross-tie	W. S. Ward	497,562	May 16	1909	481	63	994
Railway-rail and support	A. J. Moxham	495,986	Apr. 25	2335	590	63	479
Railway-rail bender	A. L. Stanford	497,288	May 9	1459	367	63	897
Railway-rail box-bridge joint	E. Samuel	502,587	Aug. 1	566	135	64	670
Railway-rail brace	D. Markley	508,575	Nov. 14	987	242	65	957
Railway-rail brace	W. E. Williams	491,152	Feb. 7	140	38	62	776
Railway-rail brace and tie-plate	C. B. Macneal	492,817	Mar. 7	71	17	62	1371
Railway-rail brace-chair	W. M. Brown	494,243	Mar. 28	2407	607	62	1868
Railway-rail brake	S. M. J. House	501,010	July 4	749	196	64	136
Railway-rail chair	A. J. Moxham	495,985	Apr. 25	2334	590	63	479
Railway-rail chair	A. J. Moxham	500,931	July 4	618	163	64	113
Railway-rail chair	F. P. Reilly	504,818	Sept. 12	845	217	64	1442
Railway-rail. Compound	J. C. Telfer	500,825	July 4	464	122	64	85
Railway-rail girder-joint	M. M. Suppes	496,916	May 9	867	228	63	794
Railway-rail fastening	L. E. Whipple	511,226	Dec. 19	2385	581	65	1881
Railway-rail joint	L. Burkhardt	510,381	Dec. 5	883	212 213	65	1578
Railway-rail joint	T. J. Gilmartin	504,302	Aug. 29	3387	847	64	1252
Railway-rail joint	F. Herman	504,981	Sept. 12	1113	285	64	1493
Railway-rail joint	L. W. Kennedy	510,268	Dec. 5	714	173	65	1545
Railway-rail joint	P. Pearson and J. Robinson	494,223	Mar. 28	2377	600	62	1863
Railway-rail joint	J. Schmidt	501,159	July 11	1009	256 257	64	197
Railway-rail joint	H. P. Stearns	497,834	May 23	2330	584	63	1085
Railway-rail joint	S. F. Stever	492,848	Mar. 7	115	29	62	1380
Railway-rail joint and fastening	P. P. Smith	498,049	June 6	534	126	63	1484
Railway-rail joint and support, &c	H. E. Ford	505,978	Oct. 3	273	72	65	54
Railway-rail joints. Angle-bar for	F. S. Ketchum	504,967	Aug. 29	2998	749	64	1179
Railway-rail safety-plate	G. P. Osborne	502,633	Aug. 1	642	153 154	64	685
Railway-rail-splashing apparatus	G. Mack	505,205	Sept. 19	1478	385	64	1574
Railway-rail splice	A. McHugh	508,900	Nov. 14	1465	362	65	1048
Railway-rail splice	W. J. Williams	493,802	Mar. 21	1672	426	62	1716
Railway rail. Street	W. T. Jennings	494,144	Mar. 28	2249	573	62	1839
Railway-rail support	A. J. Moxham	505,989	Oct. 3	295	76	65	57
Railway-rail tie and chair	P. Wheeler	503,184	Aug. 15	1590	390	64	886
Railway-rail tie-dog	J. T. Feindel	496,254	Apr. 25	2745	686	63	556
Railway-rails and uniting same	A. J. Moxham	497,808	May 23	2287	575	63	1078
Railway-rails. Automatic lock-joint for	J. L. Pope	492,558	Feb. 28	2393	594 595	62	1275
Railway-rails. Combined nut-lock and electrical connection for	A. L. Johnson	497,963	May 23	2540	635	63	1122
Railway rails. Fish-plate joint for street	E. Samuel	489,878	Jan. 10	1356	353 354	62	296
Railway-rails. Guard for adjacent	H. Lither	495,943	Apr. 18	2269	571	63	452
Railway-rails. Manufacture of steel	H. A. Harvey	506,689	Oct. 17	1513	380	65	314
Railway rails. Removable cap for street	J. A. Eno	491,538	Feb. 14	780	199	62	919
Railway-rails, their joints and chairs. Constructing and assembling	A. H. Emery	496,555	May 2	258	68, 69	63	666
Railway rolling-stock. Guide attachment for	T. E. W. Fay	494,418	Mar. 28	2687	674	62	1920
Railway semaphore. Street	L. E. Clawson	496,639	May 2	395	107	63	691
Railway series system	G. L. Thomas	491,691	Feb. 14	1027	259	62	971
Railway-signal	G. F. Adams and J. S. Lynam	490,220	Jan. 17	1962	514	62	431
Railway-signal	W. F. Z. Desant	489,629	Jan. 10	997	260	62	222
Railway-signal	J. E. Geary	489,736	Jan. 10	1152	298 299	62	252

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Railway-signal	I. L. Green	490,626	Jan. 24	2636	{ 678 679 569 570	{ 62	576
Railway-signal	S. H. Harrington	495,938	Apr. 18	2262	{ 173 173 62	{ 63	451
Railway-signal	C. M. Havey	493,211	Mar. 7	678	{ 173	{ 62	1492
Railway-signal	F. N. Kelsey	491,754	Feb. 14	1120	{ 283	{ 62	989
Railway-signal	A. G. Leonard	502,441	Aug. 1	325	{ 77	{ 64	626
Railway-signal	J. A. Rogers	510,297	Dec. 5	761	{ 185	{ 65	1554
Railway-signal	J. W. Steele	498,264	June 6	197	{ 48, 49	{ 63	1428
Railway-signal	J. B. Stewart and W. G. Wattson	498,865	June 6	202	{ 49	{ 63	1429
Railway-signal	A. D. Vinton	499,484	June 13	1241	{ 296 297	{ 63	1622
Railway-signal	J. Wayland	501,307	July 11	1222	{ 309 310	{ 64	237
Railway-signal	J. Wayland	503,299	Aug. 15	1773	{ 438	{ 64	919
Railway-signal	M. Williams	501,126	July 11	954	{ 243	{ 64	188
Railway-signal	E. T. Zohrab	506,146	Oct. 3	547	{ 142 143	{ 65	106
Railway signal and crossing-gate	J. S. Berry	502,394	Aug. 1	242	{ 57, 58	{ 64	610
Railway signal apparatus	J. C. G. Mugnier	500,668	July 4	225	{ 58, 59	{ 64	43
Railway-signal. Automatic	C. Borghese	497,530	May 16	1857	{ 468	{ 63	994
Railway-signal. Automatic	T. J. Cope	495,308	Apr. 11	1269	{ 317	{ 63	253
Railway-signal. Automatic	W. Daves and W. H. Peddle	496,473	May 2	130	{ 35	{ 63	642
Railway-signal. Automatic	J. Frysinger	491,061	Jan. 31	3350	{ 855	{ 62	732
Railway-signal. Automatic	J. G. Hartman and E. Baker	499,165	June 6	707	{ 169	{ 63	1513
Railway-signal. Auto-mechanical	G. L. Cady	495,691	Apr. 18	1881	{ 471	{ 63	381
Railway-signal. Cable	J. Sachs	511,163	Dec. 19	2921	{ 558	{ 65	1262
Railway-signal connection	J. P. Annett	497,758	May 23	2224	{ 557	{ 63	1067
Railway-signal. Electric	J. Bradford and J. P. Williams	493,678	Mar. 21	1457	{ 372	{ 62	1674
Railway-signal. Electric	A. B. Herrick	507,125	Oct. 24	2245	{ 554 555	{ 65	462
Railway-signal. Electric	W. H. Jordan	497,408	May 16	1657	{ 418	{ 63	949
Railway-signal. Electric	H. V. and A. C. Miller	493,935	Mar. 21	1877	{ 478	{ 62	1754
Railway-signal. Electric	J. Ortega y Espinosa	511,131	Dec. 19	2233	{ 547 548 549	{ 65	1854
Railway-signal. Electric	F. E. Seagrave	504,542	Sept. 5	384	{ 96, 97	{ 64	1342
Railway-signal. Electric	H. S. Wait	492,645	Feb. 28	2531	{ 627 628	{ 62	1302
Railway-signal. Electrical	S. W., A. C., and H. V. Miller	494,111	Mar. 21	2185	{ 559	{ 62	1813
Railway-signal. Electrical	B. C. Seaton	503,100	Aug. 8	1437	{ 354 355	{ 64	845
Railway signal-flag	E. S. Piper	492,229	Feb. 21	1866	{ 466	{ 62	1153
Railway-signal-locking apparatus	R. G. Marks	496,165	Apr. 25	2603	{ 855	{ 63	531
Railway-signal setting and releasing mechanism. Automatic	A. Schaub	497,556	May 16	1895	{ 477 478	{ 63	991
Railway signal system	G. L. Thomas and E. C. Seward	500,827	July 4	469	{ 123 124	{ 64	86
Railway signal system	G. L. Thomas and E. C. Seward	508,356	Nov. 7	611	{ 150 151	{ 65	572
Railway-signals. Electro-mechanical slot mechanism for	T. H. Patenall	509,093	Nov. 21	1835	{ 449	{ 65	1134
Railway signaling	I. A. Timmis	503,505	Aug. 15	2098	{ 524	{ 64	977
Railway signaling apparatus	J. K. Byler	491,798	Feb. 14	1197	{ 299	{ 62	1003
Railway signaling apparatus	J. Orme	503,981	Aug. 29	2863	{ 718	{ 64	1154
Railway signaling apparatus	R. Pfeil	501,100	July 11	908	{ 232 233	{ 64	180
Railway signaling. Electric circuit for	L. Thaler	491,387	Feb. 7	544	{ 138	{ 62	852
Railway signaling. Interlocking apparatus for	S. T. Dutton	429,940	Jan. 17	1492	{ 390	{ 62	337
Railway signaling. Interlocking apparatus for	S. T. Dutton	503,530	Aug. 15	2136	{ 536	{ 64	984
Railway signaling. Safety block system for	W. R. Sykes, Jr., and J. P. O'Donnell	497,836	May 23	2332	{ 585	{ 63	1086
Railway sleeper-block	R. D. Culver	495,396	Apr. 11	1403	{ 353	{ 63	277
Railway-sleeper. Metallic	H. G. Davis	500,473	June 27	2851	{ 702	{ 63	1929
Railway slot-brake. Conduit	W. M. Hood	507,366	Oct. 24	2682	{ 659	{ 65	541
Railway-spike	J. Churchward	492,527	Feb. 28	2344	{ 582	{ 62	1263
Railway-spike	J. L. Gage	508,877	Nov. 14	1435	{ 356	{ 65	1043
Railway-spike	S. C. Hill	491,050	Jan. 31	3338	{ 851	{ 62	729
Railway-spike	I. C. Howes	490,439	Jan. 24	2318	{ 601	{ 62	513
Railway-spline	W. Quinn and J. S. Berry	494,083	Mar. 21	2134	{ 546	{ 62	1803
Railway supply system. Electric	G. F. Green	504,977	Sept. 12	1104	{ 282 283	{ 64	1492
Railway supply system. Electric	J. C. Henry	509,312	Nov. 21	2195	{ 528	{ 65	1203
Railway supply system. Electric	W. F. Jenkins	502,858	Aug. 8	1041	{ 255	{ 64	772
Railway supply system. Electric	G. T. Woods	507,606	Oct. 31	3104	{ 758 759	{ 65	634
Railway support or substructure	J. M. Price	507,688	Oct. 31	3239	{ 793	{ 65	659
Railway surface cattle-guard	W. C. Nunn	492,424	Feb. 28	2164	{ 541	{ 62	1226
Railway surface stock-guard	L. S. Gardner. (Reissue)	11,338	May 16	2217	{ 555	{ 63	1050
Railway. Suspended	B. J. Gagnier	495,246	Apr. 11	1178	{ 295 321 322 323	{ 63	216
Railway sweeper. Electric street	J. W. Fowler and J. Hutton	495,321	Apr. 11	1283	{ 322 323	{ 63	256
Railway-switch	V. Angerer	504,649	Sept. 5	536	{ 137	{ 64	1371
Railway-switch	T. Braley	495,011	Apr. 11	756	{ 192	{ 63	160
Railway-switch	H. B. Büttel and W. H. Colson	496,996	May 9	981	{ 254	{ 63	813
Railway-switch	D. M. Church. (Reissue)	11,390	Nov. 21	2275	{ 551	{ 65	1217
Railway-switch	V. Crusier	508,413	Nov. 14	716	{ 176	{ 65	904
Railway-switch	M. F. Dellac	495,025	Apr. 11	778	{ 198	{ 63	164
Railway-switch	G. E. Draper	497,913	May 23	2469	{ 616	{ 63	1109
Railway-switch	E. B. Entwistle	508,095	Nov. 7	194	{ 52	{ 65	795
Railway-switch	C. M. Fitch	490,190	Jan. 17	1906	{ 496	{ 62	421
Railway-switch	C. M. Fitch	493,991	Mar. 21	1984	{ 506	{ 62	1774

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Railway-switch	J. F. Hendrikson	507,616	Oct. 31	3122	763	65	638
Railway-switch	S. J. Johnson	500,393	June 27	2743	674 675	63	1910
Railway-switch	R. C. Kuhn and A. Klitsche	506,437	Oct. 10	1118	278 279	65	226
Railway-switch	A. F. Letson	489,536	Jan. 10	866	227	62	196
Railway-switch	J. C. McLaughlin	510,144	Dec. 5	509	116	65	1506
Railway-switch	R. Nash	493,179	Mar. 7	633	160	62	1482
Railway-switch	N. Peat	501,660	July 18	1795	447	64	358
Railway-switch	H. Rich	494,441	Mar. 28	2717	681	62	1925
Railway-switch	A. P. Stevens	497,355	May 16	1579	397 398	63	935
Railway-switch	L. V. Stevens and J. R. Mott	501,112	July 11	932	239	64	184
Railway-switch	J. M. Swen	497,289	May 9	1459	367 368	63	897
Railway-switch	W. and G. E. Thurtle	491,500	Feb. 7	714	151	62	886
Railway-switch	J. R. Titman	496,624	May 2	365	99 100	63	686
Railway-switch	W. Wharton, Jr.	505,075	Sept. 12	1273	327 328	64	1524
Railway switch and crossing. Electric	W. W. Hendrix	511,017	Dec. 19	2046	506	65	1816
Railway-switch. Automatic	G. N. Einsele and G. W. De Grasse	492,790	Mar. 7	28	7	62	1364
Railway-switch. Automatic	C. S. Hoenes	511,425	Dec. 26	2747	664	65	1959
Railway-switch. Automatic	J. H. Quimby	506,606	Oct. 10	1379	346	65	276
Railway-switch. Automatic	G. W. Stevens	502,475	Aug. 1	378	90	64	636
Railway-switch. Automatic	M. A. Weathers	501,263	July 11	1161	294 295	64	226
Railway-switch. Automatic safety	H. C. O. Gruhlke	489,583	Jan. 10	935	242	62	209
Railway-switch. Automatic safety	H. C. O. Gruhlke	507,495	Oct. 24	2286	709 710	65	580
Railway switch. Electric	E. M. Bentley	508,672	Nov. 14	1126	278	65	985
Railway switch. Electric	A. C. Goetz	489,944	Jan. 17	1498	391	62	338
Railway switch. Electric	E. F. Stone	497,061	May 9	1083	278	63	832
Railway-switch. Electrically-operated	P. Evans	493,918	Mar. 21	1848	471	62	1749
Railway-switch. Electrically-operated	H. L. Falco	510,384	Dec. 5	886	214	65	1578
Railway-switch. Electrically-operated	C. A. Stone and E. S. Webster	511,173	Dec. 19	2301	564	65	1866
Railway-switch. Frogless	F. Schultz, Jr.	503,440	Aug. 15	1992	494	64	958
Railway-switch. Frogless automatic	J. H. Bazemore	507,874	Oct. 31	3543	871 872	65	716
Railway-switch lock	F. Viering	505,804	Sept. 26	2512	634	64	1782
Railway-switch lock. Automatic	G. Brocke	500,796	July 4	423	111	64	78
Railway switch mechanism	W. J. Ward	498,337	May 30	3150	786	63	1245
Railway-switch safety-lock	J. E. Sandelin	490,616	Jan. 24	2600	670	62	569
Railway-switch. Safety self-closing	D. T. McIntyre	506,602	Oct. 10	1373	344	65	275
Railway switch. Street	P. J. Boris	505,077	Sept. 12	1276	328 329	64	1524
Railway switch. Street	D. F. Doody	496,725	May 2	527	140	63	715
Railway switch. Street	J. B. Gough	497,569	May 16	1918	483	63	995
Railway switches and signals. Electric controlling and locking mechanism for	C. M. Wilder	501,701	July 18	1861	463 464	64	370
Railway-switches. Trip for automatic	J. L. Morris and J. P. Nace	492,042	Feb. 21	1571	391	62	1092
Railway switching mechanism. Electric	C. J. Kintner	511,627	Dec. 26	3068	750	65	2018
Railway system	L. Beecher	507,402	Oct. 24	2737	672	65	552
Railway system	C. Carr	500,992	July 4	719	189	64	131
Railway system. Electric	C. T. B. Brain	508,083	Nov. 7	167	47, 48	65	789
Railway system. Electric	T. Harris	490,248	Jan. 17	2008	525	62	440
Railway system. Electric	T. Harris	493,623	Mar. 14	1370	348	62	1640
Railway system. Electric	J. C. Henry	500,068	June 20	2189	533 534	63	1801
Railway system. Electric	H. A. Lewis	506,124	Oct. 3	506	131 132	65	99
Railway system. Electric	F. S. Perrino	500,943	July 4	630	166	64	115
Railway system. Electric	C. J. Reed	500,104	June 20	2239	545 546	63	1809
Railway system. Electric	G. W. von Siemens	502,539	Aug. 1	491	117	64	657
Railway system. Elevated	B. F. Barnes	510,878	Dec. 19	1810	448	65	1773
Railway system. Elevated	L. F. Cook	496,189	Apr. 25	2638	664	63	537
Railway system. Elevated	C. Drill and H. J. Schmitt	490,549	Jan. 24	2499	643 644	62	549
Railway system. Multiphase	F. B. Badt	489,597	Jan. 10	956	248 249	62	213
Railway-tie	N. Benjamin	505,019	Sept. 12	1168	300	64	1505
Railway-tie	N. Benjamin	505,020	Sept. 12	1170	300	64	1505
Railway-tie	H. D. Dasher	491,041	Jan. 31	3324	848	62	725
Railway-tie	C. A. Gildemeyer	491,048	Jan. 31	3336	850	62	728
Railway-tie	W. R. Kinnear	495,045	Apr. 11	809	204	63	170
Railway-tie	S. McElfattrick	490,586	Jan. 24	2545	655	62	558
Railway-tie	S. McElfattrick	497,678	May 16	2083	520	63	1025
Railway-tie	H. V. and T. Slutz	492,895	Mar. 7	194	48	62	1397
Railway-tie	C. E. Steiner	507,179	Oct. 24	2361	583	65	481
Railway-tie	L. E. Whipple	511,227	Dec. 19	2326	582	65	1881
Railway-tie	W. W. Whitaker	499,071	June 6	567	135	63	1490
Railway tie and chair	G. Tarrant	492,446	Feb. 28	2198	550	62	1233
Railway-tie and fastening	H. B. Rowland	502,638	Aug. 1	654	159	64	687
Railway-tie and fastening	H. B. Rowland	502,639	Aug. 1	655	160	64	687
Railway-tie and fastening	H. B. Rowland	505,484	Sept. 26	1924	496	64	1672
Railway-tie and means for securing track-rails thereto	T. M. Brintnall and H. C. Bradley	511,316	Dec. 19	2538	618	65	1909
Railway-tie. Metal	H. A. Do Raimes	511,072	Dec. 19	2129	526	65	1832
Railway-tie. Metal	C. L. Fitzhugh and S. S. Babbitt	493,492	Mar. 14	1136	291	62	1505
Railway-tie. Metallic	E. D. Bangs	494,314	Mar. 28	2513	634	62	1888
Railway-tie. Metallic	T. J. Bronson and A. Armstrong	491,922	Feb. 14	1384	346	62	1041
Railway-tie. Metallic	F. S. Ketchum	504,066	Aug. 29	2996	748 749	64	1178
Railway-tie. Metallic	J. P. Lancaster	502,464	Aug. 1	358	86	64	632

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Railway-tie. Metallic	A. E. Roberts	494,029	Mar. 21	2045	{ 521 522 }	62	1786
Railway-tie. Metallic	E. Siskron	504,695	Sept. 5	629	160	64	1389
Railway-tie. Metallic	A. W. Straub	492,121	Feb. 21	1686	420	62	1115
Railway-tie. Metallic	C. Worden	499,077	June 6	576	137	63	1491
Railway tie or sleeper. Metallic	C. B. Macneal	503,054	Aug. 8	1363	336	64	031
Railway-tie plate	J. S. Fox	496,115	Apr. 25	2534	640	63	517
Railway-tie plate	W. W. Holmes	495,807	Apr. 18	2066	522	63	414
Railway-tie plates. Making	W. Pfefferkorn	510,047	Dec. 5	349	78	65	1475
Railway-tie plates. Making	B. Reese	494,692	Apr. 4	261	66	63	52
Railway-tie plates. Making	W. W. Worthington	506,963	Oct. 17	1972	488	65	399
Railway-ties, &c. Composition of matter for	W. P. Emery	495,581	Apr. 18	1705		63	353
Railway time and block signal	A. H. Thorp	507,510	Oct. 24	2917	717	65	586
Railway time-signal	E. H. Adams	509,785	Nov. 28	3016	729	65	1370
Railway time-signal	A. C. Gordon	493,083	Mar. 7	4-3	121	62	1455
Railway time-signal	A. C. Gordon	507,492	Oct. 24	2876	705	65	579
Railway time-signal	B. B. Morgan	494,509	Mar. 28	2927	709	62	1946
Railway time-signal	B. B. Morgan	511,307	Dec. 19	2532	614	65	1905
Railway torpedo-signal	H. F. Clark	493,482	Mar. 14	1121	{ 287 288 }	62	1592
Railway-track	C. Köpcke	494,718	Apr. 4	300	76	63	60
Railway-track	A. J. Moxham	495,987	Apr. 25	2336	591	63	480
Railway-track	A. J. Moxham	508,038	Nov. 7	87	25	65	774
Railway-track	J. Murnane	499,139	June 6	664	160	63	1506
Railway-track	J. Wallace	498,336	May 30	3149	786	63	1245
Railway-track cleaner. Electric	H. O'Connor	508,743	Nov. 14	1227	306	65	1005
Railway-track-cleaner. Street	E. Clark and A. F. Ogren	498,622	May 30	3625	897	63	1329
Railway-track electric annunciator	J. W. Lattig	502,627	Aug. 1	635	152	64	683
Railway-track jack and liner	E. D. Moriarty	494,155	Mar. 28	2266	575	62	1841
Railway-track sleeper	C. J. Oliver	495,004	Apr. 4	742	188	63	142
Railway track. Street	W. C. Wood	511,068	Dec. 19	2118	523	65	1831
Railway-track structure	E. Samuel and V. Angerer	497,554	May 16	1893	477	63	990
Railway-track sweeper	G. E. Fleming	496,049	Apr. 25	2437	615	63	498
Railway-track tamping-machine	N. A. Evans	504,063	Aug. 29	2992	748	64	1177
Railway-track tie. Metal	M. Fitzgerald	497,954	May 23	2530	632	63	1120
Railway-track tie-rod	A. J. Moxham	492,469	Feb. 28	2240	560	62	1942
Railway-tracks. Device for preventing spreading of	A. H. Newpher	491,441	Feb. 7	625	157	62	867
Railway-tracks. Train-stopping mechanism for	J. B. Gross	503,111	Aug. 8	1458	{ 358 359 }	64	848
Railway-train arrester. Automatic	J. Frysinger	492,152	Feb. 21	1742	434	62	1127
Railway-train arrester. Automatic	J. Frysinger	492,153	Feb. 21	1744	{ 434 435 }	62	1128
Railway-train arrester. Automatic	J. Frysinger	492,154	Feb. 21	1746	435	62	1128
Railway-train arrester. Automatic	J. Frysinger	492,155	Feb. 21	1748	435	62	1129
Railway train order and signaling device	L. T. Crabtree	491,837	Feb. 14	1249	312	62	1014
Railway-train order and signaling device	L. T. Crabtree	509,201	Nov. 21	2000	486	65	1166
Railway-train protector	L. E. C. J. Beerstecher	507,349	Oct. 24	2652	652	65	536
Railway-train safety-buffer	W. Neuman	503,270	Aug. 15	1723	425	64	910
Railway-train signal	I. N. Peirce	489,418	Jan. 3	662	179	62	142
Railway-trains. Apparatus for automatically stopping	E. W. Robinson	492,837	Mar. 7	96	24	62	1376
Railway-trains. Automatic reversing device for	W. Weaver	504,766	Sept. 12	752	{ 187 188 }	64	1425
Railway-trains. Device for automatically stopping	J. H. Fox	507,976	Oct. 31	3704	920	65	746
Railway-trains. Electric alarm-signal for	J. M. Rupel	507,170	Oct. 24	2342	576	65	478
Railway-trains. Smoke, dust, or cinder guard for use on	O. F. Goodwin	498,166	May 23	2844	711	63	1176
Railway transfer-table	A. J. Moxham	500,929	July 4	615	{ 160 161 }	64	112
Railway-trolley base. Electric	O. Rau	502,530	Aug. 1	476	114	64	654
Railway trolley. Conduit	H. A. Goreham	508,104	Nov. 7	205	54	65	797
Railway-trolley. Conduit	P. C. Just	497,377	May 16	1609	407	63	941
Railway trolley. Conduit	P. C. Just	510,142	Dec. 5	506	115	65	1505
Railway trolley. Conduit	J. C. Love	511,342	Dec. 26	2587	630	65	1931
Railway trolley. Conduit	J. C. Love	511,343	Dec. 26	2589	{ 631 632 }	65	1931
Railway-trolley. Conduit	M. H. Smith	498,906	June 6	283	66	63	1442
Railway-trolley. Conduit	E. P. Warner	500,306	June 27	2609	{ 636 637 }	63	1886
Railway trolley. Electric	E. H. Allen	498,046	May 23	2673	668	63	1145
Railway trolley. Electric	N. C. Bassett	508,669	Nov. 14	1123	277	65	985
Railway trolley. Electric	G. H. Benjamin	506,463	Oct. 10	1161	288	65	234
Railway trolley. Electric	J. Chase	508,538	Nov. 14	923	226	65	944
Railway trolley. Electric	A. Dickinson	491,988	Feb. 21	1485	{ 370 371 }	62	1075
Railway trolley. Electric	W. Duncan	495,695	Apr. 18	1885	{ 472 473 }	63	382
Railway trolley. Electric	S. D. Field	508,539	Nov. 14	924	227	65	945
Railway trolley. Electric	J. R. Griffiths	498,933	June 6	326	76	63	1450
Railway trolley. Electric	F. Heath	495,035	Apr. 11	794	201	63	167
Railway trolley. Electric	W. W. Hendrix	511,018	Dec. 19	2048	{ 506 507 }	65	1816
Railway trolley. Electric	W. W. Hendrix	511,019	Dec. 19	2049	507	65	1817
Railway trolley. Electric	J. C. Henry	500,070	June 20	2192	{ 534 535 }	63	1801
Railway trolley. Electric	G. W. Hooper	499,115	June 6	634	152	63	1501
Railway trolley. Electric	G. A. Huben	507,733	Oct. 31	3303	808	65	672
Railway trolley. Electric	R. M. Hunter	498,435	May 30	3305	824	63	1273
Railway trolley. Electric	E. H. Jenkins	489,481	Jan. 10	774	204	62	178
Railway trolley. Electric	W. H. Knight	508,622	Nov. 14	1048	259	65	969
Railway trolley. Electric	B. and A. Kochs	491,361	Feb. 7	505	130	62	844
Railway trolley. Electric	E. Martyn	494,721	Apr. 4	304	77	63	61
Railway trolley. Electric	R. D. Nuttall	498,723	May 30	3817	941	63	1362

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Railway trolley. Electric.	P. F. O'Shaughnessy	498,403	May 30	3254	{ 810 811	{ 63	1264
Railway trolley. Electric.	A. Palmros	504,113	Aug. 29	3080	771	64	1195
Railway trolley. Electric.	W. W. Pritchett	496,280	Apr. 25	2783	696	63	564
Railway trolley. Electric.	J. Reutlinger	489,234	Jan. 3	391	108	62	87
Railway trolley. Electric.	E. R. Robinson	505,370	Sept. 19	1740	451	64	1623
Railway trolley. Electric.	J. F. Saitz	493,789	Mar. 21	1640	418	62	1710
Railway trolley. Electric.	E. A. Sperry	501,968	July 25	2291	573	64	460
Railway trolley. Electric.	F. J. Sprague and P. F. O'Shaughnessy	504,255	Aug. 29	3314	{ 828 829	{ 64	1237
Railway trolley. Electric.	C. J. Van Depoele	502,243	July 25	2744	693	64	546
Railway trolley-support. Electric.	J. M. Andersen	506,617	Oct. 10	1394	350	65	280
Railway trolley-switch. Electric.	J. H. Allison	503,570	Aug. 22	2211	553	64	1013
Railway. Underground electric	J. B. Sheldon, D. J. Murnane, and G. L. Van Beek	489,764	Jan. 10	1200	{ 314 315	{ 62	264
Railway-vehicle	J. J. D. Cleminson	511,684	Dec. 26	3157	771	65	2035
Railway-vehicle	J. J. D. Cleminson	511,685	Dec. 26	3158	772	65	2035
Railway-yoke	M. S. Towson	490,690	Jan. 31	2749	708	62	612
Railways and shippers against loss of freight. Means for securing	J. B. Mockridge	493,595	Mar. 14	1320	338	62	1632
Railways. Audible signal for	J. G. Hartman and E. Baker	499,166	June 6	711	170	63	1513
Railways. Automatic fog-signal apparatus for	J. G. Dixon	509,796	Nov. 28	3035	{ 733 734	{ 65	1373
Railways. Automatic signal for street	J. G. Hartman and E. Baker	499,163	June 6	703	169	63	1513
Railways. Automatic signal for street	J. G. Hartman and E. Baker	499,164	June 6	705	169	63	1513
Railways. Closed conduit for electric	J. C. Henry	500,065	June 20	2184	532	63	1800
Railways. Closed conduit for electric	C. J. Kintner	498,852	June 6	180	45	63	1424
Railways. Closed conduit for electric	A. J. Martin	497,585	May 16	1937	486	63	998
Railways. Closed conduit for electric	G. W. McNear	505,605	Sept. 26	2176	550	64	1719
Railways. Closed conduit for electric	R. Parker and B. F. Sutton	490,306	Jan. 24	2122	552	62	475
Railways. Closed conduit for electric	G. W. von Siemens	493,948	Mar. 21	1902	485	62	1759
Railways. Closed-conduit system for electric	E. Chabault	509,651	Nov. 28	2797	673	65	1329
Railways. Closed-conduit system for electric	R. H. Elliott	510,850	Dec. 12	1741	430	65	1750
Railways. Closed electric conduit for	A. Heiser	492,398	Feb. 28	2123	530	62	1218
Railways. Conductor system for electric	G. W. von Siemens	489,573	Jan. 10	919	{ 239 240	{ 62	207
Railways. Conduit system for electric	E. Hazelton	493,716	Mar. 21	1513	{ 386 387	{ 62	1684
Railways. Conduit system for electric	F. Wynno	502,216	July 25	2690	679	64	537
Railways. Construction of	E. L. Arnold	493,052	Mar. 7	437	110	62	1445
Railways. Contact for conduit electric	A. Wörner	503,710	Aug. 22	2446	609	64	1056
Railways. Contact for underground electric	W. Q. Previtt	496,896	May 9	830	220	63	787
Railways. Converter system for electric	C. S. Bradley	508,807	Nov. 14	1319	328	65	1022
Railways. Converter system for electric	G. E. Hesse	511,524	Dec. 26	2893	705	65	1988
Railways. Cross-over switch for electric	F. B. Rae	495,615	Apr. 18	1760	441	63	361
Railways. Current-conveyor for electric	W. Lawrence	505,204	Sept. 19	1477	385	64	1574
Railways. Curve or crossing for cable	E. N. Wallis	505,737	Sept. 26	2402	607	64	1760
Railways. Electric closed-conduit system for	G. W. von Siemens	509,403	Nov. 28	2380	577	65	1247
Railways. Electric-distribution system for	N. W. Perry	496,533	May 2	219	58	63	658
Railways. Electric signaling apparatus and system for	J. W. Lattig	499,126	June 6	648	{ 135 136	{ 63	1504
Railways. Electrical supply system for	J. W. Bates	503,566	Aug. 15	2197	549	64	995
Railways. Inclosed conductor for electric	F. C. Perkins	491,132	Feb. 7	104	29	62	769
Railways. Inclosed conductor for electric	J. A. K. McGregor	500,506	June 27	2901	{ 713 714	{ 63	1937
Railways. Leading-piece for overhead electric	H. D. Winton	492,881	Mar. 7	173	42	62	1392
Railways. Means for mounting pulleys in curves of cable	E. A. Hovey	491,559	Feb. 14	818	{ 207 208	{ 62	927
Railways or tramways. Construction of permanent ways for	J. E. Billups	500,366	June 27	2703	663	63	1903
Railways, &c. Permanent way for	A. Ponsard	496,133	Apr. 25	2560	644	63	522
Railways. Permanent way for	S. Rideal	508,243	Nov. 7	430	{ 104 105	{ 65	838
Railways. Permanent way for	S. Rideal	510,295	Dec. 5	750	184	65	1553
Railways. Safety-clutch for inclined	M. C. Littleworth	502,420	Aug. 1	284	68	64	618
Railways. Sectional contact-conductor for electric	G. Westinghouse, Jr	497,436	May 16	1704	{ 430 431	{ 63	957
Railways. Subway for cable	C. Vogel and C. McIntosh	509,833	Nov. 28	3093	747	65	1384
Railways. System for supplying currents to electric	C. Zipernowsky	498,603	May 30	3580	887	63	1322
Railways. System for supplying electricity to	M. H. Smith	500,256	June 27	2521	{ 616 617	{ 63	1871
Railways. Traveling contact for electric	C. J. Van Depoele	495,443	Apr. 11	1478	{ 372 373	{ 63	291
Railways. Underground conduit for electric	C. P. Tatro	489,422	Jan. 3	609	181	62	144
Raisin-seeder	S. B. Bliss	509,649	Nov. 28	2793	672	65	1328
Raisin-seeding device	W. S. Scales	506,340	Oct. 10	941	234	65	191
Raisin-tray turner	M. B. Skaggs	504,254	Aug. 29	3312	827	64	1238
Raisins, &c. Apparatus for stemming and cleaning	E. Niehoff	497,199	May 9	1285	327	63	868
Rake:							
See Buck-rake.	Hay-rake.						
Cornstalk-rake.	Horse-rake.						
Garden-rake.	Lawn-rake.						
Hand-rake.							
Rake	A. J. Chamberlain	494,324	Mar. 28	2529	637	62	1892
Rake	N. J. Felix	491,703	Feb. 14	1045	264	62	974
Rake	W. T. Galt	498,007	May 23	2615	653	63	1135
Rake	W. R. Jenkins	500,004	July 4	580	151	64	106
Rake	W. Klinker	506,597	Oct. 10	1369	343	65	274
Rake	R. J. Schneider	494,897	Apr. 4	589	148	63	114
Rake	W. Strait	503,625	Aug. 22	2318	578	64	1032
Rake and loader	J. S. Byers	509,852	Nov. 28	3130	756	65	1392
Rake or fork	M. H. Rison	495,836	Apr. 18	2113	531	63	423
Rake-tooth-forming machine	J. N. Short	501,217	July 11	1088	{ 276 277	{ 64	214

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Ram. Hydraulic	J. Hillenbrand	495,334	Apr. 11	1307	328	63	260
Rand-turning machine	L. A. Merrithew	494,378	Mar. 28	2627	659	62	1909
Range	G. F. Filley	497,271	May 9	1405	355 356	63	889
Range	N. J. Periolat	493,293	May 30	3092	771	63	1234
Range-boiler	V. Wilhelm	495,236	Apr. 11	1131	289	63	231
Range. Combined cooking and water-heating	A. P. Broomell	498,894	June 6	256	60	63	1438
Range. Cooking	C. E. Darling	509,654	Nov. 28	2801	674	65	1329
Range-indicator	B. A. Fiske	510,417	Dec. 12	950	229	65	1605
Range or stove. Cooking	W. L. Culver	497,709	May 16	2134	533	63	1034
Ranges. Connection with domestic fire or other	E. Marsh	490,573	Jan. 24	2528	651	62	555
Rapping-machine	E. L. Howe	497,498	May 16	1815	457	63	976
Rasp	A. Weed	499,619	June 13	1468	351	63	1661
Rasp-making machine	A. Weed	499,620	June 13	1469	351 352	63	1661
Rasp-punching machines. Cutter-head for	A. Weed	499,621	June 13	1471	352	63	1662
Ratchet brace	H. V. Smith	505,611	Sept. 26	2187	553	64	1722
Ratchet-brace	A. Taylor	490,617	Jan. 24	2601	670	62	569
Ratchet-brace for bits or drills	D. M. Fulton	500,382	June 27	2727	670	63	1907
Ratchet device for tools	P. J. O'Brien	501,957	July 25	2275	569	64	458
Ratchet-drill	E. Anderson	497,261	May 9	1382	350	63	886
Ratchet-drill	C. T. Burr	507,968	Oct. 31	3690	917	65	744
Ratchet-drill	W. Griesser	509,893	Dec. 5	79	20	65	1425
Ratchet-drill	B. M. Kepler	510,542	Dec. 12	1190	286	65	1648
Ratchet-tool	U. Porstendorfer	505,535	Sept. 26	2040	521	64	1693
Ratchet-wrench	W. H. Diedrick	502,410	Aug. 1	270	64	64	615
Ratchet-wrench	E. B. Hvre	509,810	Nov. 28	3060	738	65	1378
Ratchet-wrench	M. F. Killinger	493,273	Mar. 14	786	203	62	1530
Ratchet-wrench	J. Rhine	507,041	Oct. 17	2100	520	65	422
Ratchet-wrench	M. D. Schaller	508,845	Nov. 14	1381	342	65	1033
Ratchet-wrench	G. W. Wood	500,277	June 27	2551	623	63	1876
Rattan or other stock. Machine for splitting	M. E. Moore	500,813	July 4	444	117	64	82
Razor	C. R. Evertz	493,075	Mar. 7	466	118	62	1451
Razor	J. A. Stenberg	489,995	Jan. 17	1582	414	62	355
Razor-strop	W. C. Howard	500,806	July 4	436	114	64	80
Razor-strop	L. T. Sheffield	505,134	Sept. 19	1368	351	64	1555
Razor-strop case	W. F. Smith	508,443	Nov. 14	758	186	65	913
Razor-strops. Composition of matter for leather for	F. Minnis	490,030	Jan. 17	1653		62	369
Razor stropping or honing machine	J. A. Knight	498,662	May 30	3692	912 913	63	1341
Razors, &c. Machine for edging	N. Allgear	492,910	Mar. 7	223	56	62	1402
Reading-stand	F. J. Anderson and W. M. Irick	502,601	Aug. 1	593	141 142	64	675
Reaming-bit	M. R. Moss	505,322	Sept. 19	1665	429	64	1609
Reaper	O. O. Storle	498,323	May 30	3131	721	63	1241
Reaper	O. O. Storle	502,328	Aug. 1	130	29, 30	64	589
Reaper	O. O. Storle	502,329	Aug. 1	132	30	64	589
Reaper or mower	A. Chambers	507,884	Oct. 31	3555	875	65	719
Reapers. Endless sickle for	T. H. Brown	492,322	Feb. 21	2000	498	62	1182
Reaping-machine	L. Jankowski	508,945	Nov. 21	1589	389	65	1086
Reaping or mowing machine	G. Beekman	490,781	Jan. 31	2894	742 743	62	640
Reaping or mowing machine	G. Beekman	490,782	Jan. 31	2896	743 744	62	641
Receipt-form and stripper therefor	W. H. Campbell	490,897	Jan. 31	3081	790	62	678
Receiver and stretch-trap	T. J. Ryan	505,130	Sept. 19	1358	349	64	1553
Reciprocating engine	D. J. Smith	489,766	Jan. 10	1204	316	62	264
Reclining-chair	W. E. Martin and P. Walrad	491,246	Feb. 7	297	75	62	805
Recorder							
See Cash-recorder.	Sales-recorder.						
Fare and time re-	Speed-recorder.						
corider.	Time-recorder.						
Manual recorder.							
Recorder	J. T. Todd	499,610	June 13	1448	347 348	63	1658
Recording and receipting machine	J. F. Schener	489,040	Jan. 3	94	26, 27	62	24
Recording device for calculators, &c.	W. S. Burroughs	505,078	Sept. 12	1278	329	64	1524
Reed for textile machinery	J. M. Simoneau	495,435	Apr. 11	1467	369	63	289
Reeds or cords to the edges of materials. Securing	H. A. Blanchard	496,929	May 9	886	232	63	797
Reel							
See Bolting-reel.	Harvester-reel.						
Fence-machine reel.	Hose-reel.						
Fence-wire reel.	Rod-reel.						
Fishing-reel.	Twine-reel.						
Grain-reel.	Wire-cloth reel.						
Reel	A. J. Carr	489,286	Jan. 3	468	130	62	102
Reel attachment	E. Reynolds	493,518	Mar. 14	1174	300	62	1602
Reel-carrier	F. N. Hoffstaedt and J. F. Springer	489,742	Jan. 10	1167	303 304	62	256
Reel-carrying frame	A. O. Bryce and E. R. Stanton	501,822	July 18	2056	507	64	403
Reel-support and wire-stretcher. Combined	T. Fitzgibbon	492,000	Feb. 21	1503	375	62	1079
Reeling silk	G. Bergier	496,108	Apr. 25	2525	638	63	516
Reflecting and refracting radiant energy. Device for	E. C. Ohmart	504,890	Sept. 12	954	247	64	1464
Reflector and bracket. Lamp	W. S. Nevins	493,284	Mar. 14	811	208	62	1534
Reflector for radiant energy	M. L. Severy	503,004	Aug. 8	1293	316	64	818
Reflector. Light	W. G. Marston	494,339	Mar. 28	2559	645	62	1897
Refrigerating and ice-making machine	F. B. Hill	507,004	Oct. 17	2032	503	65	410
Refrigerating and ice-making machinery	P. I. Schmaltz	504,091	Aug. 29	3038	759	64	1187
Refrigerating apparatus	C. C. Gerlach	507,729	Oct. 31	3298	807	65	671
Refrigerating apparatus	F. B. Hill	505,359	Sept. 19	1720	444	64	1620
Refrigerating apparatus	F. B. Hill	511,239	Dec. 19	2404	586	65	1885
Refrigerating apparatus	D. L. Holden	493,721	Mar. 21	1524	390 391	62	1686
Refrigerating apparatus	E. D. Kendall	502,437	Aug. 1	313	75	64	623

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Refrigerating apparatus	J. Scheuerecker	493,120	Mar. 7	542	{ 135 136 146 147 }	62	1466
Refrigerating apparatus	A. Siebert	489,335	Jan. 3	539	{ 146 147 }	62	116
Refrigerating apparatus	M. Wanner	500,088	June 20	2213	540	63	1805
Refrigerating apparatus	M. Wanner	500,107	June 20	2245	546	63	1810
Refrigerating apparatus. Gas-tight joint for	H. Rassbach	507,040	Oct. 17	2098	520	65	422
Refrigerating-machine	J. Levey, T. H. Butler, and C. A. MacDonald	508,141	Nov. 7	271	67	65	808
Refrigerating-machines. Automatic pressure-regulator for	P. I. Schmaltz	504,092	Aug. 29	3040	759	64	1187
Refrigerating or freezing machine regulator	L. Sterne and T. R. Murray	509,263	Nov. 21	2115	509	65	1187
Refrigerating-ship	J. McIntyre	497,595	May 16	1957	490	63	1001
Refrigeration and storage. Device for	C. S. Hardy	509,805	Nov. 28	3052	737	65	1377
Refrigerator	T. A. Baggett	509,281	Nov. 21	2143	{ 514 515 }	65	1192
Refrigerator	H. C. Beardsley	498,612	May 30	3596	891	63	1324
Refrigerator	L. Bonnell	506,097	Oct. 3	461	120	65	90
Refrigerator	G. A. Bowen	496,378	Apr. 25	2968	740	63	600
Refrigerator	J. M. Clarkin	489,247	Jan. 3	413	115	62	92
Refrigerator	E. N. Dolbey	489,290	Jan. 3	472	131	62	103
Refrigerator	J. L. Fitz Gerald	493,262	Mar. 14	766	196	62	1526
Refrigerator	C. H. Fox	504,804	Sept. 12	820	208	64	1437
Refrigerator	G. G. Hackett	506,593	Oct. 10	1363	342	65	273
Refrigerator	M. M. Harris	492,286	Feb. 21	1944	486	62	1170
Refrigerator	L. Heller	489,004	Jan. 3	43	12	62	11
Refrigerator	J. A. Henkel	505,358	Sept. 19	1718	{ 443 444 }	64	1619
Refrigerator	J. H. Hise	501,249	July 11	1137	289	64	222
Refrigerator	T. Holt and H. Howson	495,737	Apr. 18	1959	494	63	395
Refrigerator	C. Hurd	501,277	July 11	1183	{ 299 300 }	64	230
Refrigerator	H. Kroenke and E. Bindewald	508,520	Nov. 14	897	221	65	940
Refrigerator	A. Larsen	510,273	Dec. 5	725	175	65	1547
Refrigerator	C. C. Lockstaedt	498,400	May 30	3250	809	63	1263
Refrigerator	J. G. Malcolm	505,114	Sept. 19	1334	344	64	1549
Refrigerator	D. H. Metcalf and W. S. Doy	500,147	June 27	2347	568	63	1840
Refrigerator	H. L. Pittman	505,368	Sept. 19	1738	450	64	1623
Refrigerator	T. Schoppe	510,192	Dec. 5	587	137	65	1521
Refrigerator	N. Soldwedel	490,216	Jan. 17	1957	513	62	430
Refrigerator	P. J. Vanderlinda	493,410	Mar. 14	1000	258	62	1571
Refrigerator	C. E. Velie	501,854	July 18	2101	519	64	411
Refrigerator	J. A. Watts	492,909	Mar. 7	222	55	62	1402
Refrigerator	W. M. Wood	490,055	Jan. 17	1688	440	62	376
Refrigerator	F. H. Zahrn	494,049	Mar. 21	2072	{ 529 530 }	62	1791
Refrigerator attachment. Beer-barrel	A. B. Kokernot	500,012	June 20	2097	508	63	1785
Refrigerator. Beer-barrel	A. B. Kokernot	500,011	June 20	2096	508	63	1784
Refrigerator-box	G. F. Sickles	492,503	Feb. 28	2310	573	62	1256
Refrigerator-building	A. I. Dexter	493,256	Mar. 14	758	194	62	1525
Refrigerator-car	P. A. Barker and F. A. Reynolds	509,836	Nov. 28	3096	748	65	1385
Refrigerator-car	W. E. Eastman	502,661	Aug. 1	694	166	64	693
Refrigerator-car	W. E. Eastman	502,662	Aug. 1	696	166	64	693
Refrigerator-car	H. C. Goodell	496,154	Apr. 25	2591	{ 651 652 }	63	528
Refrigerator-car	C. S. Hardy	509,806	Nov. 28	3056	737	65	1378
Refrigerator-car	C. S. Hardy	509,807	Nov. 28	3057	738	65	1377
Refrigerator-car	J. Player	503,772	Aug. 22	2544	{ 633 634 }	64	1076
Refrigerator-car	D. W. Riordan	491,496	Feb. 7	707	179	62	885
Refrigerator-car	G. B. Robbins	489,759	Jan. 10	1194	313	62	262
Refrigerator-car	T. B. Roberts	500,615	July 4	127	34	64	25
Refrigerator-car	P. W. Ross	497,346	May 16	1564	394	63	932
Refrigerator-car ice-tank	E. R. Hutchins	497,376	May 16	1608	406	63	941
Refrigerator-crate	J. F. Fugazzi	496,644	May 2	403	109	63	692
Refrigerator drip-cup attachment	C. T. Ranney	498,489	May 30	3389	844	63	1288
Refrigerator for barreled liquors on tap	G. Gardiner and C. H. Millins	493,157	Mar. 7	600	150	62	1477
Refrigerator. Ice-cream	W. H. Seidenstricker	495,065	Apr. 11	839	213	63	175
Refrigerator ice-rack	G. W. Lawrence	501,281	July 11	1187	301	64	231
Refrigerator ice-rack	F. E. Ranney	497,458	May 16	1737	438	63	963
Refrigerator ice-supporting rack	G. L. Lobsitz	499,841	June 20	1836	446	63	1738
Refrigerator-ventilator	J. Netzer	501,253	July 11	1149	291	64	224
Refrigerator. Water-cooling	R. L. Snyder	490,511	Jan. 24	2441	{ 629 630 }	62	538
Refrigerator water-cooling attachment	J. E. Guenther	502,562	Aug. 1	525	126	64	663
Refrigerator water seal	W. C. Sheldon	493,658	Mar. 21	1426	363	62	1667
Refrigerator weighing and registering attachment	W. B. Dickson	508,507	Nov. 14	862	213	65	933
Refuse from scows. Apparatus for discharging	C. Gullmann	507,902	Oct. 31	3584	884	65	723
Refuse matter. Apparatus for treating	T. W. Carrio	503,073	Aug. 8	1389	343	64	836
Regenerative furnace	M. M. Monsanto	496,365	Apr. 25	2941	735	63	594
Regenerative kiln	E. Walsh, Jr	503,729	Aug. 22	2475	615	64	1062
Register:							
See Autographic regis-ter.	Door-register.						
Billiard-register.	Fare-register.						
Car-register.	Game-register.						
Cash-register.	Harvester sheaf-register.						
Check-register.	Heater-flue register.						
Credit-balance reg-ister.	Hot-air register.						
Counting-register.	Measure-register.						
	Pool-triangle register.						
	Printing-press register.						
Register	W. E. Patchin	504,239	Aug. 29	3287	821	64	1233
Register	O. F. Swift and W. Warwick	501,260	July 11	1157	293	64	225
Register and calculator	J. B. Benton	511,322	Dec. 26	2550	{ 622 623 }	65	1924

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Register apparatus. Autographic	C. D. Grimes and G. E. Harter	491,348	Feb. 7	487	125	62	840
Register or counting device.	S. M. Balzer	489,703	Jan. 10	1102	285	62	244
Register or recorder.	I. S. Remson and E. A. Schoettel	505,958	Oct. 3	239	63, 64	65	47
Register to count the operations of mechanism	S. M. Balzer	489,892	Jan. 10	1377	358	62	300
Registering device. Electric	B. B. Ward	498,372	May 30	3214	799	63	1255
Registering device for textile-fabric machines, &c	M. Keeney	491,564	Feb. 14	826	209	62	929
Registering device. Package.	R. F. Andersson	494,050	Mar. 21	2074	530	62	1792
Registering machine. Barrel.	A. W. Oppmann	504,610	Sept. 5	483	124	64	1360
Registering machine. Sales.	J. P. Rex	497,030	May 9	1034	263	63	823
Registering mechanism.	W. Koch	506,122	Oct. 3	500	130	65	98
Registering trip-slip. Conductor's.	H. W. Libbey	492,764	Feb. 28	2717	675	62	1338
Regulating mechanism.	A. Kleinstiver	508,947	Nov. 21	1593	390	65	1086
Regulator:							
See Air-brake regulator.	Furnace-regulator.						
Air-brake pressure-regulator.	Gas-regulator.						
Boiler water-regulator.	Gas-motor regulator.						
Cotton-gin feed-regulator.	Gas-pressure regulator.						
Damper-regulator.	Governor speed-regulator.						
Draft-regulator.	Heat-regulator.						
Dynamo-regulator.	Oven heat-regulator.						
Electric regulator.	Paper-machine feed-regulator.						
Electric-current-regulator.	Penholder-regulator.						
Electric-machine-regulator.	Piano touch-regulator.						
Electric-motor-regulator.	Pressure-regulator.						
Engine-regulator.	Pump-regulator.						
Feed-regulator.	Saw-sage regulator.						
Feed-water-regulator.	Shutter-regulator.						
	Temperature-regulator.						
	Watch-regulator.						
	Water-wheel regulator.						
	Windmill-regulator.						
Regulator	P. la Cour	498,461	May 30	3350	834	63	1281
Regulator	W. H. Elkins	502,285	Aug. 1	33	8	64	572
Rein and tail-holder. Driving.	B. Blake	507,476	Oct. 24	2851	699	65	574
Rein attachment	B. F. Buell	492,978	Mar. 7	327	82	62	1424
Rein-button	J. T. Swartz	491,199	Feb. 7	227	57	62	790
Rein. Driving.	H. F. Easton	509,882	Dec. 5	62	15	65	1422
Rein. Driving.	C. W. Hoss	501,789	July 18	2012	495	64	395
Rein-holder	H. C. Davis	498,107	May 23	2760	690	63	1161
Rein-holder	A. Foisy	491,542	Feb. 14	785	200	62	919
Rein-holder	J. Jensen	505,528	Sept. 26	2032	518	64	1691
Rein-holder	F. E. Lathrop	507,684	Oct. 31	3232	791	65	658
Rein-holder	A. Rosenthal	493,412	Mar. 14	1002	258	62	1571
Rein-holder	N. C. Sample	506,944	Oct. 17	1943	481	65	393
Rein-holder	V. L. Talbot	503,297	Aug. 15	1771	437	64	918
Rein-ring	A. S. Smeal	506,350	Oct. 10	1017	254	65	206
Rein-support.	T. E. Clark	502,703	Aug. 8	801	193	64	727
Reins. Hand-hold for.	G. F. Whiting	501,308	July 11	1226	310	64	238
Relasting-machine	G. W. Thompson	493,196	Mar. 7	656	167	62	1487
Relay	J. W. Lattig	492,689	Feb. 28	2596	643	62	1314
Relay	H. S. L. Verley	502,449	Aug. 1	338	81	64	628
Releasing device.	W. P. Brooks	496,380	Apr. 25	2970	741	63	600
Releasing device. Automatic.	H. P. Nielsen	490,211	Jan. 17	1949	511	62	428
Relief-plates. Making.	J. F. Earhart	509,120	Nov. 21	1873	459	65	1141
Removing obstructions. Apparatus for.	W. R. McLain	489,541	Jan. 10	873	228	62	198
Rendering-tank	E. Holthaus	507,222	Oct. 24	2438	601	65	495
Renovator	C. Karlson	507,369	Oct. 24	2691	661	65	543
Renting-machine. Coin-controlled.	G. Richmond	509,181	Nov. 21	1966	479	65	1160
Resawing-machine	J. S. Graham and J. Kane	508,515	Nov. 14	887	219	65	938
Resawing-machine	A. J. Haskell	499,424	June 13	1152	276	63	1606
Resawing-machine	A. Surerus and W. P. Greenhill	500,167	June 27	2384	578 } 579 }	63	1846
Reservoir	M. A. Possons and H. L. Carroll	491,023	Jan. 31	3290	840	62	719
Resin-acid esters. Manufacture of.	E. Schaal	501,446	July 11	1458	365	64	280
Resins and their residues. Treating crude.	G. Col	495,543	Apr. 18	1643	413	63	341
Resistance-box	A. O. Benecke	511,286	Dec. 19	2491	607	65	1900
Resistance-box	E. Weston	500,362	June 27	2697	662	63	1902
Resistance-coil	J. J. Wood	507,345	Oct. 24	2646	650 } 651 }	65	535
Resistance-plates. Making	C. E. Carpenter	511,407	Dec. 26	2714	658	65	1953
Respirator	F. Coquy	492,980	Mar. 7	329	83	62	1424
Respirator. Mask.	C. B. König	504,880	Sept. 12	939	242	64	1461
Restaurant service.	W. A. Butterfield	509,191	Nov. 21	1986	483	65	1164
Retort-jacket	W. L. Teter	499,056	June 6	549	128	63	1486
Retort-lid	J. P. Clark	491,769	Feb. 14	1149	288	62	994
Retort-lid catch or lock	J. P. Clark	493,424	Mar. 14	1019	262	62	1574
Retort-lids. Pressure device for.	F. V. Matton	507,917	Oct. 31	3608	890	65	728
Retort. Mechanical	R. Haig	505,356	Sept. 19	1715	442 } 443 }	64	1619
Retouching device	A. S. Harry	491,171	Feb. 7	183	46	62	783
Retting-bath	J. C. Pennington	509,396	Nov. 28	2363		65	1244
Reversible can	E. M. Cooke and W. P. Phillips	509,568	Nov. 28	2673	647	65	1305
Reversing-engine	C. Hammen	510,256	Dec. 5	693	168	65	1541
Reversing mechanism.	W. Knebler	510,031	Dec. 5	325	73	65	1470
Revoluble screen.	D. E. Phillips	500,508	June 27	2907	714	63	1939
Revolver	P. H. Finnegan	504,154	Aug. 29	3142	785 } 786 }	64	1206
Revolver.	H. M. Caldwell	511,406	Dec. 26	2712	658	65	1953
Revolver.	I. Johnson and A. Fyrberg	505,918	Oct. 3	182	46	65	36
Revolver barrel-strap catch	I. Johnson and O. Mossberg	511,620	Dec. 26	3056	745	65	2016
Revolving motor	H. L. Parker and A. W. Meston	501,482	July 11	1508	379	64	290
Rheostat	J. B. Blood	508,674	Nov. 14	1129	279	65	986

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Rheostat	A. B. Herrick	504,160	Aug. 29	3151	787	64	1207
Rheostat	C. A. Hussey	502,040	July 25	2404	605	64	482
Rheostat	E. R. Knowles	498,799	June 6	77	19	63	1402
Rheostat	E. Thomson	500,631	July 4	150	39	64	30
Rheostat	F. A. Weller	511,259	Dec. 19	2441	595	65	1891
Rheostat	J. J. Wood	502,340	Aug. 1	145	33, 34	64	592
Rheostat	P. Wright	497,366	May 16	1592	402	63	937
Rheostat	A. Wurts	505,911	Oct. 3	175	45	65	34
Rheostat-plate	C. E. Carpenter	492,757	Feb. 28	2700	670	62	1335
Rheostat-plate	C. E. Carpenter	492,758	Feb. 28	2701	671	62	1335
Ribbon-holder	J. L. Black	489,360	Jan. 3	578	156	62	124
Ribbons. Apparatus for folding and creasing the edges of	W. Remy	494,347	Mar. 28	2572	648	62	1899
Rice. Polishing	J. Menge	493,509	Mar. 14	1164	297	62	1600
Rifle	F. Simonson	492,057	Feb. 21	1587	395	62	1096
Rifle-sight. Duplex telescope	L. C. Cummins	499,160	June 6	692	168	63	1512
Ring:							
Curtain-ring.	Musical ring.						
Finger-ring.	Napkin-ring.						
Grinding-ring.	Rein-ring.						
Harness-line ring.	Spinning-ring.						
Key-ring.	Terret-ring.						
Lap-ring.	Traverse-ring.						
Ring-gage	G. R. Hughes	500,130	June 27	2321	561	63	1836
Ring-shanks. Tool for bending	A. Lambert	496,125	Apr. 25	2549	642	63	520
Rings. Manufacture of	J. Bonner	499,091	June 6	596	143	63	1494
Rink. Electric	M. W. Hassan	497,495	May 16	1812	455	63	975
Rivers or harbors. Machine for removing mud or sand from	C. B. Glover	490,747	Jan. 31	2840	728	62	629
Rivet-feeding device	J. H. Martin	490,609	Jan. 24	2589	667 668	62	566
Rivet-holding device	G. Bartscher	503,943	Aug. 29	2789	699	64	1141
Rivet-setting machine	H. H. Cummings	498,423	May 30	3282	818 819	63	1269
Rivet-setting machine	E. M. Pope	509,554	Nov. 28	2648	640 641	65	1299
Rivet-setting machine	E. B. Stimpson	509,699	Nov. 28	2871	694 695	65	1342
Rivets. Machinery for making solid or tubular	H. S. Reynolds	503,329	Aug. 15	1830	453 454 455	64	929
Riveting-machine	J. R. Coanor	508,371	Nov. 7	637	156 157	65	876
Riveting-machine	J. B. Courtet	500,755	July 4	360	94	64	67
Riveting-machine	S. Frisbie	501,681	July 18	1829	455 456	64	364
Riveting-machine	E. Heyde	493,938	Mar. 21	1862	475	62	1751
Riveting-machine	C. H. Norton	507,239	Oct. 24	2464	607	65	500
Riveting-machine feeding device	H. Hahn	509,732	Nov. 28	2928	708	65	1352
Riveting-machine gage	E. Easton	500,869	July 4	533	138	64	97
Riveting-machine. Hydraulic	H. V. Loss	496,059	Apr. 25	2452	619 620	63	501
Riveting-machine. Hydraulic	W. H. Wood	509,782	Nov. 28	3009	728	65	1369
Riveting-tool	B. F. Kline	489,608	Jan. 10	971	252	62	217
Roach-trap	C. F. Kuntz	501,350	July 11	1313	328	64	252
Road-bed	J. Platten	506,071	Oct. 3	422	110	65	82
Road-crossing	H. H. Faust, Jr.	509,885	Dec. 5	67	16, 17	65	1423
Road-engine	W. C. Oastler	498,918	June 6	301	69	63	1445
Road-gate	J. H. Williams	458,596	May 30	3570	885	63	1320
Road-machine	J. E. Wallis	494,909	Apr. 4	607	154	63	117
Road making and repairing machine	M. G. Bunnell	511,287	Dec. 19	2493	608	65	1900
Road. Wagon	T. S. Riddel	497,344	May 16	1561	393	63	931
Roads and other surfaces. Apparatus for breaking up	A. A. Voysey and H. H. Hosack	510,739	Dec. 12	1521	377 378	65	1710
Roads, &c. Apparatus for breaking up	A. A. Voysey and H. H. Hosack	510,738	Dec. 12	1519	376 377	65	1709
Roads. Machine for making and repairing	M. G. Bunnell	510,955	Dec. 19	1947	475	65	1799
Roadway	F. Melber	511,023	Dec. 19	2053	508	65	1817
Roaster.							
See Coffee-roaster. Peanut-roaster.							
Roasting apparatus	P. Cacciatori	501,867	July 18	2118	524	64	414
Roasting apparatus for coffee, cocoa, &c	D. Grove and B. Lilienfeld	507,538	Oct. 31	2975	730	65	610
Roasting coffee, &c. Apparatus for	D. P. F. Cardozo	509,298	Nov. 21	2174	523	65	1198
Roasting-furnace	A. H. Keller	506,511	Oct. 10	1248	311	65	251
Roasting-furnace. Revolving	C. Fellner	491,704	Feb. 14	1046	264	62	974
Rock-breaking machine	C. Kimplen	510,800	Dec. 12	1626	404 405	65	1729
Rock-crusher. Adjustable	J. P. Simmons and W. J. Holmes	490,215	Jan. 17	1956	512	62	430
Rock-drill	M. C. Bullock and S. W. Douglass	511,119	Dec. 19	2211	542	65	1849
Rock-drill	W. O. Higgins	508,313	Nov. 7	546	134	65	858
Rock-drill	H. P. Jones	502,565	Aug. 1	529	45	64	663
Rock-drill	E. L. Sharpneck	495,275	Apr. 11	1217	305	63	243
Rock-drill	W. Wood	497,043	May 9	1050	268	63	826
Rock-drill clamp	J. G. Leyner	496,573	May 2	286	76	63	671
Rock-drill-rotating device	W. Wood	505,242	Sept. 19	1530	399	64	1584
Rock-drill. Steam	T. F. Farrell	489,471	Jan. 10	761	201	62	175
Rock-drill support	S. W. Douglass	511,074	Dec. 19	2132	526 527	65	1833
Rock-drill tripod	A. J. Sypher	511,103	Dec. 19	2183	537	65	1843
Rock-drilling machine	J. McCulloch	493,175	Mar. 7	626	157 158 159	62	1481
Rock-drilling machine	J. A. Pearsall and C. M. Walker	510,517	Dec. 12	1113	269	65	1635
Rock-drilling-machine clutch	S. H. Macomber	490,152	Jan. 17	1849	482	62	410

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Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Rock or coal drill	T. Williard	507,091	Oct. 17	2178	539	65	435
Rocker-shield	F. A. Keyes	510,799	Dec. 12	1625	404	65	1729
Rocking-chair	J. M. Ausman	505,083	Sept. 19	1288	333	64	1541
Rocking-chair	J. Bodani	510,400	Dec. 12	926	222	65	1600
Rocking-chair	S. Chambers	508,403	Nov. 14	705	173	65	902
Rocking-chair	C. T. Holloway	509,663	Nov. 28	2825	682	65	1334
Rocking-horse, cradle, &c.	Y. Normington and H. Blades	503,979	Aug. 29	2861	718	64	1154
Rocking-horse motor	S. Wilson	490,465	Jan. 24	2361	612	62	522
Rocket-stand	W. H. Meadowcroft	499,790	June 20	1746	422	63	1723
Rod:							
<i>See</i> Fishing-rod. Stadia-rod.							
Leveling-rod. Stair-rod.							
Rod-coupling device	A. W. Knight	494,208	Mar. 28	2354	595	62	1859
Rod-feeding device	C. M. Conradson	489,935	Jan. 17	1484	{ 387 388 }	62	336
Rod gripping device	C. M. Conradson	489,936	Jan. 17	1485	388	62	336
Rod-reel	I. A. Kilmer	501,251	July 11	1147	291	64	223
Rods. Machine for cutting, pointing, and shaping ..	J. W. R. Johnson	489,586	Jan. 10	937	{ 243 244 }	62	210
Rods. Machine for securing heads to	D. M. Redmond	509,683	Nov. 28	2850	689	65	1339
Roll-holder camera	R. J. De Barril	506,210	Oct. 10	708	178	65	145
Roll-dressing machine	G. Mesta	497,500	May 16	1818	{ 457 458 }	63	976
Roll-truing machine	D. J. Davidson	504,566	Sept. 5	423	107	64	1348
Rolls. Cleaning and scouring hot	W. H. Banfield	511,493	Dec. 26	2850	689	65	1979
Roller:							
<i>See</i> Curtain-roller. Metallic roller.							
Drawing-roller. Picking-roller.							
Farm-roller. Seaming-roller.							
Feed-roller. Shade-roller.							
Field-roller. Snow-roller.							
Land-roller. Street-roller.							
Log-roller. Trawl-roller.							
Roller for crushing ore or other material	T. A. Edison	498,385	May 30	3231	804	63	1259
Rolling and bending metal into spiral forms. Ma- chine for	W. D. Eynon	491,341	Feb. 7	467	120	62	837
Rolling and condensing metal bars. Machine for ..	B. V. Daelen	499,677	June 13	1549	373	63	1675
Rolling and drawing metal. Machine for	A. Leforestier	497,126	May 9	1185	303	63	850
Rolling iron bars, &c. Method of and apparatus for.	J. Hunter	511,147	Dec. 19	2260	554	65	1258
Rolling-machine	B. F. and F. T. Peacock	503,616	Aug. 22	2304	{ 574 575 }	64	1029
Rolling-machine	A. B. Shippee	496,490	May 2	152	43	63	647
Rolling-machine	A. B. Shippee	496,491	May 2	153	43, 44	63	647
Rolling-machine. Metal	E. T. Horner	494,567	Apr. 4	62	14	63	13
Rolling machines. Blank-feeding mechanism for drill.	A. B. Shippee	496,623	May 2	363	98, 99	63	685
Rolling machinery. Metal	H. Hewitt	499,545	June 13	1350	{ 320 321 }	63	1641
Rolling machinery. Metal	E. H. Story	494,904	Apr. 4	600	151	63	116
Rolling-mill	E. M. Butz	499,651	June 13	1512	{ 362 363 364 }	63	1668
Rolling-mill	{ C. L. Fitzhugh, J. Z. Speer, and S. S. } Babbitt.	{ 496,084	{ Apr. 25	{ 2490	{ 628 629 511 512 }	{ 63	{ 508
Rolling-mill	F. I. Freeman	492,352	Feb. 21	2051	512	62	1191
Rolling-mill	H. J. Gosling	503,134	Aug. 15	1507	370	64	871
Rolling-mill	S. O. Haskin	511,422	Dec. 26	2742	663	65	1958
Rolling-mill appliance	H. Rigby	495,683	Apr. 18	1867	{ 468 469 680 681 }	63	379
Rolling-mill billet-conveyer	S. S. Babbitt	503,694	Aug. 22	2711	{ 680 681 105 106 }	64	1108
Rolling-mill feed mechanism	J. M. Murphy	506,060	Oct. 3	402	106	65	79
Rolling-mill feed-table	W. H. Maddock	504,393	Sept. 5	131	34	64	1294
Rolling-mill feeding and discharging apparatus ..	H. E. Sheldon	499,259	June 13	844	202	63	1551
Rolling-mill feeding mechanism	W. H. Maddock	504,395	Sept. 5	134	35	64	1295
Rolling-mill plant	L. Cook	503,830	Aug. 22	2619	{ 654 655 }	64	1090
Rolling-mill plant	W. Garrett	492,156	Feb. 21	1750	436	62	1129
Rolling-mill oiling-box	J. Judd	499,431	June 13	1163	278	63	1607
Rolling-mill swinging guide	T. Morrison	505,922	Oct. 3	190	47, 48	65	37
Rolling-mill transfer mechanism	W. H. Maddock	504,394	Sept. 5	132	35	64	1295
Rolling-mill. Universal	A. Reese	499,590	June 13	1418	339	63	1653
Rolling mill. Universal tube	W. Heckert	490,628	Jan. 24	2641	{ 680 681 }	62	577
Rolling-mills. Automatic edging-guide for	T. Morrison	505,923	Oct. 3	191	48	65	37
Rolling-mills. Automatic feeding device for	J. Robertson	507,166	Oct. 24	2333	575	65	477
Rolling-mills. Pass receiver and shifter for	W. A. Sweet	510,451	Dec. 12	1008	241	65	1615
Rolling-mills. Tool for manipulating the overfeed of.	W. Wallace	494,945	Apr. 4	653	166	63	126
Rolling sheet metal. Apparatus for	J. Jenkins	503,241	Aug. 15	1676	412	64	902
Rolling soldering-irons. Machine for	J. W. Cramer	502,280	Aug. 1	27	0	64	571
Rolling wear-plates. Roll for	J. Churchward	496,337	Apr. 25	2883	721	63	583
Roof	W. R. Kinnear	507,545	Oct. 31	2984	{ 732 733 }	65	612
Roof	T. Weare	502,940	Aug. 8	1190	293	64	799
Roof-block	J. Whomes and F. J. Gillmore	501,637	July 18	1758	438	64	352
Roof-bracket	G. E. Miller	496,483	May 2	140	39	63	644
Roof-bracket	T. H. Moore	498,285	May 30	3054	760	63	1228
Roof cresting or hip	A. M. Cheeseman	511,508	Dec. 26	2872	{ 696 697 }	65	1983
Roof-gutter	A. Neracher	500,416	June 27	2775	684	63	1915
Roof-leader strainer	J. White	511,388	Dec. 26	2684	{ 650 651 }	65	1949
Roof. Portable-house	C. H. Leonard	510,920	Dec. 19	1880	461	65	1786

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Roof snow guard and breaker.....	W. H. Berger and D. B. Rock	507,776	Oct. 31	3381	828	65	686
Roof-templet.....	H. W. Nichols.....	495,828	Apr. 18	2098	527	63	420
Roof. Thatch.....	C. Mandeville.....	509,751	Nov. 28	2957	716	65	1358
Roofing.....	S. R. Hawthorne.....	505,526	Sept. 26	2031	518	64	1691
Roofing.....	W. Jehle and W. A. Clark	508,110	Nov. 7	215	56	65	798
Roofing.....	C. E. Pope.....	508,751	Nov. 14	1238	309	65	1007
Roofing.....	J. White.....	511,385	Dec. 26	2679	649	65	1948
Roofing and siding strip.....	J. W. Hammett.....	498,111	May 23	2771	694	63	1163
Roofing composition.....	G. H. Blake.....	498,840	June 6	160	.....	63	1420
Roofing composition.....	E. M. McCook and W. P. Seal	505,531	Sept. 26	2036	.....	64	1692
Roofing. Composition of matter for	G. A. Turnbull.....	503,336	Aug. 15	1842	.....	64	931
Roofing compound.....	A. Monroe.....	500,024	June 20	2123	.....	63	1789
Roofing material.....	G. S. Lee.....	490,668	Jan. 31	2716	{ 698 699 }	62	606
Roofing. Metal.....	L. S. Bonbrake.....	495,875	Apr. 18	2176	546	63	434
Roofing. Metal.....	B. B. Detombay.....	502,552	Aug. 1	513	122	64	660
Roofing. Metallic.....	J. S. Brooks.....	503,941	Aug. 29	2787	698	64	1140
Roofing. Metallic.....	J. W. Fallon.....	503,789	Aug. 22	2569	639	64	1081
Roofing. Metallic.....	W. S. Harris.....	496,685	May 2	467	126	63	704
Roofing. Metallic.....	W. R. Kinnear.....	499,024	June 6	498	{ 116 117 }	63	1478
Roofing. Metallic.....	J. T. Neel.....	502,009	July 25	2347	588	64	471
Roofing. Metallic.....	J. Tyra.....	508,193	Nov. 7	346	56	65	892
Roofing, paving, &c. Composition for	D. A. Wray.....	491,395	Feb. 7	557	.....	62	854
Roofing. Sheet-metal.....	W. C. Berger.....	505,021	Sept. 12	1172	300	64	1506
Roofing. Sheet-metal.....	C. B. and H. H. Grahl.....	508,105	Nov. 7	206	55	65	797
Roofing. Sheet-metal.....	A. C. Kanneberg.....	492,513	Feb. 28	2323	576	62	1258
Roofing-sheets. Expansion-joint for	J. White.....	511,384	Dec. 26	2678	649	65	1948
Roofing-sheets. Jointing.....	J. White.....	511,386	Dec. 26	2681	{ 649 650 }	65	1948
Room for use in symbolic exercises. Portable	J. A. Gorman.....	494,857	Apr. 4	534	{ 134 135 }	63	104
Root-cutting machine. Beet.....	F. Stephan.....	489,338	Jan. 3	546	{ 147 148 }	62	117
Rope-clamp.....	C. E. Pugsley.....	506,441	Oct. 10	1126	280	65	227
Rope-driving machinery.....	W. H. Robinson.....	503,684	Aug. 22	2397	{ 598 599 }	64	1047
Rope-holder.....	G. B. Warner.....	497,900	May 23	2447	611	63	1106
Rope-leader for winding drums.....	N. H. Pine.....	490,984	Jan. 31	3222	824	62	704
Rope-shifting mechanism. Driving.....	S. S. Caskey.....	501,869	July 18	2120	524	64	414
Rope-socket.....	D. W. Black.....	499,954	June 20	2009	488	63	1769
Rope-socket.....	D. W. Black.....	499,955	June 20	2010	488	63	1769
Rosin-holder.....	J. F. Müller.....	509,482	Nov. 28	2538	612	65	1279
Rosin. Manufacture of.....	R. L. Etheridge.....	508,608	Nov. 14	1033	.....	65	966
Rossing-machine.....	W. Hadley and A. T. McDonald.....	489,251	Jan. 3	422	117	62	94
Rotary cutter.....	H. P. Fairfield.....	498,745	May 30	3854	950	63	1369
Rotary cutter.....	C. Raabe.....	501,213	July 11	1083	275	64	213
Rotary cutter.....	A. S. Vose.....	498,144	May 23	2814	704	63	1171
Rotary cutter.....	H. W. Winter.....	503,067	Aug. 8	1381	341	64	835
Rotary cutter for making similar teeth	U. F. L., and H. E. Eberhardt	496,511	May 2	187	52	63	653
Rotary engine.....	W. W. Andrews.....	500,988	July 4	716	188	64	130
Rotary engine.....	A. D. Bellingier.....	491,402	Feb. 7	565	143	62	856
Rotary engine.....	A. Boyd.....	498,618	May 30	3617	896	63	1328
Rotary engine.....	D. Carskaden.....	495,451	Apr. 11	1490	375	63	294
Rotary engine.....	D. Carskaden.....	497,403	May 16	1648	{ 416 417 }	63	948
Rotary engine.....	C. P. Case.....	496,856	May 9	748	{ 198 199 200 }	63	772
Rotary engine.....	F. H. Cathcart.....	495,303	Apr. 11	1263	{ 315 316 }	63	252
Rotary engine.....	J. H. Dow.....	496,352	Apr. 25	2913	728	63	589
Rotary engine.....	O. S. Gardeen.....	490,648	Jan. 31	2675	689	62	599
Rotary engine.....	A. F. Gillet.....	493,081	Mar. 7	478	120	62	1454
Rotary engine.....	O. O. Gould.....	506,999	Oct. 17	2024	{ 500 501 }	65	409
Rotary engine.....	G. H. Graham.....	494,138	Mar. 28	2235	{ 569 570 }	62	1836
Rotary engine.....	H. P. Holland.....	502,818	Aug. 8	983	239	64	762
Rotary engine.....	H. C. Hunt.....	501,146	July 11	983	{ 250 251 }	64	194
Rotary engine.....	G. I. and G. Jorda.....	511,622	Dec. 26	3063	{ 748 749 }	65	2017
Rotary engine.....	S. Marcus.....	503,611	Aug. 22	2299	573	64	1028
Rotary engine.....	J. Matthews.....	494,069	Mar. 21	2109	538	62	1798
Rotary engine.....	J. F. McElroy.....	503,550	Aug. 15	2172	542	64	990
Rotary engine.....	J. F. McElroy.....	504,536	Sept. 5	374	94	64	1339
Rotary engine.....	J. F. McElroy.....	510,482	Dec. 12	1057	254	65	1625
Rotary engine.....	J. F. McElroy.....	510,483	Dec. 12	1059	{ 254 255 }	65	1625
Rotary engine.....	F. Meyer, J. S. Kiehl, and A. Grant..	492,360	Feb. 21	2062	{ 514 515 }	62	1193
Rotary engine.....	O. E. Morse.....	507,830	Oct. 31	3474	{ 854 855 }	65	703
Rotary engine.....	W. H. Murch.....	495,357	Apr. 11	1340	336	63	266
Rotary engine.....	W. S. Petty.....	508,555	Nov. 14	948	233	65	950
Rotary engine.....	V. Popp.....	496,954	May 9	918	241	63	803
Rotary engine.....	W. Rice.....	502,585	Aug. 1	564	135	64	669
Rotary engine.....	G. A. Ritson.....	496,900	May 9	836	222	63	788
Rotary engine.....	C. H. and A. Stone.....	505,334	Sept. 19	1679	433	64	1612
Rotary engine.....	R. Temple.....	511,311	Dec. 19	2529	{ 615 616 }	65	1907
Rotary engine.....	J. C. Walker.....	495,283	Apr. 11	1234	308	63	246
Rotary engine.....	H. W. White.....	506,758	Oct. 17	1641	411	65	337

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Rotary engine, pump, and blower.....	A. F. G. Brown.....	507,780	Oct. 31	3388	829	65	687
Rotary motor. Electrical.....	W. J. Still.....	498,585	May 30	3552	881	63	1316
Rotary motor or pump for steam, water, or compressed air.....	F. Schröder.....	493,844	Mar. 21	1729	441	62	1727
Rotary steam-engine.....	W. M. Byrd.....	501,598	July 18	1692	422	64	341
Rotary steam-engine.....	J. Hill.....	507,128	Oct. 24	2257	556	65	464
Rotary steam-engine.....	C. Kettron.....	507,738	Oct. 31	3308	809 810	65	673
Rotary steam-engine.....	W. C. Knight.....	500,398	June 27	2747	676 677	63	1911
Rotary steam-engine.....	J. M. McIver.....	490,813	Jan. 31	2940	754 755	62	650
Rotary steam-engine.....	W. M. Whiteley.....	509,708	Nov. 28	2888	699	65	1345
Rotating-cylinder engine.....	S. G. Brosius.....	492,859	Mar. 7	130	33	62	1383
Rotating-cylinder engine.....	S. G. Brosius.....	492,860	Mar. 7	134	33, 34	62	1384
Rotating-cylinder engine.....	S. G. Brosius.....	492,861	Mar. 7	137	34	62	1385
Rotating rack for holding robes, &c.....	F. G. Wood.....	508,459	Nov. 14	779	192	65	917
Rotating screen for screening kaolin or analogous substances.....	J. W. Burgess.....	493,751	Mar. 21	1585	403 404	62	1699
Rough-rounding and channeling machine.....	H. Briggs and C. Dancel.....	511,263	Dec. 19	2446	596 597	65	1892
Roundabout.....	L. P. Perew.....	499,800	June 20	1763	427	63	1726
Roundabout.....	W. Somers.....	489,238	Jan. 3	395	109 110	62	89
Rounding machine.....	A. B. Wagner.....	500,519	June 27	2937	721	63	1945
Route-indicator.....	C. Bash.....	509,609	Nov. 28	2736	661	65	1317
Routing-machine.....	H. P. Nevin and W. S. Farrar.....	490,492	Jan. 24	2416	624	62	533
Routing, ruling, and tinting machine. Combined.....	C. H. Beeler, Jr.....	506,069	Oct. 3	448	117 118	65	87
Rowing apparatus.....	W. Roessler.....	502,467	Aug. 1	364	87	64	633
Rowing-gear.....	W. Boardman.....	494,948	Apr. 4	656	169	63	126
Rowing-gear.....	R. B. Reynolds.....	509,605	Nov. 28	2731	660	65	1316
Rowlock.....	L. Minerley.....	501,802	July 18	2034	500	64	398
Rowlock.....	C. Norman.....	508,969	Nov. 21	1623	398	65	1094
Rubber article. Hollow.....	E. L. Perry.....	504,612	Sept. 5	485	124	64	1360
Rubber boot.....	C. C. Brainwarth.....	495,450	Apr. 11	1490	375	63	293
Rubber boot.....	O. P. Hurd.....	508,619	Nov. 14	1045	258	65	969
Rubber boot.....	E. Kissinger.....	501,082	July 11	863	224	64	172
Rubber boot.....	B. A. Pickering.....	494,262	Mar. 28	2437	614	62	1873
Rubber boots. Machine for finishing boot-tree legs for.....	W. H. Austin.....	494,834	Apr. 4	501	126	63	97
Rubber. Composition of matter as substitute for hard.....	J. D. Brown.....	499,354	June 13	1025		63	1584
Rubber-dam clamp.....	G. A. Brouillet.....	506,098	Oct. 3	463	121	65	90
Rubber-dam clamp.....	J. W. Ivory.....	499,550	June 13	1357	322	63	1642
Rubber fabrics. Means for plugging holes in.....	T. B. Sloper.....	490,369	Jan. 24	2219	578 579	62	495
Rubber mixing and calendering machines. Roll for india.....	E. F. Bragg.....	508,272	Nov. 7	485	117	65	847
Rubber mixing and calendering machines. Roll for india.....	R. Cowen and E. F. Bragg.....	508,286	Nov. 7	503	122	65	851
Rubber. Producing variegated.....	J. Burbridge.....	510,888	Dec. 19	1825		65	1776
Rubber shoe.....	M. Mayer.....	509,927	Dec. 5	131	31	65	1434
Rubber shoes together. Means for securing.....	G. P. Umstead.....	505,734	Sept. 26	2398	606	64	1759
Rubber stamps. Apparatus for manufacturing.....	G. J. B. Rodwell.....	511,548	Dec. 26	2932	714 715	65	1994
Rubber stamps or casts. Making.....	W. F. Barnes.....	489,448	Jan. 10	723	194	62	168
Rubber to render it adhesive. Treating vulcanized.....	J. M. Raymond.....	490,500	Jan. 24	2426		62	535
Rubbers. Attachment for.....	L. J. Weatherwax.....	506,142	Oct. 3	539	139	65	105
Rubbing machine.....	C. S. Yarnell.....	507,251	Oct. 24	2481	611	65	503
Rubbing or polishing machine.....	S. F. Moore.....	507,280	Oct. 24	2533	624	65	511
Rudder.....	A. McDougall.....	492,873	Mar. 7	163	39	62	1391
Rudder connection.....	E. G. Jackson.....	502,723	Aug. 8	827	200	64	732
Rudders. Electrical indicator for.....	C. V. Knowles.....	495,047	Apr. 11	811	205	63	170
Rudders. Mechanism for controlling ships.....	J. Christensen.....	495,623	Apr. 18	1773	446	63	363
Rule, bevel, and square. Combined.....	W. H. H. Garritt.....	504,341	Sept. 5	45	13	64	1279
Rule. Folding pocket.....	P. W. Shephard.....	503,008	Aug. 8	1299	318	64	819
Rule gage attachment.....	P. A. Saum.....	496,748	May 2	569	153	63	721
Rule. Key-seat.....	D. Wilson.....	510,494	Dec. 12	1079	260	65	1629
Rule. Pocket.....	R. J. Gilham.....	500,572	July 4	55	16	64	11
Rule. Roof-framing.....	A. G. Dahmer.....	499,521	June 13	1313	309	63	1634
Ruler. Desk.....	R. Chadwick.....	497,946	May 23	2519	629	63	1118
Ruler. Flexible.....	G. W. Kraft.....	490,390	Jan. 24	2250	585	62	501
Ruler. Parallel.....	A. F. Gillet.....	496,825	May 2	692	183	63	742
Ruler. Slate.....	B. W. Ahne.....	500,046	June 20	2154	522	63	1794
Ruler. Slate.....	A. Bechmann.....	509,356	Nov. 28	2224	554	65	1230
Ruling device.....	K. M. Hurlburt.....	509,907	Dec. 5	107	24	65	1430
Ruling-machine.....	F. Hart.....	497,472	May 16	1757	442 443	63	966
Ruling machines. Ink-fountain for paper.....	L. S. Bigelow.....	509,861	Dec. 5	18	4	65	1414
Runner and tip-retainer. Combined.....	P. R. Wylie.....	496,029	Apr. 25	2399	607	63	492
Running-gear.....	J. F. Stevens and W. V. Breene.....	505,139	Sept. 19	1374	352	64	1556
Running-gear.....	A. Warenskjold and J. G. Burgess.....	496,712	May 2	505	135	63	711
Saccharin. Making pure.....	C. Fahlberg.....	496,112	Apr. 25	2530		63	517
Saccharin. Purifying.....	C. Fahlberg.....	496,113	Apr. 25	2531		63	517
Sack-holder.....	P. P. Fjellman.....	497,870	May 23	2401	599	63	1098
Sad-iron.....	T. G. Adams.....	506,895	Oct. 17	1866	464	65	379
Sad-iron.....	H. Clayton.....	500,854	July 4	508	132	64	93
Sad-iron.....	W. Mitchell.....	510,081	Dec. 5	409	90	65	1487
Sad-iron.....	H. I. Noble.....	494,020	Mar. 21	2033	518	62	1784
Sad-iron.....	M. F. and J. H. Potts.....	506,252	Oct. 10	792	195 196	65	162
Sad-iron.....	M. J. Shimer.....	497,136	May 9	1198	306	63	852
Sad-iron.....	W. C. Smalstig.....	496,102	Apr. 25	2516	636	63	514
Sad-iron.....	H. W. Tibbals.....	507,338	Oct. 24	2633	648	65	532
Sad-iron.....	L. O. Tullis and J. M. Cox.....	498,370	May 30	3212	799	63	1255

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Sad-iron.....	H. J. Wattles.....	511,225	Dec. 19	2384	581	65	1881
Sad-iron.....	J. M. Wishart.....	501,264	July 11	1164	{ 295 296 }	64	226
Sad-iron stand.....	M. S. Everett.....	503,410	Aug. 15	1945	483	64	950
Saddle.....	E. S. Cross.....	500,472	June 27	2851	702	63	1929
Saddle.....	C. T. Hester.....	510,684	Dec. 12	1437	354	65	1693
Saddle attachment.....	J. F. Kohler.....	495,346	Apr. 11	1322	332	63	263
Saddle-bag.....	W. K. Pembroke.....	495,908	Apr. 18	2222	560	63	443
Saddle-bags.....	J. A. Browne.....	501,821	July 18	2055	506	64	403
Saddle. Harness.....	L. B. Hill.....	502,121	July 25	2532	635	64	506
Saddle. Harness.....	J. L. Koch.....	506,783	Oct. 17	1679	423	65	344
Saddle. Harness.....	W. S. Lund.....	496,088	Apr. 25	2495	630	63	509
Saddle. Harness.....	S. A. Nolen.....	489,087	Jan. 3	157	43	62	38
Saddle. Harness.....	J. H. Price.....	501,024	July 4	766	201	64	140
Saddle. Harness.....	H. Schmitz.....	496,447	May 2	93	26	63	636
Saddle. Harness.....	W. Taylor.....	511,474	Dec. 26	2823	683	65	1974
Saddle. Riding.....	H. Hotze.....	497,665	May 16	2064	515	63	1021
Saddle. Riding.....	F. E. du Moulin.....	496,726	May 2	529	140	63	715
Saddle. Riding.....	A. P. Tenison.....	506,747	Oct. 17	1617	407	65	332
Saddle. Side.....	B. P. Blood.....	491,831	Feb. 14	1239	310	62	1012
Saddle-tree.....	A. Dyke.....	490,552	Jan. 24	2504	645	62	550
Saddle trees. Die for manufacturing metallic harness.....	W. H. Bustin.....	505,079	Sept. 12	1280	330	64	1525
Safe.....	W. Corry.....	491,875	Feb. 14	1316	325	62	1027
Safe.....	F. Crawford.....	502,953	Aug. 8	1209	298	64	803
Safe.....	E. Meyers.....	508,895	Nov. 14	1457	361	65	1047
Safe.....	W. W. Munsell.....	501,092	July 11	891	229	64	178
Safe.....	J. F. Schulhoff.....	499,257	June 13	841	201	63	1551
Safe. Burglar-proof.....	W. H. Carr.....	490,869	Jan. 31	3019	776	62	667
Safe. Distiller's.....	W. W. Mutter and W. Dawson.....	507,832	Oct. 31	3478	{ 855 856 }	65	704
Safe. Fireproof.....	W. Corliass.....	508,207	Nov. 7	375	92	65	828
Safe-lock.....	W. W. Munsell.....	506,714	Oct. 17	1557	390	65	322
Safe-locks. Method of and apparatus for controlling and utilizing concussion and applying it to.....	M. A. Dalton.....	508,902	Nov. 14	1468	{ 363 364 365 366 367 368 }	65	1048
Safe-locking device.....	A. G. Burton.....	502,613	Aug. 1	609	{ 145 146 }	64	678
Safe or cupboard.....	H. M. Reid and A. C. Pheil.....	506,794	Oct. 17	1694	426	65	347
Safe or vault.....	C. Hill.....	501,142	July 11	975	249	64	192
Safe-plate. Composite.....	I. W. Hoyer.....	498,058	May 23	2691	674	63	1148
Safe. Provision.....	J. H. Stephens.....	509,262	Nov. 21	2114	508	65	1187
Safe. Savings-deposit.....	N. H. Lee.....	497,671	May 16	2072	517	63	1023
Safes. Electric bolt-operating mechanism for.....	E. and H. C. Stockwell.....	494,495	Mar. 28	2808	{ 703 704 }	62	1942
Safety-brake and shaft-coupling. Combined.....	A. Fikenwirth.....	489,123	Jan. 3	219	59	62	51
Safety-pin.....	D. A. Carpenter.....	509,998	Dec. 5	261	61	65	1458
Safety-pin.....	C. E. Stevens.....	504,634	Sept. 5	514	133	64	1367
Safety-pin.....	D. H. Warner.....	493,372	Mar. 14	953	245	62	1561
Safety-switch.....	J. W. Mundy.....	494,934	Apr. 4	638	164	63	123
Safety-switch.....	J. E. Mustard.....	508,232	Nov. 7	415	101	65	835
Salad-mixing device.....	J. B. Fitch.....	501,649	July 18	1773	{ 441 442 443 }	64	355
Sales-recorder and cash-drawer. Manual.....	E. O. Wood.....	507,958	Oct. 31	3678	{ 913 914 }	65	741
Salicylate of para-tolyldimethylpyrazolon.....	H. Thoms.....	503,066	Aug. 8	1380	.....	64	835
Salicylate of tolyldimethylpyrazolon.....	H. Thoms.....	509,055	Nov. 21	1748	.....	65	1118
Salicylic ester of acetol.....	P. Fritsch.....	509,520	Nov. 28	2594	.....	65	1290
Salt. Apparatus for electrolysis of.....	T. Craney.....	496,863	May 9	765	203	63	775
Salt. Apparatus for the manufacture of.....	M. M. Monsanto.....	496,615	May 2	349	95	63	683
Salt-box.....	J. A. McGlinchey.....	509,135	Nov. 21	1899	464	65	1146
Salt box or cellar.....	W. L. Johnson.....	494,205	Mar. 28	2350	594	62	1858
Salt-drier. Centrifugal.....	J. M. Duncan.....	498,383	May 30	3228	803	63	1358
Salt-furnace. Regenerative.....	E. K. Holland.....	502,360	Aug. 1	186	44	64	600
Salt-manufacturing apparatus.....	J. Runciman.....	491,376	Feb. 7	528	{ 134 135 }	62	849
Salt or pepper holder.....	E. A. Parker.....	507,720	Oct. 31	3287	804	65	669
Salt. Process of and apparatus for making.....	D. P. F. Cardozo.....	508,915	Nov. 21	1538	375	65	1076
Salt-washing apparatus.....	T. Craney.....	496,866	May 9	769	204	63	776
Salts. Apparatus for electrolysis of fused.....	W. E. Case.....	503,451	Aug. 15	2006	498	64	960
Salts by electrolysis. Process of and apparatus for dissociating soluble.....	H. S. Blackmore.....	510,834	Dec. 12	1687	419	65	1740
Salts. Electrolyzing.....	T. Craney.....	498,769	June 6	26	7	63	1393
Salting trough. Stock.....	E. F. Baskett.....	490,095	Jan. 17	1754	457	62	390
Sample-box.....	R. Gair.....	493,921	Mar. 21	1853	472	62	1749
Sample-case.....	R. H. Stuart.....	494,394	Mar. 28	2655	666	62	1914
Sample. Cloth or dress-goods.....	J. M. Bostwick.....	504,550	Sept. 5	401	102	64	1344
Sample holder. Fabric.....	J. E., D. W., and S. J. McCarthy.....	503,802	Aug. 22	2584	644	64	1084
Sand-band.....	G. D. Cleveland.....	511,124	Dec. 19	2220	544	65	1851
Sand-band.....	S. Wilson.....	490,731	Jan. 31	2809	721	62	625
Sand mold.....	S. J. Adams.....	508,590	Nov. 14	1006	247	65	961
Sand mold.....	S. J. Adams.....	511,284	Dec. 19	2486	606	65	1899
Sand or gravel drier.....	S. R. Scharf.....	501,539	July 18	1594	401	64	321
Sandpaper-wheel.....	F. H. Stubbe.....	505,683	Sept. 26	2313	587	64	1744
Sandpaper wheel or roller.....	F. H. Stubbe.....	507,508	Oct. 24	2914	717	65	585
Sandpapering-machine.....	W. H. Doane and J. Sofge.....	499,014	June 6	484	{ 112 113 231 }	63	1475
Sandpapering-machine.....	C. L. Ruehs.....	495,104	Apr. 11	918	{ 232 233 }	63	191
Sandpapering-machine.....	C. L. Ruehs.....	497,895	May 23	2438	{ 608 609 }	63	1105

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Sandpapering-machine	C. L. Ruehs	489,093	Jan. 3	170	46, 47	62	40
Sandpapering-machines. Block-setting rack for	C. L. Ruehs	495,758	Apr. 18	1987	502	63	400
Sandpapering-machines. Revolving head for	C. A. Weed	492,077	Feb. 21	1618	401	62	1102
Sand-screen	G. A. True	509,706	Nov. 28	2886	698	65	1344
Sanding-drum	W. F. Larish	491,658	Feb. 14	975	246	62	959
Sandal	G. H. Russell	494,598	Apr. 4	117	27	63	25
Sanitary house	W. Van der Heyden	504,544	Sept. 5	386	97, 98	64	1342
Sanitary utensil	T. J. Kashleigh and J. Hern	496,097	Apr. 25	2511	635	63	513
Sanitary ventilator	W. L. Potter	502,995	Aug. 8	1281	313	64	815
Sash adjuster. Window	A. J. Barber	497,296	May 16	1483	373	63	917
Sash-balance	R. K. Brown	491,762	Feb. 14	1136	286	62	991
Sash-balance	R. K. Brown	510,154	Dec. 5	527	121	65	1509
Sash-balance	E. L. Bullock	491,507	Feb. 7	728	184	62	888
Sash-balance	R. R. Cowl	500,756	July 4	362	94	64	67
Sash-balance	H. L. Craig	491,639	Feb. 14	947	238	62	953
Sash-balance	N. Hamlet	503,596	Aug. 22	2261	566	64	1022
Sash-balance	F. P. Johnson	491,114	Feb. 7	80	22	62	764
Sash-balance	F. N. Kimball	494,959	Apr. 4	676	174	63	130
Sash-balance	O. Seely	509,587	Nov. 28	2700	653	65	1310
Sash-balance	J. H. Shipman	500,967	July 4	687	180	64	125
Sash-balance	J. N. Stallings	511,030	Dec. 19	2061	510	65	1819
Sash-balance	T. Whetter	489,442	Jan. 3	707	189	62	152
Sash-cord fastener	L. Gerhardt	500,760	July 4	367	95	64	68
Sash-cord fastener	S. Jenkinson	491,966	Feb. 14	1450	361	62	1054
Sash-cord guide	G. D. Clark	495,021	Apr. 11	773	196	63	164
Sash-cord guide	E. C. Stearns	496,069	Apr. 25	2466	623	63	504
Sash-cord guide	C. Wolcott	507,640	Oct. 31	3172	776	65	647
Sash-fastener	E. Ament	505,341	Sept. 19	1689	435	64	1614
Sash-fastener	R. Baker	499,817	June 20	1791	435	63	1731
Sash-fastener	A. Barton	491,505	Feb. 7	724	183	62	888
Sash-fastener	B. Bernstein	495,659	Apr. 18	1835	459	63	373
Sash-fastener	J. H. Chamberlin	494,625	Apr. 4	159	37	63	32
Sash-fastener	J. S. Coey	510,776	Dec. 12	1588	395	65	1732
Sash-fastener	S. A. Crawford	494,734	Apr. 4	328	83	63	64
Sash-fastener	J. E. Dolber	502,556	Aug. 1	518	124	64	661
Sash-fastener	E. and H. S. Ensminger	493,258	Mar. 14	761	194	62	1525
Sash-fastener	J. N. Euwer	499,913	June 20	1954	474	63	1760
Sash-fastener	J. A. Forbes	509,304	Nov. 21	2184	525	65	1201
Sash-fastener	J. P. H. Gastrell	489,735	Jan. 10	1150	298	62	254
Sash-fastener	G. Gibson	491,881	Feb. 14	1325	327	62	1028
Sash-fastener	G. Gibson	491,882	Feb. 14	1326	328	62	1028
Sash-fastener	G. Gibson	493,159	Mar. 7	603	151	62	1477
Sash-fastener	G. Gibson	496,303	Apr. 25	2822	706	63	571
Sash-fastener	J. C. Hauser	492,799	Mar. 7	44	10	62	1367
Sash-fastener	H. W. Hood	510,686	Dec. 12	1440	355	65	1694
Sash-fastener	F. C. Immel	508,389	Nov. 7	671	164	65	882
Sash-fastener	J. P. Kane	511,702	Dec. 26	3180	778	65	2039
Sash-fastener	S. R. Kirby	497,186	May 9	1269	322	63	865
Sash-fastener	S. R. Kirby	497,187	May 9	1270	322	63	865
Sash-fastener	C. Knapp	493,035	Mar. 7	416	104	62	1441
Sash-fastener	C. Knapp	504,165	Aug. 29	3161	789	64	1209
Sash-fastener	D. O. Livermore	509,922	Dec. 5	126	29	65	1435
Sash-fastener	F. J. Loudin	510,432	Dec. 12	978	233	65	1609
Sash-fastener	W. E. Mayo	500,254	June 27	2519	615	63	1870
Sash-fastener	S. Morrell	490,209	Jan. 17	1946	510	62	428
Sash-fastener	R. D. Murphy	493,107	Mar. 7	524	131	62	1463
Sash-fastener	C. Neumann	495,905	Apr. 18	2317	559	63	443
Sash-fastener	W. L. Penney	492,427	Feb. 28	2169	542	62	1237
Sash-fastener	J. M. Porter	498,990	June 6	430	100	63	1467
Sash-fastener	M. Posz	493,291	Mar. 14	821	210	62	1536
Sash-fastener	A. Raymond and F. S. North	503,294	Aug. 15	1767	437	64	918
Sash-fastener	W. J. Steel	489,274	Jan. 3	452	125	62	99
Sash-fastener	R. E. Sweeney	489,768	Jan. 10	1209	317	62	265
Sash-fastener	W. Wagener	501,451	July 11	1465	371	64	282
Sash-fastener	W. R. Walker	511,379	Dec. 26	2665	646	65	1946
Sash-fastener	C. Wolcott	501,238	July 11	1119	284	64	219
Sash-fastener	D. Young	508,361	Nov. 7	623	153	65	874
Sash-frame. Dust-proof	J. H. M. Beaty	498,225	May 30	2958	737	63	1210
Sash-holder	R. K. Brown	491,763	Feb. 14	1137	286	62	992
Sash-holder	J. W. Cronan	497,168	May 9	1245	316	63	861
Sash-holder	M. A. Dotey	508,168	Nov. 7	309	76, 77	65	815
Sash-holder	J. H. Griswold	504,978	Sept. 12	1107	284	64	1493
Sash-holder	L. A. Hathaway and E. W. Elkins	489,476	Jan. 10	767	203	62	177
Sash-holder	A. James	506,318	Oct. 10	892	220	65	182
Sash-holder	J. H. Johnston	490,907	Jan. 31	3102	795	62	682
Sash-holder	W. H. King	497,245	May 9	1362	346	63	882
Sash-holder	S. R. Kirby	497,185	May 9	1268	322	63	865
Sash-holder	S. R. Kirby	497,581	May 16	1932	485	63	997
Sash-holder	C. E. Lucas	509,042	Nov. 21	1731	428	65	1115
Sash-holder	P. S. Riddelle	501,809	July 18	2040	502	64	400
Sash-holder	J. Robertson	510,614	Dec. 12	1317	321	65	1671
Sash-holder	W. R. Walker	490,001	Jan. 17	1589	415	62	357
Sash-holder	H. E. Willer	495,646	Apr. 18	1812	454	63	370
Sash-lock	R. W. Heppell	506,780	Oct. 17	1676	492	65	344
Sash-operating mechanism	P. S. Riddelle	504,620	Sept. 5	494	127	64	1362
Sash-weight	F. H. Homan	501,346	July 11	1305	325	64	251
Sash-weight	R. S. Judson	508,546	Nov. 14	934	230	65	947
Sash-weight holder	J. Neil	503,291	Aug. 15	1760	435	64	917
Sash. Window	S. L. Ralph and G. W. Roach	498,991	June 6	433	100	63	1467
Sash. Window	F. Valin	499,405	June 13	1116	268	63	1600

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sash. Window-screen and storm-	C. F. Wise	498,833	June 6	147	35	63	1418
Sashes. Combined hinge and banger for storm-	F. W. Farrar	492,791	Mar. 7	31	8	62	1365
Sashes. Device for raising or lowering swinging.	D. P. Hopkins	509,376	Nov. 28	2317	561	65	1236
Sashes, &c. Metallic bar for window-	W. Henderson	497,543	May 16	1875	473	63	988
Satchel harness. Telescoping.	H. Van Altena	497,736	May 16	2170	543	63	1042
Satchel or bag frame	R. Flocke. (Reissue)	11,315	Mar. 21	2194	560	62	1814
Sausage-casings. Preparing and holding	P. F. Turner	494,907	Apr. 4	606	153	63	117
Sausage-machine	J. F. Matthews and F. Heley	497,127	May 9	1186	303	63	850
Sausage-stuffer	J. B. Spatz	498,317	May 30	3121	778	63	1239
Sausage-stuffing machine	J. Eppler. (Reissue)	11,317	Mar. 28	2892	724	62	1957
Sausage-stuffing machine	C. W. Hottman	490,712	Jan. 31	2781	714	62	619
Saw	C. P. Hallsey	496,874	May 9	793	209	63	780
Saw	W. and C. Junge	495,345	Apr. 11	1321	331	63	263
Saw	A. Krieger	492,890	Mar. 7	186	45	62	1396
Saw	A. Krieger	493,628	Mar. 21	1383	351	62	1659
Saw	A. Krieger	494,210	Mar. 28	2356	596	62	1859
Saw	E. T. Lippert	497,499	May 16	1817	457	63	976
Saw	J. Lykke	493,934	Mar. 21	1875	478	62	1734
Saw and lathe to be operated by foot-power. Combined circular	G. H. Furbish	511,331	Dec. 26	2572	626	65	1928
Saw and plane. Combined	J. Bowles	505,154	Sept. 19	1396	358	64	1559
Saw and planer. Combined	J. Bowles	503,522	Aug. 15	2120	532	64	981
Saw attachment.	B. Gallagher and R. A. Johnson	495,731	Apr. 18	1950	491	63	393
Saw attachment. Gang-	J. Weingartner	498,594	May 30	3566	884	63	1319
Saw-blade	G. Székely	511,473	Dec. 26	2822	682	65	1974
Saw-brazing clamp. Band-	C. M. Emerson	495,881	Apr. 18	2185	548	63	436
Saw-clamp	L. Martenson	511,443	Dec. 26	2776	672	65	1964
Saw-clamp	M. D. Miner	498,360	May 30	3194	795	63	1251
Saw. Crosscut-	L. E. Dean	493,687	Mar. 21	1472	375	62	1677
Saw. Crosscut-	J. V. Hotchkiss	494,103	Mar. 21	2170	554	62	1810
Saw. Crosscut-	B. F. Moss	508,484	Nov. 14	831	206	65	927
Saw. Drag-	J. S. Clay and J. R. Rucker	491,985	Feb. 21	1482	369	62	1075
Saw-dressing device	J. A. McRanolds	495,946	Apr. 18	2273	573	63	453
Saw-filer	A. G. Phillips	494,487	Mar. 28	2785	699	62	1937
Saw filing and setting machine	L. S. Keeter	508,111	Nov. 7	217	56, 57	65	799
Saw-filing device	G. A. Kennedy	508,722	Nov. 14	1199	297	65	999
Saw-filing device	M. J. Page	493,445	Mar. 14	1060	273	62	1582
Saw-filing machine.	J. H. Diehl	495,400	Apr. 11	1410	354	63	278
Saw-filing machine.	W. P. Ginter and W. Strous	506,222	Oct. 10	726	181 182	65	149
Saw-filing machine.	G. R. Huff and G. H. Vernon	505,626	Sept. 26	2205	558 559	64	1725
Saw-filing machine.	J. C. Johnson	506,698	Oct. 17	1528	382 383	65	316
Saw-filing machine.	B. Tholen	511,561	Dec. 26	2953	719	65	1998
Saw-frame	E. Chaquette	510,774	Dec. 12	1586	395	65	1721
Saw-frame	G. M. Harriman	506,111	Oct. 3	483	125	65	94
Saw. Frame-	N. S. Snell	509,256	Nov. 21	2105	507	65	1185
Saw frame. Hack-	F. E. Horne	499,227	June 13	801	190	63	1544
Saw-gage	C. F. Fowler	503,281	Aug. 15	1740	430	64	913
Saw-gage	C. E. King	439,817	Jan. 10	1274	334	62	240
Saw-gage	D. C. Schlabach	496,233	Apr. 25	2711	679	63	550
Saw. Grooving-	H. F. Poore	489,206	Jan. 3	344	97	62	78
Saw-guide	H. L. Johnston and J. E. Sandberg	492,299	Feb. 21	1963	489	62	1174
Saw guide and cooler. Band-	E. G. Pake	495,330	Apr. 18	2102	528	63	421
Saw guide. Band-	E. F. W. Horn	492,511	Feb. 28	2322	576	62	1258
Saw guide. Band-	C. E. Wright	496,178	Apr. 25	2623	660	63	534
Saw-gummer.	A. W. McKinnon	496,948	May 9	912	235	63	802
Saw-gummer.	J. B. Rhodes	502,319	Aug. 1	113	26	64	586
Saw-hammering machine	T. H. Dillon	501,769	July 18	1983	490	64	390
Saw. Hack-	L. L. Davis	492,937	Mar. 7	262	66	62	1410
Saw. Hand-	T. S. Disston	495,931	Apr. 18	2252	567	63	449
Saw-handle	E. Andrews	508,798	Nov. 14	1306	325	65	1020
Saw-handle	M. M. Cope	498,626	May 30	3631	899	63	1330
Saw-handle	J. W. Miller	506,245	Oct. 10	781	193	65	160
Saw handle. Crosscut-	T. J. Ely	493,823	Mar. 21	1701	433	62	1721
Saw handle. Crosscut-	M. E. True	490,691	Jan. 31	2751	708	62	613
Saw-handle. Reversible	J. R. and W. R. Randolph	508,975	Nov. 21	1632	400	65	1095
Saw. Insertible-toothed.	J. E. Emerson	495,729	Apr. 18	1948	490	63	393
Saw-jointer	E. B. Pike	507,386	Oct. 24	2713	666	65	548
Saw machine. Drag-	E. A. Smith	506,277	Oct. 10	838	206	65	171
Saw machine for cutting metal, &c. Band-	G. W. Griffin	502,887	Aug. 8	1086	267	64	781
Saw machine. Hack-	H. D. Lanfair	502,978	Aug. 8	1259	308	64	811
Saw machine. Hack-	H. L. Pratt	502,996	Aug. 8	1282	314	64	816
Sawmill.	R. B. Cole	497,768	May 23	2238	561	63	1069
Sawmill.	C. E. Cranford	492,787	Mar. 7	23	6, 7	62	1363
Sawmill attachment.	W. G. Peyton	499,246	June 13	828	197	63	1549
Saw mill. Band-	J. E. and C. M. Emerson	499,162	June 6	701	168	63	1512
Saw mill. Band-	E. E. Fitzgerald	491,047	Jan. 31	3332	850	62	727
Saw mill. Band-	G. M. Hinkley, D. B. Hanson, and W. H. Trout.	491,683	Feb. 14	1013	255 256 257	62	968
Saw mill. Band-	C. H. Roberts	509,557	Nov. 28	2655	642 643	65	1301
Sawmill-carriage	W. S. Dodge	493,546	Mar. 14	1229	314	62	1613
Sawmill-carriage	S. R. Smith	496,142	Apr. 25	2570	647	63	524
Sawmill-carriage attachment.	G. W. Rodebaugh	490,453	Jan. 24	2339	606	62	517
Sawmill-carriage feed	F. O. Schroeder	489,988	Jan. 17	1573	412	62	353
Sawmill-carriage offset mechanism.	E. Myers and L. Hanhart	496,129	Apr. 25	2554	643	63	521
Sawmill-carriage offsetting device.	J. McAllister	510,042	Dec. 5	340	76	65	1473
Sawmill-carriage offsetting mechanism.	A. Cunningham	494,735	Apr. 4	328	83, 84	63	65
Sawmill-carriage setting device.	J. H. Dodds	491,090	Feb. 7	42	12	62	756
Sawmill-carriages. Mechanism for operating.	E. A. Reese, S. N. Hench, and W. A. Dromgold.	491,447	Feb. 7	641	160	62	870

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Sawmill-carriages. Mechanism for operating.....	J. N. Richey, S. N. Hench, and W. A. Dromgold.	491,494	Feb. 7	705	178	62	884
Sawmill-dog.....	M. W. Chamberlain	510,891	Dec. 19	1829	452	65	1777
Sawmill-dog.....	T. H. Comstock and J. E. Junk	489,287	Jan. 3	469	130	62	103
Sawmill-dog.....	S. Hauck and G. S. Comstock	496,650	May 2	413	112	63	694
Sawmill dogging mechanism.....	A. Harold	509,029	Nov. 21	1709	422	65	1110
Sawmill feed mechanism.....	J. L. Barnes	509,859	Dec. 5	10	2	65	1413
Sawmill feed mechanism.....	C. Bowman	502,245	July 25	2748	694	64	547
Sawmill feed mechanism.....	T. J. Reamy	491,856	Feb. 14	1283	318	62	1020
Sawmill feed mechanism.....	T. J. Reamy	510,818	Dec. 12	1663	412 413	65	1735
Sawmill-feeds. Valve connection for steam.....	J. H. Brown	494,116	Mar. 28	2203	562	62	1830
Saw mill. Gang.....	W. T. Mackey	501,799	July 18	2028	499 500	64	397
Sawmill head-block.....	S. F. Ames	490,131	Jan. 17	1818	475	62	404
Sawmill-works.....	H. W. Eisenhart, S. S. Morton, and H. B. Waltman.	495,405	Apr. 11	1417	356 357	63	280
Sawmill-works.....	J. P. McClure	495,259	Apr. 11	1192	299	63	239
Sawmill-works.....	T. S. Wilkin	490,463	Jan. 24	2357	611	62	521
Sawmill-works.....	W. A. Wilkinson	511,573	Dec. 26	2975	724 725	65	2002
Sawmill-works. Automatic receding.....	A. S. Petticrew	502,316	Aug. 1	102	24	64	584
Saw mill. Transportable circular.....	J. H. Matthews	496,886	May 9	814	214 215	63	784
Sawmills. Steam-feed for.....	W. E. Hill	509,737	Nov. 28	2936	710	65	1354
Saw. Miter.....	T. E. King	506,433	Oct. 10	1112	275 276 277	65	224
Saw. Miter.....	R. Uhl	493,667	Mar. 21	1440	367 368	62	1670
Saw. Pruning.....	F. P. Brewer	491,980	Feb. 21	1475	367	62	1073
Saw. Segment.....	G. B. Crapsey	490,384	Jan. 24	2243	583	62	499
Saw-set.....	J. P. Beck	507,523	Oct. 31	2949	723	65	605
Saw-set.....	E. W. Dillon	504,521	Sept. 5	350	89	64	1335
Saw-set.....	G. W. Eddy	499,825	June 20	1810	440	63	1733
Saw-set.....	C. Morrill	507,152	Oct. 24	2312	568	65	473
Saw-set.....	E. Smith	490,371	Jan. 24	2225	579	62	496
Saw-set.....	C. C. Taintor	499,482	June 13	1238	295	63	1621
Saw set and gage.....	E. E. Ritchie	505,925	Oct. 3	192	48	65	38
Saw set, gage, and jointer. Combined.....	E. M. Bickerstaff	504,656	Sept. 5	547	140	64	1373
Saw-setting device.....	C. M. Kardell	499,789	June 20	1745	422	63	1723
Saw-setting gage.....	W. Saxe	489,039	Jan. 3	93	26	62	23
Saw-setting machine.....	A. Holecek	505,880	Oct. 3	124	32	65	25
Saw-sharpener.....	W. H. Nogar	494,021	Mar. 21	2033	518	62	1784
Saw sharpening and setting machine.....	J. H. Landis	490,410	Jan. 24	2276	591	62	506
Saw-sharpening device.....	T. S. Disston	510,846	Dec. 12	1737	428 429	65	1749
Saw-sharpening machine.....	F. Schmaltz	490,927	Jan. 31	3127	802	62	687
Saw-sharpening machine.....	E. S. Twyford	489,275	Jan. 3	453	125 126	62	100
Saw. Steam-power crosscut.....	J. B. Kelly	503,665	Aug. 22	2375	592 593	64	1042
Saw straightening and expanding machine.....	I. Toomer	510,910	Dec. 5	618	145	65	1527
Saw-swage.....	A. E. Bronson and D. Chubb	502,065	July 25	2446	614	64	489
Saw-swage.....	R. E. Dimick	504,124	Aug. 29	3091	774	64	1197
Saw-swage.....	J. R. Kirkpatrick	499,295	June 13	910	220	63	1563
Saw-swage.....	S. U. Lockwood	493,435	Mar. 14	1038	268	62	1578
Saw-swage.....	J. F. Pribnow	508,118	Nov. 7	229	59	65	801
Saw-swage.....	J. W. Turner	497,616	May 16	1989	497	63	1008
Saw-table.....	C. D. Marsh	501,521	July 18	1573	396	64	317
Saw-table gage.....	P. Prybil	503,726	Aug. 22	2472	614	64	1061
Saw-templet.....	B. F. Spooner	503,010	Aug. 8	1302	318 319	64	819
Saw-tooth.....	W. E. Brooke	504,412	Sept. 5	162	43	64	1301
Saw-tooth.....	G. W. Mallette	492,407	Feb. 28	2142	535	62	1222
Saw-tooth and means for securing same.....	E. H. B. Taylor and J. D. Wimer	509,407	Nov. 28	2386	579	65	1248
Saw-tooth. Curved.....	I. N. Kendall and G. Cassidy	499,886	June 20	1917	465	63	1753
Saw-tooth-dressing device.....	C. H. Weston	499,625	June 13	1476	354	63	1663
Saw-tooth gage.....	J. F. Brower	492,187	Feb. 21	1794	448	62	1138
Saw-tooth-gaging device.....	E. J. Gould	506,998	Oct. 17	2023	500	65	409
Saw-tooth holder. Insertible.....	A. Krieger	493,334	Mar. 14	893	228	62	1548
Saws. Device for side-dressing circular.....	W. Hatfield	504,726	Sept. 12	673	172	64	1409
Saws. Device for side-swaging and setting.....	J. Scherer	489,663	Jan. 10	1037	270	62	231
Saws. Grinding mechanism for scarfing or beveling.....	J. N. Quinn	489,984	Jan. 17	1568	410	62	352
Saws. Manufacture of.....	G. W. Griffin	502,886	Aug. 8	1085	267	64	781
Saws. Method of and machine for finishing.....	T. J. St. Louis	501,742	July 18	1934	478	64	382
Saws. Power mechanism for circular.....	W. W. Holmes	511,269	Dec. 19	2459	600	65	1894
Saws. Safety-guard for rip.....	G. A. Shields	509,253	Nov. 21	2099	506	65	1184
Saws. Work-guide for.....	V. Stein	500,972	July 4	694	182	64	126
Sawing logs, trees, or spiles. Machine for.....	A. W. Rich	505,482	Sept. 26	1921	495	64	1672
Sawing-machine.....	L. Cooper	501,826	July 18	2060	508	64	404
Sawing-machine.....	L. A. Deuther	510,962	Dec. 19	1960	480	65	1801
Sawing-machine.....	E. B. Hayes	497,980	May 23	2573	643 644	63	1128
Sawing-machine.....	W. E. Moffatt	497,676	May 16	2077	519	63	1024
Sawing-machine.....	J. H. Peterson	494,887	Apr. 4	576	145	63	112
Sawing-machine.....	L. P. Smith	506,948	Oct. 17	1949	483	65	394
Sawing-machine.....	F. M. Teeguarden	502,838	Aug. 8	1013	247	64	768
Sawing-machine.....	J. A. Wells	490,696	Jan. 31	2756	710	62	614
Sawing-machine. Band.....	E. C. Mershon	503,768	Aug. 22	2540	631 632	64	1075
Sawing-machine. Band.....	E. C. Mershon	505,080	Sept. 12	1281	330 331	64	1525
Sawing-machine. Band.....	P. O'Connor	490,212	Jan. 17	1951	511	62	429

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Sawing machine. Band-saw shingle or board.....	G. W. Mason.....	495,353	Apr. 11	1334	{ 334 335 }	63	265
Sawing machine. Cold.....	G. Ehrhardt.....	500,193	June 27	2427	592	63	1854
Sawing-machine feed mechanism.....	J. V. Gue.....	490,748	Jan. 31	2841	729	62	630
Sawing-machine. Hack.....	D. C. Stover and F. W. Hoefer.....	510,619	Dec. 12	1324	{ 323 324 }	65	1672
Sawing-machine. Hand.....	F. L. T. Gerhard.....	509,574	Nov. 28	2682	649	65	1307
Sawing machine. Metal.....	G. Ehrhardt.....	500,194	June 27	2429	592	63	1854
Sawing machine. Reciprocating circular.....	G. M. Hinkley.....	499,293	June 13	901	{ 218 219 }	63	1561
Sawing machine. Wood.....	W. D. Hopkins.....	492,746	Feb. 28	2680	{ 665 666 }	62	1331
Sawing machine. Wood.....	D. M. Prosser.....	497,209	May 9	1300	331	63	871
Scaffold-horse.....	F. C. Lovejoy.....	498,749	May 30	3859	951	63	1370
Scaffold. Ladder.....	T. C. Williams.....	510,057	Dec. 5	367	81, 82	65	1479
Scaffold. Movable.....	K. A. Frosell.....	508,378	Nov. 7	652	{ 160 161 }	65	879
Scaffold. Portable.....	G. Barnes.....	499,699	June 20	1586	382	63	1696
Scaffold. Portable.....	I. Smith.....	506,561	Oct. 10	1318	{ 329 330 }	65	264
Scaffold truss or support for building, decorating, or other purposes.....	T. Kennedy.....	496,739	May 2	556	{ 149 150 }	63	719
Scaffolds. Contrivance for fastening.....	A. Kühn.....	508,949	Nov. 21	1506	391	65	1087
Scaffolding. Device for suspending.....	C. Heinemann.....	491,885	Feb. 14	1329	329	62	1029
Scalding machine. Tomato.....	J. D. Cox.....	494,463	Mar. 28	2752	{ 690 691 }	62	1931
Scale and bristle detaching machine.....	J. Tobin.....	493,454	Mar. 14	1075	{ 276 277 }	62	1584
Scale. Automatic electric weighing.....	C. F. Wood.....	500,045	June 20	2151	522	63	1794
Scale. Automatic grain.....	M. B. Lloyd.....	493,275	Mar. 14	790	205	62	1530
Scale. Automatic weighing and recording.....	W. F. Burns.....	502,222	July 25	2699	681	64	539
Scale. Bag-holding weighing.....	M. B. Lloyd.....	500,337	June 27	2657	651	63	1895
Scale-beam.....	S. T. Braley.....	509,591	Nov. 28	2705	654	65	1311
Scale-beam.....	M. N. Sevier.....	490,507	Jan. 24	2436	628	62	537
Scale-beam.....	L. G. Woolley.....	491,458	Feb. 7	658	165	62	874
Scale-beam. Computing.....	F. M. Daniels.....	494,552	Apr. 4	26	6	63	7
Scale. Cart.....	B. C. Coupland and F. T. Hough.....	502,810	Aug. 8	961	234	64	758
Scale. Computing.....	H. R. Blair and J. B. Giffen.....	510,319	Dec. 5	793	191	65	1560
Scale. Computing.....	A. B. Hayden.....	506,112	Oct. 3	484	125	65	95
Scale. Computing.....	J. H. Swihart.....	490,518	Jan. 24	2453	632	62	540
Scale. Computing weighing.....	C. M. Holden.....	503,931	Aug. 22	2768	693	64	1120
Scale. Druggist's weighing.....	G. Nithack.....	494,685	Apr. 4	245	62	63	50
Scale. Electric grain-weighing.....	J. and D. D. A. Outcalt.....	511,647	Dec. 26	3096	756	65	2023
Scale. Lengths-dividing.....	E. Goldschmitt.....	495,219	Apr. 11	1119	280	63	226
Scale. Letter.....	S. W. Babbitt.....	490,422	Jan. 24	2296	596	62	509
Scale. Letter.....	E. S. May.....	493,636	Mar. 21	1394	353	62	1661
Scale. Letter.....	C. A. Miller.....	504,534	Sept. 5	371	94	64	1339
Scale. Pattern-maker's.....	J. T. Cowley.....	503,528	Aug. 15	2132	535	64	984
Scale. Pendulum weighing.....	L. C. Farmer.....	499,378	June 13	1059	257	63	1590
Scale. Platform.....	S. J. Austin.....	506,148	Oct. 3	552	144	65	107
Scale. Platform.....	S. T. Braley.....	509,592	Nov. 28	2706	{ 654 655 }	65	1311
Scale. Platform.....	G. W. Williams.....	505,503	Sept. 26	1973	507	64	1680
Scale. Portable.....	J. W. Storey.....	502,786	Aug. 8	929	226	64	752
Scale. Portable wagon.....	L. G. Clawson and E. G. Wheeler.....	489,930	Jan. 17	1463	383	62	338
Scale. Recording.....	R. McFarlane.....	495,752	Apr. 18	1979	500	63	399
Scale. Recording weighing.....	C. M. Bruff.....	492,708	Feb. 28	2626	{ 650 651 }	62	1321
Scale. Recording weighing.....	R. McFarlane.....	495,751	Apr. 18	1977	{ 499 500 }	63	398
Scale. Sack.....	R. Abercrombie.....	502,265	Aug. 1	1	1	64	567
Scale. Sack.....	L. L. Maxhimer.....	495,897	Apr. 18	2206	556	63	440
Scale. Spring.....	G. H. Chatillon.....	505,091	Sept. 19	1301	335	64	1543
Scale. Spring.....	G. H. Chatillon.....	507,107	Oct. 24	2215	547	65	456
Scale. Spring.....	E. N. Gilfillan.....	498,711	May 30	3788	934	63	1356
Scale. Weighing.....	J. J. Hickey.....	499,993	June 20	2071	501	63	1780
Scale. Weighing.....	I. M. Hill.....	497,241	May 9	1357	345	63	882
Scale. Weighing.....	C. O. Miller.....	504,930	Sept. 12	1023	264	64	1478
Scales. Druggist's weighing.....	W. H. Sargent.....	489,331	Jan. 3	531	144	62	114
Scales. Pendulum.....	C. L. and P. C. Woods.....	510,948	Dec. 19	1935	472	65	1797
Scales. Price.....	O. O. Ozias.....	506,793	Oct. 17	1691	{ 425 426 }	65	347
Scales. Price-indicating attachment for weighing.....	W. H. Gamble and D. H. Allen.....	489,942	Jan. 17	1495	390	62	338
Scalper.....	A. Van Camp.....	491,392	Feb. 7	551	140	62	854
Scalper. Rotary.....	W. H. Meldrum and H. R. Shaw.....	494,683	Apr. 4	241	61	63	49
Scalping-machine.....	W. D. Gray.....	497,655	May 16	2047	{ 511 512 }	63	1018
Scarf-pin.....	B. A. Ballou.....	492,522	Feb. 28	2334	579	62	1261
Scenic effects. Apparatus for producing.....	S. Mackaye.....	490,483	Jan. 24	2392	619	62	528
Scenic effects. Apparatus for producing increased realism in.....	S. Mackaye.....	490,490	Jan. 24	2404	{ 621 622 623 }	62	530
School-bag.....	J. E. Edwards.....	511,690	Dec. 26	3166	774	65	2036
School seat and desk.....	G. W. Peek.....	499,851	June 20	1852	451	63	1741
School seat and desk. Adjustable.....	E. C. Gard and O. M. Wing.....	499,671	June 13	1540	371	63	1673
Scissors-sharpener.....	W. L. Beers and H. O. Howland.....	511,397	Dec. 26	2698	654	65	1951
Scoop and sifter. Flour.....	T. W. Gould.....	490,766	Jan. 31	2867	735	62	635
Scoop. Sifting.....	E. H. Whitney.....	500,542	June 27	2969	729	63	1951
Scourer.....							
See Grain-scourer. Wheat-scourer.							
Knife or fork scourer.							
Scouring and washing apparatus feeder.....	J. H. Bickley.....	494,405	Mar. 28	2670	670	62	1917
Scouring, polishing, and buffing machine. Combined.....	N. Nelson.....	492,099	Feb. 21	1650	411	62	1108
Scouring, polishing, and buffing machine. Combined.....	N. Nelson.....	510,438	Dec. 12	984	235	65	1611

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Scow. Dumping.....	T. T. H. Harwood.....	489,434	Jan. 3	691	{ 185	62	148
Scow. Dumping.....	B. A. Mullin.....	501,020	July 4	760	{ 186		
Scow. Dumping.....	P. Ryan.....	502,142	July 25	2566	644	64	139
Scraper.....	C. F. Aldrich.....	501,858	July 18	2106	520	64	512
Scraper.....	H. G. Butler.....	493,421	Mar. 14	1012	261	62	412
Scraper.....	E. J. Davy.....	508,685	Nov. 14	1143	282	65	1573
Scraper.....	H. Molchior.....	510,956	Dec. 19	2005	495	65	989
Scraper.....	B. F. Shuart.....	499,477	June 13	1232	294	63	1809
Scraper.....	P. Unsinger.....	499,060	June 6	553	130	63	1620
Scraper and cultivator. Combined.....	G. W. Smith and J. S. Hendon.....	510,940	Dec. 19	1919	469	65	1487
Scraper apparatus.....	W. and H. G. Butler.....	494,320	Mar. 28	2523	636	62	1794
Scraper. Excavating.....	D. I. Calhoun.....	506,667	Oct. 17	1478	{ 371	65	307
Scraper-operating apparatus.....	H. G. Butler.....	491,765	Feb. 14	1141	{ 372		
Scraper or shovel.....	J. A. Campbell.....	509,875	Dec. 5	44	10	62	992
Scraper. Pot.....	C. G. Menninger.....	490,577	Jan. 24	2532	652	62	1419
Scraper. Road.....	P. Blanchard.....	494,317	Mar. 28	2518	634	62	556
Scraper. Road.....	J. F. Kimball.....	491,565	Feb. 14	827	{ 210	62	1889
Scraper. Wheeled.....	W. Ackerman and A. A. Hasselquist.....	509,278	Nov. 21	2114	{ 211		
Scraper. Wheeled.....	P. Deevy.....	506,212	Oct. 10	713	513	65	929
Scraper. Wheeled.....	F. F. Hudel and E. H. Liebenstein.....	501,145	July 11	980	179	65	1190
Scraper. Wheeled.....	J. B. Mowry.....	497,233	May 9	1436	250	64	146
Scraper. Wheeled.....	F. A. Rathbun.....	499,038	June 6	514	{ 363	63	893
Scraper. Wheeled.....	F. A. Rathbun.....	509,398	Nov. 28	2371	{ 364		
Screen:					{ 374	65	1246
See Carriage-screen. Grain-screening screen.					{ 375		
Centrifugal screen. Insect-screen.							
Clay-screen. Ornamental screen.							
Coal-screen. Pulp-screen.							
Door or window screen. Revolvable screen.							
Fire-screen. Rotating screen.							
Flume-screen. Sand-screen.							
Fly-screen. Self-cleaning screen.							
Grain-screen. Window-screen.							
Screen.....	F. Wagner.....	492,073	Feb. 21	1608	400	62	1099
Screen-holder.....	W. Wuestefeld.....	507,398	Oct. 24	2731	670	65	551
Screw.....	J. B. Adler.....	497,510	May 16	1829	461	63	979
Screw-blank-feeding mechanism.....	H. K. Jones.....	504,435	Sept. 5	202	52, 53	64	1308
Screw-cap.....	C. T. Brant.....	495,195	Apr. 11	1090	271	63	320
Screw-clamp.....	J. Frank and F. H. Frankenberg.....	490,143	Jan. 17	1836	479	62	407
Screw-cleaning device.....	C. W. Stevens.....	491,144	Feb. 7	128	34	62	773
Screw-cutting dies. Machine for the manufacture of.....	W. O. Harris.....	500,494	June 27	2885	710	63	1935
Screw-cutting implement.....	R. Bowman.....	499,092	June 6	596	143	63	1494
Screw-cutting machine.....	J. Davidsohn.....	510,320	Dec. 5	803	194	65	1562
Screw-cutting machine.....	W. W. Doolittle.....	489,222	Jan. 3	371	103	62	84
Screw-cutting machine.....	J. A. Field.....	499,979	June 20	2047	{ 496	63	1776
Screw-cutting machine.....	M. Macdougall.....	502,675	Aug. 1	729	{ 497		
Screw-cutting machine.....	W. W. Tucker.....	500,043	June 20	2147	521	63	700
Screw. Drive.....	R. Linkletter.....	494,681	Apr. 4	240	60	63	1793
Screw-driver.....	G. W. Agin.....	503,569	Aug. 22	2210	553	64	49
Screw-driver.....	S. S. Hand.....	508,706	Nov. 14	1177	290	64	1013
Screw-driver.....	A. Schuermann.....	504,757	Sept. 12	740	184	64	994
Screw-driver and tool-handle. Combination.....	J. B. Hughes.....	505,165	Sept. 19	1412	364	64	1423
Screw-driver attachment.....	J. R. Kimby.....	491,687	Feb. 14	1018	258	62	1562
Screw-hooks, &c. Tool for holding.....	J. Uhl.....	510,104	Dec. 5	443	99	65	969
Screw-jack.....	B. F. Cox and J. Fahey.....	500,757	July 4	364	94	64	1493
Screw-jack.....	W. Quinn.....	493,183	Mar. 7	639	163	62	68
Screw. Jack.....	P. H. Grimm and F. J. Williard.....	500,203	June 27	2442	596	63	1484
Screw. Jack.....	C. Johnson.....	493,332	Mar. 14	890	228	62	1856
Screw-machine.....	E. E. Claussen.....	502,923	Aug. 8	1160	{ 285	64	795
Screw-machine.....	E. E. Claussen.....	504,102	Aug. 29	3060	{ 286		
Screw-machine.....	C. Grotz.....	507,494	Oct. 24	2880	{ 765	65	579
Screw-machine.....	J. Hartness.....	510,020	Dec. 5	308	{ 766		
Screw-machine. Automatic.....	O. P. Briggs.....	508,864	Nov. 14	1418	{ 767	65	1468
Screw-machine die or tap holder.....	J. B. Clyne.....	497,767	May 23	2937	{ 768		
Screw machine. Machine.....	M. Macdougall.....	502,371	Aug. 1	203	48	64	1040
Screw machine. Metal.....	J. Hartness.....	502,517	Aug. 1	452	109	64	1069
Screw-making machine.....	T. Sowerbotts.....	509,775	Nov. 28	2994	{ 724	65	1365
Screw-making machine.....	B. F. Wheeler.....	499,070	June 6	564	{ 725		
Screw-manufacturing machine.....	J. B. Clyne.....	497,766	May 23	2934	560	63	1489
Screw-threads. Apparatus for milling dies for rolling.....	H. K. Jones.....	502,257	July 25	2770	700	64	1069
Screw-threads. Attachment for machines for rolling.....	H. K. Jones.....	492,468	Feb. 28	2239	560	62	552
Screw-threads. Die for forming.....	J. Sheldon.....	498,582	May 30	3548	{ 879	63	1316
Screw-threads. Die for rolling.....	W. O. Bement.....	510,109	Dec. 5	449	{ 880		
Screw-threads. Die for rolling.....	H. K. Jones.....	502,256	July 25	2768	699	64	1494
Screw-threads. Die for rolling.....	H. K. Jones.....	502,258	July 25	2774	701	64	551
Screw-threads. Machine for forming.....	E. G. King and C. H. Becker.....	502,302	Aug. 1	77	17, 18	64	552
Screw-threads. Tool for cutting down.....	C. A. Higbee, J. Braun, and H. Deck.....	501,943	July 25	2255	563	64	580
Screw-threads. Tool for trimming.....	C. A. Higbee.....	501,942	July 25	2253	{ 562	64	454
					{ 563		

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Screw. Wood.	H. W. Morgan.	507,919	Oct. 31	3611	891	65	729
Screw. Wood.	M. Herzberg and T. L. Norman	493,585	Mar. 14	1304	332	62	1628
Screw-wrench.	W. Dicks.	509,151	Nov. 21	1919	469	65	1150
Screws. Method of and machine for feeding.	G. Wood.	510,224	Dec. 5	647	153 } 154	65	1532
Scrubber.	O. Smith.	494,037	Mar. 21	2056	525	62	1788
Scrubbing and mopping machine.	C. W. Shively and S. W. Barclay.	500,221	June 27	2474	603	63	1862
Sculptural work. Apparatus for copying	P. Hasselberg.	508,310	Nov. 7	541	133	65	858
Scythe.	J. Badertscher.	504,773	Sept. 12	771	194	64	1428
Sea. Apparatus for calming the waves of the	B. B. D'Alessandro.	499,319	June 13	944	228	63	1569
Seal.	E. J. Brooks.	501,042	July 4	799	209	64	146
Seal.	E. J. Brooks.	503,645	Aug. 22	2344	585	64	1036
Seal.	F. W. Brooks.	492,103	May 23	2756	689	63	1160
Seal.	F. W. Brooks.	511,723	Dec. 26	3217	789	65	2046
Seal.	F. W. Brooks.	511,724	Dec. 26	3218	789	65	2046
Seal.	W. G. Denney.	503,110	Aug. 8	1456	358	64	848
Seal.	J. L. Hayden.	500,743	July 4	338	89	64	63
Seal and seal-tag.	E. J. Brooks.	505,388	Sept. 19	1771	458	64	1629
Seal and tag therefor.	E. J. Brooks.	509,610	Nov. 28	2738	661	65	1318
Seal. Car.	J. T. Goffett.	490,018	Jan. 17	1631	425	62	365
Seal. Car.	J. Nadon.	511,642	Dec. 26	3091	755	65	2022
Seal. Center.	J. Hearne.	501,342	July 11	1300	324	64	250
Seal. Center.	K. M. Mitchell.	501,572	July 18	1648	412 } 413	64	332
Seal for vessels and means for opening same	A. F. Fitz Gerald.	489,183	Jan. 3	309	86	62	70
Seal-lock.	J. Dowling.	506,214	Oct. 10	714	179	65	146
Seal-lock.	F. F. Getze.	509,077	Nov. 21	1796	442	65	1126
Seal-lock.	D. F. MacCarthy.	495,097	Apr. 11	905	228	63	189
Seal-lock.	O. E. Wheaton.	504,643	Sept. 5	526	135	64	1369
Seal-press. Roller.	G. A. Cline.	494,411	Mar. 28	2678	672	62	1919
Sealed bucket. Hermetically.	S. N. Long.	510,867	Dec. 12	1791	440	65	1757
Sealing bottles, jars, &c. Means for hermetically	A. Weissenthanner.	500,698	July 4	264	72	64	50
Sealing cans, &c. Apparatus for	R. A. Sloan and J. E. L. Barnes.	502,019	July 25	2370	595 } 596	64	476
Sealing device. Bottle.	M. N. Lynn.	491,431	Feb. 7	602	152	62	864
Sealing device. Bottle.	M. N. and E. P. Lynn.	491,432	Feb. 7	604	153	62	864
Sealing device. Bottle.	E. P. Lynn.	491,433	Feb. 7	605	153	62	864
Sealing vessels. Hermetically	A. L. Weissenthanner.	509,834	Nov. 28	3094	747	65	1385
Seam-finishing machine.	I. Hayes.	502,719	Aug. 8	822	199	64	731
Seam for articles of manufacture.	C. H. Wilcox.	498,600	May 30	3575	886	63	1321
Seam for sheet-metal vessels. All-metal.	C. E. Pierce.	508,237	Nov. 7	424	102	65	837
Seam for uniting or ornamenting fabrics	G. D. Munsing.	506,525	Oct. 10	1267	317	65	254
Seam-turning machine.	O. A. Webber.	509,983	Dec. 5	240	56	65	1454
Seams. Making.	S. Jaros.	501,478	July 11	1502	378	64	289
Seaming machine. Can.	C. B. Kendall and H. Schaake.	489,484	Jan. 10	777	205 } 206 } 207	62	179
Seaming machine. Roller.	C. L. Wagandt.	506,022	Oct. 3	340	90, 91	65	67
Seaming machine. Sheet-metal.	H. L. Hosmer and W. R. Wilson.	500,900	July 4	576	150	64	105
Seaming-roller for tin roofs	J. M. and W. J. Devers.	496,970	May 9	942	247	63	807
Search-light.	A. L. Rohrer.	508,642	Nov. 14	1084	268	65	977
Seat:							
See Adjustable seat.	Counter-seat.						
Bicycle-seat.	School-seat.						
Car-seat.	Vehicle-seat.						
Carriage-seat.	Vehicle shifting seat.						
Carriage jump-seat.	Vehicle spring-seat.						
Carriage shifting seat.	Wagon-seat.						
Window-seat.							
Seat.	G. A. Ennis.	504,915	Sept. 12	1001	258	64	1473
Seat.	B. C. Smith.	503,728	Aug. 22	2474	615	64	1062
Seat for agricultural machines or vehicles.	G. Banks.	493,573	Mar. 14	1287	329	62	1625
Seat-spring.	G. Coxon.	510,838	Dec. 12	1691	420	65	1741
Seat-spring. Expansion.	W. J. Morgan.	507,027	Oct. 17	2070	511	65	417
Secondary battery.	C. R. Arnold.	489,115	Jan. 3	207	55	62	48
Secondary battery.	L. Bristol.	493,817	Mar. 21	1694	431	62	1719
Secondary battery.	N. H. Edgerton.	491,878	Feb. 14	1321	327	62	1027
Secondary battery.	F. King.	501,723	July 18	1896	471	64	376
Secondary battery.	F. King and E. Clark.	500,394	June 27	2744	675	63	1910
Secondary battery.	I. Kitsée.	505,467	Sept. 26	1901	490	64	1668
Secondary battery.	H. H. Lloyd.	490,254	Jan. 17	2016	527	62	442
Secondary battery.	L. Morse.	502,824	Aug. 8	993	242	64	764
Secondary battery.	F. O. Norton.	499,848	June 20	1845	449	63	1740
Secondary battery.	L. B. Rowley.	495,638	Apr. 18	1794	450	63	367
Secondary battery.	W. L. Silvey.	500,622	July 4	136	37	64	27
Secondary battery.	W. L. Silvey.	504,370	Sept. 5	92	23	64	1288
Secondary battery.	C. A. Smyth.	507,463	Oct. 24	2831	693	65	571
Secondary electric battery.	C. Theryc and A. Oblasser.	500,978	July 4	701	184	64	100
Sectional boiler.	W. H. Page.	500,507	June 27	2904	714	63	1938
Seed. Apparatus for delinting cotton.	A. D. Thomas.	503,104	Aug. 8	1446	356	64	846
Seed delinter. Cotton.	H. L. Fox.	495,167	Apr. 11	1045	260 } 261	63	212
Seed delinter. Cotton.	R. F. Spangenberg.	495,069	Apr. 11	845	215 } 216	63	176
Seed drill. Garden.	H. Bender.	493,146	Mar. 7	581	145	62	1473
Seed grinder. Cotton.	J. T. Tullis.	503,259	Aug. 15	1706	419	64	907
Seed linters. Auxiliary feed mechanism for cotton.	F. S. Strong and F. C. Mann.	503,997	Aug. 29	2897	725	64	1160
Seed. Machine for delinting cotton.	F. W. Cross.	499,873	June 20	1891	460	63	1748
Seed. Method of and apparatus for delinting cotton.	A. D. Thomas.	503,103	Aug. 8	1443	355 } 356	64	846
Seed or fertilizer distributor. Convertible.	W. E. H. Searcy.	502,892	Aug. 8	1097	269 } 270	64	783
Seeds. Apparatus for treating oleaginous or other.	A. Paget.	494,883	Apr. 4	571	144	63	111

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Invention.	Name.	No.	Date.	Monthly volume		Official Gazette.	
				Spec.	Disg.	Vol.	Page.
Seeds. Machine for removing lint from cotton.....	M. Moran	500,102	June 20	2236	544	63	1808
Seeder	O. Erickson	491,994	Feb. 21	1493	373	62	1077
Seeder	A. G. Gekeler	502,960	Aug. 8	1223	301	64	805
Seeder	M. S. Henry	496,782	May 2	621	166	63	730
Seeder	F. S. McWhorter	504,500	Sept. 5	318	81, 82	64	1329
Seeder	E. D. Mead	492,358	Feb. 21	2058	513 514	62	1192
Seeder. Broadcast	E. H. Grafunder	491,167	Feb. 7	174	44, 45	62	781
Seeder. Broadcast hand	H. H. Franzen	490,956	Jan. 31	3177	813	62	696
Seeder. Disk harrow	G. W. Packer	495,120	Apr. 11	956	240	63	197
Seeder. Disk harrow	G. W. Packer	505,534	Sept. 26	2038	520	64	1692
Seeding attachment. Vehicle	J. E. Haines	506,910	Oct. 17	1887	470	65	382
Seeding-drill	W. F. Hoyt	492,802	Mar. 7	48	11, 12	62	1368
Seeding-machine	F. H. Ferris	507,796	Oct. 31	3412	836 837	65	692
Seeding-machine	W. C. Johnson	508,321	Nov. 7	557	137	65	860
Seeding-machine	J. F. Parks	504,362	Sept. 5	72	19	64	1284
Seeding-machine	J. B. Williams	503,274	Aug. 15	1728	426	64	911
Seesaw and merry-go-round. Combination	F. Goldsmith	501,005	July 4	740	194	64	135
Seesaw. Folding	E. M. Searce	505,485	Sept. 26	1925	496 497	64	1673
Seine-hauling apparatus	H. Thiel	490,375	Jan. 24	2232	581	62	498
Self-cleaning screen	A. Fereva	493,886	Mar. 21	1790	457	62	1738
Self-closing and self-locking switch	H. Tracy and H. Noble	507,187	Oct. 24	2372	585 586	65	483
Self-closing box	S. E. Hurlbut	496,610	May 2	341	93	63	681
Self-closing can	W. A. Sexton	502,537	Aug. 1	487	117	64	656
Self-serving table	R. T. Hollowell	490,286	Jan. 24	2085	544	62	467
Self-waiting table	J. Hammerle	498,747	May 30	3856	950	63	1369
Self-waiting table	G. W. Jackson	505,602	Sept. 26	2172	549	64	1719
Seller. Merchandise	F. Towle	491,147	Feb. 7	132	35, 36	62	774
Semaphore	B. F. Culp	497,265	May 9	1397	353	63	887
Semaphore and revolving lamp	J. Wrigley	496,080	Apr. 25	2480	627	63	507
Semaphore-operating device	J. H. Frischen	501,062	July 11	833	216 217	64	167
Separating-machine	C. F. Shumaker	494,800	Apr. 4	441	109	63	86
Separation. Centrifugal	O. B. Peck	499,348	June 13	1005	243 244	63	1580
Separation. Centrifugal	O. B. Peck	499,349	June 13	1012	244 245	63	1581
Separator:							
See Boiler-separator. Grain-separator.							
Castings-separator. Liquid-separator.							
Centrifugal separator. Mineral-separator.							
tor. Ore-separator.							
Cream-separator. Phosphate-separator.							
Dust-separator. Spinning-machine separator.							
Egg separator. tor.							
Froth and liquid separator. Steam-separator.							
Gas-separator. Stone-separator.							
Gold-separator. Teeth-separator.							
Separator	J. M. Finch	499,915	June 20	1958	475	63	1760
Separator	J. Frey	492,720	Feb. 28	2644	655	62	1324
Separator	W. Seoular	502,144	July 25	2571	645	64	513
Separator	R. A. Stubbs	499,262	June 13	848	203	63	1552
Separator	F. H. Wheelan	498,597	May 30	3571	885	63	1320
Separator	F. H. Wheelan and R. W. Jessup	508,792	Nov. 14	1298	323	65	1018
Separator and screen	J. Pollock	505,723	Sept. 26	2381	601	64	1756
Sewage, &c. Apparatus for cleansing	W. Birch	491,796	Feb. 14	1192	298	62	1002
Sewage, &c. Apparatus for the purification of	I. H. Jewell	506,879	Oct. 17	1836	459	65	373
Sewage. Apparatus for treating	J. J. Powers	499,583	June 13	1407	336	63	1650
Sewage disposal	I. H. Jewell	506,880	Oct. 17	1838	459	65	373
Sewage. Purifying	W. E. Adeney and W. K. Parry	505,182	Sept. 19	1439	370 371	64	1567
Sewage. Treating	J. J. Powers	495,834	Apr. 18	2108	530	63	423
Sewage-treating apparatus	O. E. Meyer	505,166	Sept. 19	1414	364	64	1562
Sewer	J. P. Nesdall, C. E. Colton, and R. Mara	508,967	Nov. 21	1619	398	65	1092
Sewer-basin trap	W. E. Sefton	506,267	Oct. 10	812	209	65	165
Sewer-cleaner	N. Lacroix and L. Dubois	494,427	Mar. 28	2700	678	62	1922
Sewer-cleaning apparatus	A. Mundell	502,130	July 25	2545	638	64	509
Sewer-guard	S. T. Williams of Thos.	492,450	Feb. 28	2206	551	62	1235
Sewer-pipe ventilating-cap	H. Bradley, Jr., and J. V. Adams	499,904	June 20	1942	471	63	1757
Sewer seal device	D. F. L. Jones and J. D. McPhail	498,121	May 23	2785	696	63	1166
Sewer-sheathing. Timber-driver for	W. D. Van Duzee	495,126	Apr. 11	976	244	63	200
Sewer-trap	I. Heffron	506,690	Oct. 17	1515	380	65	314
Sewer-trap	P. Standen	505,302	Sept. 19	1635	422	64	1604
Sewer water-trap	A. Budde	493,750	Mar. 21	1584	403	62	1699
Sewer well and grate	C. Munson	490,301	Jan. 24	2105	548	62	471
Sewing-cabinet and work-table	J. H. Simmons	509,773	Nov. 28	2989	723	65	1364
Sewing-looped fabrics. Attachment for machines for	A. L. Traver	502,478	Aug. 1	381	91, 92	64	636
Sewing-looped fabrics. Machine for	A. L. Traver	490,417	Jan. 24	2290	595	62	508
Sewing-machine	J. E. Bertrand	502,874	Aug. 8	1065	262	64	777
Sewing-machine	J. E. Bertrand	502,875	Aug. 8	1066	262	64	777
Sewing-machine	H. E. Cole	495,452	Apr. 11	1493	375	63	294
Sewing-machine	G. H. Colley	508,600	Nov. 14	1022	232	65	964
Sewing-machine	P. L. Cox	504,911	Sept. 12	992	255 256	64	1472
Sewing machine	C. W. Davis	504,061	Aug. 29	2990	747	64	1177
Sewing-machine	M. T. Denne	505,034	Sept. 12	1198	307 308	64	1510
Sewing-machine	F. Doucet	507,530	Oct. 31	2962	726	65	608

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Sewing-machine	D. Flanagan	497,644	May 16	2031	{ 505 506 507	63	1015
Sewing-machine	C. S. Gooding	489,945	Jan. 17	1500	{ 391 392 393	62	339
Sewing-machine	W. H. Hanna	491,554	Feb. 14	810	{ 204 205	62	925
Sewing-machine	G. S. Hill	494,480	Mar. 28	2775	696	62	1936
Sewing-machine	C. M. Hine	497,242	May 9	1358	345	63	882
Sewing-machine	D. Howell	508,715	Nov. 14	1189	293	65	997
Sewing-machine	E. Kohler	489,163	Jan. 3	272	76	62	63
Sewing-machine	F. W. Merrick	490,857	Jan. 31	3000	770	62	662
Sewing-machine	L. L. Miller	493,217	Mar. 7	686	176	62	1493
Sewing-machine	L. L. Miller	507,825	Oct. 31	3464	852	65	702
Sewing-machine	A. Morley	499,845	June 20	1840	448	63	1739
Sewing-machine	G. D. Munsing	506,524	Oct. 10	1266	317	65	254
Sewing-machine	L. Muther	506,527	Oct. 10	1269	318	65	255
Sewing-machine	L. Onderdonk	506,538	Oct. 10	1285	321	65	258
Sewing-machine	J. Reece	498,216	May 23	2935	{ 730 731	63	1191
Sewing-machine	J. Schaack	507,243	Oct. 24	2470	608	65	501
Sewing-machine	J. R. Scott	497,690	May 16	2107	526	63	1029
Sewing-machine	E. Smith	504,792	Sept. 12	796	{ 202 203	64	1432
Sewing-machine	G. Speight and S. Chapman	494,039	Mar. 21	2060	526	62	1789
Sewing-machine	G. Speight, S. Chapman, and R. Todd	494,038	Mar. 21	2057	{ 525 526	62	1789
Sewing-machine	W. H. H. Tracy	498,331	May 30	3141	783	63	1243
Sewing-machine	W. H. H. Tracy	498,332	May 30	3144	784	63	1244
Sewing-machine	K. Vogel	500,518	June 27	2934	720	63	1945
Sewing-machine attachment	H. B. Burns	510,771	Dec. 12	1583	394	65	1720
Sewing-machine attachment	C. F. Wells and M. J. Sparks	509,062	Nov. 21	1757	434	65	1119
Sewing-machine attachment	R. A. Shellard	491,194	Feb. 7	219	56	62	789
Sewing-machine attachment-holder	J. M. Greist	504,876	Sept. 12	934	240	64	1460
Sewing-machine attachment-holder	G. Tucker	503,222	Aug. 15	1652	405	64	897
Sewing-machine binding attachment	C. L. Torr	506,888	Oct. 17	1854	462	65	376
Sewing-machine bobbin	J. Scott	493,845	Mar. 21	1731	441	62	1727
Sewing-machine bobbin	C. E. Wilkinson	493,417	Mar. 14	1008	260	62	1572
Sewing-machine bobbin-winder	A. Morley	497,476	May 16	1765	445	63	967
Sewing-machine bobbin-winding machine	F. Müller	495,990	Apr. 25	2338	592	63	480
Sewing machine. Book-	E. Nugent	507,034	Oct. 17	2083	{ 514 515	65	419
Sewing machine. Book-	D. M. Smyth	491,228	Feb. 7	273	68, 69	62	800
Sewing-machine box-loop attachment	J. W. Hynes	510,792	Dec. 12	1615	402	65	1727
Sewing-machine. Buttonhole.	W. F. Fair	500,708	July 4	280	76, 77	64	52
Sewing-machine. Buttonhole.	J. Reece	494,280	Mar. 28	2465	{ 620 621 622	62	1878
Sewing-machine buttonhole attachment	J. W. Blodgett	490,735	Jan. 31	2813	{ 722 723	62	625
Sewing-machine cloth-winding attachment	E. Calm	497,425	May 16	1680	{ 424 425	63	954
Sewing-machine clutch	C. A. Dahl	503,311	Aug. 15	1801	447	64	922
Sewing-machine-cover holder	W. R. Towse	492,851	Mar. 7	121	30	62	1381
Sewing-machine. Fair-stitch	E. F. Mower	507,377	Oct. 24	2702	{ 663 664	65	545
Sewing-machine feed	J. N. Kelly	507,737	Oct. 31	3306	809	65	673
Sewing-machine feed-adjusting device	P. L. Cox	507,786	Oct. 31	3397	833	65	689
Sewing-machine feed mechanism	F. W. Merrick	490,854	Jan. 31	2996	{ 767 768	62	661
Sewing-machine feeding mechanism	D. Flanagan	497,645	May 16	2034	507	63	1016
Sewing-machine feeding mechanism	V. Leconte, Père.	509,744	Nov. 28	2946	{ 712 713	65	1356
Sewing-machine feeding mechanism	W. A. Mack	510,868	Dec. 12	1792	440	65	1757
Sewing-machine feeding mechanism	C. Maldaner	496,660	May 2	431	115	63	697
Sewing-machine feeding mechanism	C. Maldaner	510,433	Dec. 12	979	{ 233 234	65	1610
Sewing-machine feeding mechanism	C. McNeil	506,532	Oct. 10	1275	319	65	256
Sewing-machine feeding mechanism	R. J. Woodward	506,455	Oct. 10	1149	285	65	232
Sewing-machine folding guide	J. I. McDonald	508,223	Nov. 7	417	101	65	836
Sewing-machine for barring buttonholes	E. Z. Taylor	509,970	Dec. 5	207	47, 48	65	1449
Sewing-machine for making straw bottle-covers	K. Giese	507,898	Oct. 31	3575	{ 880 881 882	65	722
Sewing-machine guide	J. Douglas	507,112	Oct. 24	2223	549	65	457
Sewing-machine guide	C. H. Foster	501,930	July 25	2239	559	64	451
Sewing-machine guide	W. Raenuehle	490,885	Jan. 31	3051	783	62	673
Sewing-machine guiding attachment	J. D. Krenz and W. D. Frederick	494,679	Apr. 4	236	60	63	48
Sewing-machine guiding device	J. Douglas	507,489	Oct. 24	2873	{ 704 705	65	578
Sewing-machine hemming attachment	W. M. and L. E. Webber	494,971	Apr. 4	695	178	63	133
Sewing-machine hemstitching attachment	M. E. Hall	493,496	Mar. 14	1142	{ 292 293	62	1596
Sewing-machine motor	J. C. Drew	489,121	Jan. 3	216	58	62	50
Sewing-machine motor	H. A. Frantz	491,751	Feb. 14	1114	282	62	988
Sewing-machine needle	S. M. Creteau	493,399	Mar. 14	986	254	62	1568
Sewing-machine needle	F. J. Freese	489,800	Jan. 10	1251	327	62	274
Sewing-machine needle	G. W. Lascell	507,548	Oct. 31	2990	734	65	613
Sewing-machine needle	N. H. Piffard	497,926	May 23	2487	621	63	1113
Sewing-machine needle-clamp carrier	P. B. Laskey	498,212	May 23	2931	730	63	1191
Sewing-machine-needle drawer	H. B. Essington	489,558	Jan. 10	899	{ 234 235	62	203
Sewing-machine needle-threader	E. C. Jenkins	500,235	June 27	2492	609	63	1866

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Sewing-machine needle-threading attachment	G. B. Windsor	507,955	Oct. 31	3674	912	65	741
Sewing-machine. Overseaming	E. and R. Cornely	501,057	July 11	827	215	64	166
Sewing-machine. Overseaming	J. M. Merrow and J. T. Collins	497,587	May 16	1940	487 488	63	999
Sewing-machine overseaming attachment	G. W. Kemp	497,668	May 16	2067	516	63	1022
Sewing-machine presser-foot	H. Mundlos	511,539	Dec. 26	2920	711	65	1993
Sewing-machine presser-foot	S. W. Philbrick	494,224	Mar. 28	2378	600	62	1863
Sewing-machine quilting attachment	W. H. Chapman	504,558	Sept. 5	411	105	64	1346
Sewing-machine quilting attachment	J. W. Chenoweth	497,231	May 9	1335	339 340	63	877
Sewing-machine quilting attachment	C. C. Clark	488,986	Jan. 3	17	4	62	6
Sewing-machine quilting attachment	J. R. Duncan	489,156	Jan. 3	263	73	62	61
Sewing-machine rotary shuttle-actuating mechanism.	E. Kohler	489,162	Jan. 3	271	75	62	63
Sewing-machine ruffling attachment	J. M. Greist	504,875	Sept. 12	932	240	64	1460
Sewing-machine ruffling attachment	L. C. Wing	492,317	Feb. 21	1992	496	62	1180
Sewing machine. Shoe	E. P. and H. H. Arnold	507,873	Oct. 31	3541	870 871 618	65	716
Sewing machine. Shoe	F. J. Freese	507,267	Oct. 24	2509	619	65	507
Sewing machine. Shoe	G. A. Stiles	494,969	Apr. 4	691	177	63	132
Sewing-machine shuttle	G. W. Baker	500,093	June 20	2223	542	63	1806
Sewing-machine shuttle	L. A. Miller	503,269	Aug. 15	1721	424	64	910
Sewing-machine shuttle	J. Robertson	500,430	June 27	2797	6-8	63	1919
Sewing-machine shuttle	J. H. Way	507,698	Oct. 31	3256	797	65	663
Sewing-machine shuttle	C. E. Wilkinson	492,930	Mar. 7	251	64	62	1408
Sewing-machine shuttle-actuating mechanism	H. E. Tracy	493,131	Mar. 7	558	139	62	1469
Sewing-machine shuttle and shuttle-actuating mechanism.	D. Williamson	507,192	Oct. 24	2380	587 588	65	485
Sewing-machine-shuttle bobbin-holder	H. A. Bates	505,305	Sept. 19	1637	423	64	1605
Sewing machine. Sole	J. E. Bertrand	502,873	Aug. 8	1062	261 262	64	777
Sewing machine. Sole	W. O. Hildreth	503,084	Aug. 8	1408	347 348	64	839
Sewing-machine spool-holder	W. A. Pridemore	508,238	Nov. 7	424	103	65	837
Sewing-machine table	T. Kundtz	491,654	Feb. 14	970	244	62	958
Sewing-machine table	T. Kundtz	491,655	Feb. 14	971	244	62	958
Sewing-machine table	T. Kundtz	491,656	Feb. 14	973	245	62	959
Sewing-machine table	W. A. Mack	508,031	Nov. 7	77	22, 23	65	772
Sewing-machine table. Cabinet	T. Kundtz	490,116	Jan. 17	1784	465	62	397
Sewing-machine take-up	D. Flanagan	497,646	May 16	2035	507	63	1016
Sewing-machine tension device	J. M. Merrow	493,871	Mar. 21	1769	451	62	1734
Sewing-machine tension device	G. F. Ruby	491,265	Feb. 7	322	82	62	810
Sewing-machine thread-carrier mechanism	F. W. Merrick	490,856	Jan. 31	2999	769	62	662
Sewing-machine thread-controlling device	R. G. Woodward	493,461	Mar. 14	1088	279	62	1586
Sewing-machine thread-cutter	J. E. Snapp	499,352	June 13	1020	245	63	1583
Sewing-machine thread-cutting attachment	G. W. Baker	500,092	June 20	2222	541	63	1806
Sewing-machine thread-waxing and tension device	J. B. Morgan	493,637	Mar. 21	1395	354	62	1661
Sewing-machine trimmer	H. Case	495,020	Apr. 11	770	196	63	163
Sewing-machine trimmer	C. A. Gates	490,846	Jan. 31	2985	765	62	659
Sewing-machine trimming attachment	T. H. Hollingsworth	510,342	Dec. 5	821	199	65	1565
Sewing-machine trimming mechanism	H. H. Fefel	511,603	Dec. 26	3031	739	65	2011
Sewing-machine tuck-marker	H. R. Corkhill, Jr., and F. J. Shields	497,950	May 23	2524	630	63	1119
Sewing-machine tuck-marker	J. M. Greist	504,805	Sept. 12	821	208	64	1437
Sewing-machine. Wax-thread	G. R. Allen	510,951	Dec. 19	1939	473	65	1797
Sewing-machine. Wax-thread	O. E. Brown	498,505	May 30	3426	850	63	1295
Sewing-machine. Wax-thread	O. E. Brown	499,414	June 13	1138	272	63	1603
Sewing-machine welt-guide	L. G. Greene	507,119	Oct. 24	2234	552	65	459
Sewing-machine welt-guide	J. D. Stinchfield	510,655	Dec. 12	1389	340	65	1685
Sewing-machine work-support	F. W. Merrick	490,855	Jan. 31	2998	768 769	62	662
Sewing-machines. Combined presser-foot and thread-holder for	A. E. Johnson and C. H. Porter	493,869	Mar. 21	1767	451	62	1734
Sewing-machines. Guide for double-needle	L. Eschner	504,571	Sept. 5	429	109	64	1350
Sewing-machines. Heating device for shoe	W. N. Porter	509,823	Nov. 28	3078	744	65	1382
Sewing-machines. Needle-carrier and guiding device therefor for	J. M. Merrow and W. H. Stedman	497,006	May 9	998	257	63	816
Sewing machines. Thread-cutting attachment for shoe.	V. P. Buck	495,542	Apr. 18	1642	412	63	341
Sewing machines. Welt-guiding device for shoe	E. P. and E. F. Arnold	510,150	Dec. 5	520	120	65	1508
Sewing-machines. Wide hemmer for	A. S. Simons	504,947	Sept. 12	1050	269	64	1482
Sewing on buttons. Machine for	W. E. Bennett	511,496	Dec. 26	2856	691	65	1980
Sewing on buttons. Machine for	B. T. String and S. Miller	507,507	Oct. 24	2911	716 717	65	584
Shackle	S. M. Gusdorf and D. S. Blue	495,034	Apr. 11	792	201	63	167
Shackle. Yielding	W. H. Williams	497,936	May 23	2503	624	63	1115
Shade and curtain-pole support. Combined window.	W. H. Johnson	501,425	July 11	1428	358	64	274
Shade and shade-holder	H. A. C. Hellyer and W. T. Lawless	503,537	Aug. 15	2144	538	64	986
Shade-cloth stretching and drying machine	W. Bailey	498,609	May 30	3590	889 890	63	1323
Shade-guide	A. M. Haswell	493,162	Mar. 7	608	153	62	1478
Shade-guide-strip. Window	F. C. Schroeder	507,288	Oct. 24	2543	626	65	513
Shade-hanger bracket	J. E. Knapp	507,440	Oct. 24	2802	686	65	565
Shade hanger. Window	J. A. Thompson	508,783	Nov. 14	1283	320	65	1016
Shade-holder	J. F. Grill	511,136	Dec. 19	2242	550	65	1855
Shade-holder	H. E. Werline	509,502	Nov. 28	2567	620	65	1284
Shade-holder. Adjustable	O. B. Starkwather	505,681	Sept. 26	2311	587	64	1744
Shade-holding mechanism	J. B. Thurston	493,879	Mar. 21	1778	454	62	1736
Shade or curtain hanger	G. E. Bonney	506,301	Oct. 10	870	215	65	177
Shade-roller	S. Hartshorn	496,411	May 2	33	9	63	625
Shade-roller bracket. Adjustable	G. Cook	510,894	Dec. 19	1832	452	65	1777
Shade-roller. Spring	A. E. Dennis	504,970	Sept. 12	1092	279	64	1490
Shade-roller. Spring	E. F. Hartshorn	511,076	Dec. 19	2136	527	65	1834
Shade supporter. Window	S. T. Sturver	504,952	Sept. 12	1056	271	64	1483

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Shade. Window.....	F. Schwanhäusser	508,151	Nov. 7	285	71	65	811
Shades. Adjustable appliance for hanging window.....	R. W. Hilliker.....	497,880	May 23	2411	602	63	1100
Shades. Adjustable bracket for window.....	D. A. Page and R. C. Bird.....	510,815	Dec. 12	1648	410	65	1733
Shades. Attachment to frictional holding mechanisms for spring-actuated.....	E. T. Burrowes.....	493,885	Mar. 21	1789	457	62	1738
Shades. Holding mechanism for spring-actuated.....	E. T. Burrowes.....	501,674	July 18	1821	454	64	362
Shades. Holding mechanism for spring-actuated.....	E. T. Burrowes.....	510,114	Dec. 5	461	103 104	65	1496
Shaft and bearing.....	T. A. Cook.....	501,611	July 18	1714	427	64	345
Shaft-coupling.....	D. Boorman.....	503,033	Aug. 8	1334	328	64	826
Shaft-coupling.....	A. Reason.....	496,063	Apr. 25	2459	621	63	503
Shaft-coupling.....	W. G. Tilton.....	502,686	Aug. 1	750	181	64	704
Shaft-coupling.....	H. H. Westinghouse and W. A. Bole.....	492,898	Mar. 7	202	49	62	1398
Shaft-coupling. Hollow.....	H. W. Caldwell.....	501,918	July 25	2233	554	64	448
Shaft-hanger.....	A. H. Wagner.....	494,767	Apr. 4	376	94	63	75
Shaft-hanger for grinding and polishing machines.....	C. Heaton.....	491,824	Feb. 14	1328	328	62	1029
Shaft-holder. Wagon.....	F. Wiefing.....	505,891	Oct. 3	145	38	65	29
Shaft-iron. Vehicle.....	J. H. Osborne.....	502,911	Aug. 8	1132	279	64	790
Shaft-lubricator.....	A. D. Hoffman.....	508,222	Nov. 7	399	97	65	832
Shaft or bar iron.....	J. Green.....	504,431	Sept. 5	197	51	64	1307
Shaft. Power-transmitting flexible.....	J. K. Priest.....	501,731	July 18	1908	475	64	377
Shaft. Structural hollow.....	S. H. Johnson and H. C. Stowe.....	508,836	Nov. 14	1350	334	65	1027
Shaft-support. Vehicle.....	G. W. Pressey.....	497,602	May 16	1967	493	63	1003
Shaft-tip.....	J. F. Wright.....	505,742	Sept. 26	2410	609	64	1761
Shaft tip. Wagon.....	C. A. Eisenhart.....	506,309	Oct. 10	880	217	65	179
Shaft. Vehicle.....	A. Friedmann, Jr.....	500,283	June 27	2559	625	63	1877
Shaft. Vehicle.....	I. Hogeland.....	504,783	Sept. 12	785	198	64	1430
Shaft. Vehicle.....	J. and W. F. Kuykendall.....	499,340	June 13	983	238	63	1575
Shaft. Vehicle.....	G. A. Lambert.....	497,378	May 16	1610	407	63	941
Shafts and their couplings. Machine for grinding pulley.....	P. Medart.....	492,095	Feb. 21	1643	408 409	62	1107
Shafts. Attaching drums and sleeves to.....	G. H. Jantz.....	501,228	July 11	1108	281	64	275
Shafts. Buggy.....	L. De Cailly.....	506,211	Oct. 10	710	178	65	145
Shafts. Centering device for revolving.....	E. Seger.....	510,938	Dec. 19	1913	468	65	1792
Shafts. Reversing mechanism for counter.....	F. Holderman.....	495,806	Apr. 18	2064	521	63	414
Shafts. Treadle-motion for rotary.....	C. Spindler.....	501,902	July 18	2185	543	64	425
Shafting and coupling attachment therefor. Flexible.....	J. Moffat and W. W. Virtue.....	497,590	May 16	1947	488 489	63	999
Shafting. Flexible.....	G. Beekman.....	497,905	May 23	2455	613 614	63	1107
Shafting. Flexible.....	G. W. and M. G. Gillette.....	504,720	Sept. 12	666	169	64	1408
Shag-steaming apparatus.....	C. Schnürch.....	505,725	Sept. 26	2386	603	64	1757
Shaking, bolting, or sifting machine.....	O. Schnelle.....	497,756	Oct. 31	3336	817	65	677
Shampooing the hair and scalp. Device for.....	W. C. Vose.....	493,953	Mar. 21	1912	488	62	1761
Shank-stiffener.....	G. A. Weld.....	501,978	July 25	2304	576	64	463
Shank-stiffener.....	P. Zopf, Jr.....	497,157	May 9	1231	313	63	858
Shaper-head.....	C. Bowman.....	510,887	Dec. 19	1824	451	65	1776
Shaping-machine.....	W. R. Fox.....	502,621	Aug. 1	623	149 150	64	681
Shaping-machine.....	W. L. Vanderploeg.....	498,733	May 30	3837	946	63	1365
Shaping or slotting machines. Ram connection for.....	U. Eberhardt.....	506,678	Oct. 17	1495	375	65	310
Sharpening. Tool.....	W. E. Ginn.....	502,459	Aug. 1	352	84	64	631
Sharpening clippers. Machine for.....	D. S. Henderson.....	505,899	Oct. 3	156	40	65	31
Sharpening machine. Drill.....	J. S. Bancroft.....	508,268	Nov. 7	479	115 116	65	846
Sharpening machine. Scythe.....	A. Galette.....	510,637	Dec. 12	1353	332	65	1678
Sharpening mather-head cutters, &c. Machine for.....	T. B. and W. E. Hazard.....	490,283	Jan. 24	2079	543	62	466
Sharpening-stones. Stand for.....	A. E. Lamb.....	496,741	May 2	560	150	63	720
Sharpening them. Device for holding gravers' or other tools for.....	M. Bock.....	494,504	Mar. 28	2821	708	62	1945
Shaving-mug.....	J. M. Blasi.....	511,323	Dec. 26	2553	623	65	1924
Shawl-strap and traveling-companion. Combined.....	A. B. S. Phillips.....	503,355	Aug. 15	1871	463	64	936
Shearing-machine.....	S. Trethewey.....	490,777	Jan. 31	2889	741	62	640
See Animal-shears. Pinking-shears. Metal-shears.							
Shears.....	L. A. Blake.....	499,705	June 20	1595	385	63	1697
Shears.....	P. G. Caspian.....	502,809	Aug. 8	960	234	64	757
Shears.....	W. B. Clarke.....	491,078	Feb. 7	28	7	62	753
Shears.....	W. Fischer.....	491,679	Feb. 14	1005	253	62	966
Shears.....	C. Hamann.....	492,198	Feb. 21	1809	452	62	1142
Shears.....	C. Hamann.....	509,125	Nov. 21	1885	460 461	65	1143
Shears.....	C. C. Nagley.....	489,612	Jan. 10	976	254	62	218
Shears.....	C. Oberle and E. Faller.....	506,371	Oct. 10	994	247	65	201
Shears.....	A. Remscheid.....	493,785	Mar. 21	1636	417	62	1709
Shears.....	O. Steinen.....	493,415	Mar. 14	1005	259	62	1572
Shears and scissors sharpener.....	A. and F. F. King.....	492,810	Mar. 7	61	14	62	1370
Shears. Drive-rod clutch for.....	W. H. Atkinson and D. M. Somers.....	489,210	Jan. 3	349	98	62	80
Shears for cutting rods while in motion.....	V. E. Edwards.....	505,512	Sept. 26	1993	511	64	1683
Shears-gage.....	C. Oberle and E. Faller.....	497,412	May 16	1662	419	63	950
Sheathing and lath. Combined wooden.....	H. C. Forsyth.....	510,015	Dec. 5	302	67	65	1467
Sheave.....	F. B. Torrey.....	499,611	June 13	1457	349	63	1660
Sheave or wheel. Rope.....	J. W. Kerr.....	492,331	Feb. 21	2012	500 501	62	1184
Sheave. Purchase-block.....	J. C. Keefe.....	492,208	Feb. 21	1826	458	62	1145
Sheep. Device for treating.....	J. E. Wenger.....	489,055	Jan. 3	114	31	62	29
Sheep-dipper.....	E. A. Sieker and A. H. Schmidt.....	494,265	Mar. 28	2441	615	62	1874
Sheep-shearing machine.....	H. Bland.....	509,837	Nov. 28	3100	748 749	65	1385
Sheet collecting and delivery mechanism.....	L. C. Crowell.....	505,442	Sept. 26	1863	479 480	64	1660
Sheet-delivering apparatus.....	S. G. Goss.....	504,874	Sept. 12	930	239 240	64	1460

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Sheet delivery and folding apparatus	C. B. Cottrell	494,846	Apr. 4	516	{ 130 131 497 498 426 427 427 428	{ 63 65 64 64	{ 100 406 911 912
Sheet-delivery apparatus	G. P. Fenner	506,990	Oct. 17	2012	498	65	406
Sheet-feeding mechanism	B. F. Barnes and J. G. Smith	503,275	Aug. 15	1730	426 427 427 428	64	911
Sheet-feeding mechanism	B. F. Barnes and J. G. Smith	503,276	Aug. 15	1732	427 428	64	912
Sheet lifting and counting device	J. W. Darley, Jr.	500,379	June 27	2719	668	63	1906
Sheet-metal articles. Means for forming and orna- menting	B. M. Abell and W. Ostrander	493,005	Mar. 7	370	92	62	1432
Sheet-metal-beading machine	J. M. Fender	506,989	Oct. 17	2011	497	65	406
Sheet-metal beam	J. White	511,383	Dec. 26	2876	648	65	1948
Sheet-metal belt-fasteners. Method of and machine for making	E. L. Budlong	503,035	Aug. 8	1336	329	64	826
Sheet-metal-bending machine	A. J. Douglass	505,567	Sept. 26	2114	536	64	1708
Sheet-metal blanks. Machine for edging	E. Small	509,455	Nov. 28	2486	600	65	1269
Sheet-metal bodies. Making spirally-corrugated	W. Edge	496,601	May 2	324	89	63	678
Sheet-metal can	E. Barrath	507,305	Oct. 24	2581	635	65	522
Sheet-metal can	E. Barrath	507,306	Oct. 24	2582	635	65	522
Sheet-metal can	E. Barrath	507,367	Oct. 24	2583	635	65	522
Sheet-metal can	E. Barrath	507,960	Oct. 31	3681	{ 914 915	{ 65 65	{ 742 949
Sheet-metal can	F. H. Palmer	508,554	Nov. 14	947	233	65	949
Sheet-metal can or box	G. A. Waeber	501,199	July 11	1063	269	64	209
Sheet-metal cans. Construction of	F. Reiset and G. A. Waeber	496,209	Apr. 25	2676	672	63	544
Sheet-metal cans. Machine for making	A. W. Hartlove	497,542	May 16	1874	472	63	987
Sheet-metal-coating apparatus	G. W. Jaques	506,044	Oct. 3	376	{ 99 100	{ 65 65	{ 73 378
Sheet-metal cutting and bending machine	W. J. Bayrer	490,060	Jan. 17	1697	{ 442 443	{ 62 62	{ 378 1444
Sheet-metal cylinders. Machine for forming	E. Small	509,959	Dec. 5	186	44	65	1444
Sheet-metal elbow	F. Dieckmann	500,119	June 27	2288	555	63	1829
Sheet-metal elbows. Manufacture of	C. and A. Lindemann	502,044	July 25	2411	607	64	483
Sheet metal. Embossing	J. White	511,392	Dec. 26	2690	652	65	1950
Sheet-metal-forming machine	H. Senger	504,628	Sept. 5	505	130	64	1365
Sheet-metal folder	J. T. Story	502,684	Aug. 1	748	180	64	703
Sheet metal. Galvanizing	S. A. Sague	505,131	Sept. 19	1362	350	64	1554
Sheet metal. Machinery for pressing boats from	W. Heslop	493,720	Mar. 21	1522	{ 389 390 241 242	{ 62 64	{ 1686 1461
Sheet metal. Machinery for pressing or stamping boats from	W. Heslop	504,878	Sept. 12	936	241 242	64	1461
Sheet metal. Manufacturing	I. E. Craig	501,705	July 18	1872	213	64	371
Sheet-metal-molding machine	C. D. Pruden	489,498	Jan. 10	812	{ 213 214	{ 62 62	{ 186 186
Sheet-metal package	G. G. McMurtry	509,136	Nov. 21	1900	465	65	1146
Sheet-metal pipe	C. S. Hamlin	507,709	Oct. 31	3272	800	65	665
Sheet-metal press	J. Bartlett	495,192	Apr. 11	1085	{ 269 270	{ 63 63	{ 219 1585
Sheet-metal salvers. Making	Z. T. Hall	499,359	June 13	1031	249	63	1585
Sheet-metal vessel	F. A. Walsh	492,074	Feb. 21	1608	400	62	1099
Sheet-metal vessels. Constructing and opening her- metically sealing	G. A. Waeber	496,175	Apr. 25	2620	660	63	533
Sheet-metal vessels. Ear for	H. S. Reynolds	503,680	Aug. 22	2393	597	64	1046
Sheet-metal vessels. Ear for	H. S. Reynolds	503,681	Aug. 22	2394	597	64	1046
Sheet-metal vessels. Machine for making	E. Small	509,456	Nov. 28	2488	{ 601 602 603	{ 65 65	{ 1269 1100
Sheet-metal vessels. Machine for making	F. A. Walsh	492,075	Feb. 21	1609	400	62	1100
Sheet-metal vessels. Machine for wiring the edges of	H. S. Reynolds	505,675	Sept. 26	2300	{ 583 584	{ 64 64	{ 1742 903
Sheet-metal ware. Enameled	G. W. Niedringhaus	503,247	Aug. 15	1687	415	64	903
Sheet-metal ware. Enameled	G. W. Niedringhaus	503,248	Aug. 15	1687	415	64	904
Sheet-metal ware. Hollow	W. Edge	492,463	Feb. 28	2231	558	62	1241
Sheet-metal-working machine	F. A. Walsh	492,076	Feb. 21	1612	401	62	1100
Sheet-metal-working machine	F. A. Walsh	511,567	Dec. 26	2964	{ 722 723	{ 65 65	{ 2000 1437
Shelf and table. Combined	G. M. Welker	498,893	June 6	255	60	63	1437
Shelf-bracket	T. Corscaden	493,484	Mar. 14	1125	288	62	1593
Shelf-bracket	T. Corscaden	511,590	Dec. 26	3003	731	65	2008
Shelf. Folding	H. C. Reynolds	495,910	Apr. 18	2226	561	63	444
Shelf. Hanging	C. W. Edgerton	491,093	Feb. 7	47	12	62	757
Shelf-partition. Adjustable	W. E. Richards	502,321	Aug. 1	117	27	64	587
Shelf-roller	P. J. Pauly, Jr.	510,088	Dec. 5	417	93	65	1488
Shelf-support	W. E. Richards	501,591	July 18	1677	418	64	338
Shelf-support	S. A. Smith	498,945	June 6	344	82	63	1452
Shelf-support. Adjustable	E. T. Lenthold	510,804	Dec. 12	1632	406	65	1730
Shelving	W. H. Hubbard and A. Goodrich	490,288	Jan. 24	2087	544	62	468
Shelving. Metallic	M. J. Breslin	510,582	Dec. 12	1219	296	65	1653
Shelving. Store	F. A. Anthony	505,017	Sept. 12	1166	299	64	1504
Shelving. System of	C. Baum	494,835	Apr. 4	504	126	63	97
Shell-placer	C. S. Hisey	495,888	Apr. 18	2194	{ 552 553	{ 63 65	{ 438 1231
Shells. Article made from	M. F. and H. E. Brennan	509,359	Nov. 28	2287	555	65	1231
Sheller: See Corn-sheller. Pea-sheller.							
Shepherd's crook	R. L. Renz and H. Weidman	504,175	Aug. 29	3183	795	64	1214
Shield. Arm-pit	M. J. Butler	498,877	June 6	229	54	63	1433
Shingle-edging machine	H. A. and B. U. Hills	494,922	Apr. 4	624	159	63	121
Shingle-machine. Band-saw	D. H. Ball	499,698	June 20	1584	382	63	1695
Shingle-marker	J. T. Rush	499,889	June 20	1920	466	63	1753
Shingle package	G. H. Meququer	495,423	Apr. 11	1442	364	63	285
Shingle-packing machine	W. H. Dutton	495,403	Apr. 11	1414	355	63	279

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Shingle-sawing machine.....	F. Challoner.....	493,682	Mar. 21	1467	{ 373 374 }	62	1675
Shingles. Method of and machine for packing.....	G. H. Megquier.....	495,424	Apr. 11	1443	364	63	285
Shingling-bracket.....	E. J. Wilkes.....	489,402	Jan. 3	638	173	62	137
Shingling-bracket. Folding.....	M. F. Burk.....	511,721	Dec. 26	3215	788	65	2045
Ship.....	R. B. Painton.....	509,553	Nov. 28	2646	640	65	1299
Ship. Apparatus for determining the bearing and course of a.....	E. Baker.....	499,087	June 6	591	142	63	1494
Ship ash-ejector. Steam.....	G. Clarke.....	491,959	Feb. 14	1439	{ 358 359 }	62	1052
Ship-locomotive.....	H. D. Snell.....	498,036	May 23	2657	664	63	1142
Ship. Steam.....	C. Harris.....	491,170	Feb. 7	182	46	62	782
Ships at sea. Apparatus for coaling.....	P. B. Low.....	489,749	Jan. 10	1178	{ 307 308 309 }	62	259
Ships' bottoms. Covering for.....	J. Cinamon.....	496,598	May 2	320	87, 88	63	678
Ships' bottoms. Covering for.....	F. D. Mott.....	492,044	Feb. 21	1573	391	62	1092
Ship's brake.....	F. Tobias.....	507,856	Oct. 31	3518	865	65	711
Ships' cables. Device for cutting.....	F. V. de Bem.....	504,203	Aug. 29	3230	805	64	1222
Ship's distance from an object. Apparatus for determining a.....	E. Baker.....	499,495	June 13	1263	301	63	1626
Ship's hull.....	P. O'Brien.....	509,672	Nov. 28	2838	685	65	1336
Ship's keel.....	W. T. Sylven and G. W. Coffin.....	506,139	Oct. 3	535	138	65	104
Ships. Leak-stopper for.....	J. E. Gowen.....	503,079	Aug. 8	1397	345	64	838
Ship's log.....	C. F. Holt.....	495,587	Apr. 18	1712	431	63	354
Shipping and display box for seeds.....	S. R. Miller.....	490,156	Jan. 17	1853	{ 483 484 }	62	411
Shipping-case.....	J. H. Bowley.....	509,839	Nov. 28	3104	750	65	1336
Shipping-case.....	I. Unger.....	509,001	Nov. 21	1670	41	65	1102
Shirt.....	J. A. Bedard.....	488,981	Jan. 3	11	3	62	5
Shirt.....	P. Ganson.....	510,639	Dec. 12	1357	332	65	1679
Shirt.....	C. A. Hascall.....	499,788	June 20	1744	422	63	1722
Shirt.....	C. W. Prentiss.....	497,727	May 16	2160	540	63	1039
Shirt.....	W. S. C. Wiley.....	493,956	Mar. 21	1916	489	62	1762
Shirt-adjuster.....	J. H. Billings.....	489,921	Jan. 17	1451	379	62	330
Shirt and collar therefor.....	B. Lowenberg.....	500,922	July 4	607	158	64	111
Shirt and manufacturing same.....	W. A. O'Brien.....	500,270	June 27	2542	621	63	1874
Shirt-bosom protector.....	J. Teel.....	494,656	Apr. 4	201	51	63	42
Shirt-stretcher.....	O. J. Marsh.....	505,472	Sept. 26	1908	491	64	1669
Shirt-waist.....	H. L. Levy.....	493,170	Mar. 7	621	156	62	1481
Shoal-alarm.....	S. H. James.....	493,826	Mar. 21	1704	434	62	1721
Shock-binder.....	C. S. Unruh.....	491,391	Feb. 7	550	139	62	853
Shock-compressor.....	S. C. French.....	498,898	June 6	265	62	63	1439
Shoe.....	A. F. Bertram.....	493,813	Mar. 21	1689	430	62	1719
Shoe.....	W. P. Bradford.....	492,186	Feb. 21	1793	447	62	1138
Shoe.....	W. J. Drey.....	496,822	May 2	689	182	63	741
Shoe.....	O. P. and G. O. Elterich.....	503,588	Aug. 22	2244	562	64	1020
Shoe.....	W. Hall.....	500,385	June 27	2730	671	63	1908
Shoe.....	H. M. Hansen.....	501,505	July 18	1545	389	64	312
Shoe.....	A. H. Jonas and J. J. Braendly.....	494,812	Apr. 4	465	116	63	89
Shoe.....	F. J. King.....	502,973	Aug. 8	1253	306	64	810
Shoe.....	E. Kinsella.....	505,428	Sept. 19	1842	473	64	1643
Shoe.....	W. T. Loyd.....	508,328	Nov. 7	568	139	65	863
Shoe.....	J. H. Mulligan.....	507,154	Oct. 24	2315	569	65	473
Shoe.....	J. W. Packard. (Reissue).....	11,362	Aug. 22	2777	695	64	1122
Shoe.....	A. F. Postel and L. B. Morris.....	511,717	Dec. 26	3209	787	65	2044
Shoe.....	C. A. Riedig.....	508,978	Nov. 21	1635	401	65	1096
Shoe.....	B. Scarinci.....	505,298	Sept. 19	1631	421	64	1604
Shoe.....	B. R. Tillgren.....	500,680	July 4	238	63	64	45
Shoe.....	T. W. Trimby.....	498,965	June 6	380	91	63	1459
Shoe.....	G. W. Weilert.....	505,258	Sept. 19	1551	405	64	1589
Shoe-clasp locker or unlocker.....	W. L. Judson.....	504,038	Aug. 29	2959	740	64	1171
Shoe. Congress.....	G. C. Moore.....	496,526	May 2	209	56	63	657
Shoe-fastener.....	I. Beetison.....	500,048	June 20	2160	524	63	1795
Shoe-fastener.....	P. A. Raymond.....	494,085	Mar. 21	2136	546	62	1803
Shoe-fastening.....	J. M. Branig.....	499,201	June 13	769	183	63	1538
Shoe-fastening.....	A. D. Field.....	495,408	Apr. 11	1421	357	63	280
Shoe-fastening.....	L. Gay.....	499,923	June 20	2054	493	63	1777
Shoe-fastening.....	J. H. Gunn.....	509,802	Nov. 28	3048	736	65	1376
Shoe-fastening.....	W. L. Judson.....	504,037	Aug. 29	2957	740	64	1171
Shoe-fastening.....	G. W. Prentice.....	506,861	Oct. 17	1802	452	65	366
Shoe-fastening.....	A. Schmied.....	501,301	July 11	1215	{ 307 308 }	64	236
Shoe-fastening.....	T. Schneider.....	498,579	May 30	3545	878	63	1315
Shoe-fastening.....	J. N. Schwander.....	506,341	Oct. 10	941	235	65	191
Shoe-fastening.....	E. F. Spicer.....	494,825	Apr. 4	482	122	63	93
Shoe-fastening.....	H. Vachon.....	509,707	Nov. 28	2887	698	65	1345
Shoe-fastening.....	G. A. Weld.....	505,865	Oct. 3	98	26	65	21
Shoe-fastening.....	G. A. Weld.....	507,249	Oct. 24	2477	610	65	502
Shoe-holder.....	F. W. Whitche.....	497,150	May 9	1217	311	63	855
Shoe-nail.....	C. E. Slocomb.....	489,548	Jan. 10	884	231	62	200
Shoe-polishing machine.....	S. Aabenheim.....	489,907	Jan. 17	1417	367	62	323
Shoe-rest.....	F. H. Brown.....	499,093	June 6	597	143	63	1495
Shoe-rest.....	M. S. Melzer.....	490,915	Jan. 31	3113	798	62	684
Shoe shank-piece.....	J. Heckel.....	498,055	May 23	2626	672	63	1147
Shoe shank-piece.....	E. Kinsella.....	498,125	May 23	2789	{ 697 698 }	63	1167
Shoe-shank-shaping machine.....	T. F. Tyler.....	511,666	Dec. 26	3125	764	65	2029
Shoe-shank stiffeners. Machinery for making metal.....	E. E. Fay.....	493,860	Mar. 21	1754	447	62	1731
Shoe-shank stiffeners. Making metal.....	E. J. Watson.....	494,609	Apr. 4	136	31	63	29
Shoe stiffener and fastener.....	J. W. Cottam.....	495,309	Apr. 11	1270	317	63	253
Shoe-stretcher.....	J. F. Fullum.....	503,742	Aug. 22	2503	623	64	1068

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Shoe. Swimming.	A. F. Hilker.	509,535	Nov. 28	2621	634	65	1294
Shoe-tip.	G. W. Dixon.	507,793	Oct. 31	3408	835	65	691
Shoe. Turned.	J. H. Anthoine.	509,566	Nov. 28	2669	646	65	1304
Shoe. Turned.	H. H. Budd.	509,149	Nov. 21	1917	469	65	1150
Shoe. Turned.	G. A. Richardson.	508,242	Nov. 7	429	104	65	838
Shoe-turning apparatus.	L. C. Shaw.	494,601	Apr. 4	120	28	63	25
Shoe-upper.	G. H. Clark.	496,969	May 9	941	247	63	807
Shoes. Manufacture of.	A. C. Oppenheimer.	499,571	June 13	1392	333	63	1647
Shoemaker's jack.	G. Sumner.	509,497	Nov. 28	2559	619	65	1282
Shoplifting-detector.	F. Sturtevant.	497,062	May 9	1065	278	63	832
Shot. Apparatus for the manufacture of drop.	A. J. Deniston.	496,043	Apr. 25	2422	612	63	497
Shot. Apparatus for the manufacture of drop.	A. J. Deniston.	496,044	Apr. 25	2427	613	63	497
Shot or powder gage and shell-loader.	J. A. R. Elliott.	506,425	Oct. 10	1096	272	65	221
Shoulder-brace.	W. H. Horn.	508,713	Nov. 14	1187	293	65	997
Shovel:							
See Ash-shovel.	Snow-shovel.						
Cinder-shovel.	Steam-shovel.						
Double turning-shovel.							
Shovel.	H. Ames.	511,670	Dec. 26	3131	765	65	2030
Shovel-standards, &c. Device for attaching.	A. S. McDermott.	501,955	July 25	2271	568	64	457
Shovels and disposing of excavated material. Method of and apparatus for operating steam-	C. L. Gould.	506,908	Oct. 17	1882	{ 469 470 }	65	381
Shovels. Manufacture of.	P. W. Groom.	491,944	Feb. 14	1420	354	62	1048
Show-case.	J. W. Blackledge.	489,705	Jan. 10	1105	285	62	245
Show-case.	G. J. Meyer.	509,748	Nov. 28	2952	715	65	1357
Show-case alarm. Electric.	R. C. Kruschke.	490,479	Jan. 24	2385	{ 617 618 }	62	526
Show-case. Combined sponge and chamois.	W. H. Wightman.	498,042	May 23	2666	667	63	1144
Show case or rack.	E. F. Spencer.	506,743	Oct. 17	1613	406	65	332
Show case or rack.	E. F. Spencer.	506,744	Oct. 17	1613	406	65	332
Show case or rack.	E. F. Spencer.	508,445	Nov. 14	759	187	65	913
Show-tray for dried fruit.	W. R. M. Tortat.	508,449	Nov. 14	764	188	65	914
Shutter and curtain. Window.	J. O'Donnell.	506,537	Oct. 10	1283	321	65	258
Shutter and slat operator.	D. F. Goodall.	504,575	Sept. 5	434	110	64	1350
Shutter. Automatic fire.	L. C. Tufts.	499,647	June 13	1507	361	63	1668
Shutter closer and fastener.	J. K. Christy.	508,404	Nov. 14	706	173	65	903
Shutter. Combined burglar and fire proof.	E. H. Lunken.	504,533	Sept. 5	369	93	64	1338
Shutter-fastener.	R. Davis and A. Gartner.	510,164	Dec. 5	540	125	65	1512
Shutter-fastener.	J. S. Ebert.	503,128	Aug. 15	1498	368	64	869
Shutter-fastener.	L. M. Froberg.	491,165	Feb. 7	172	44	62	781
Shutter-fastener.	A. F. Gustafson.	504,921	Sept. 12	1007	260	64	1475
Shutter-fastener.	C. J. Sandberg.	501,696	July 18	1852	461	64	368
Shutter-fastener.	C. B. White.	496,077	Apr. 25	2478	626	63	506
Shutter fastener. Fire.	A. Grosch, A. Allenberg, and C. Buerling.	503,046	Aug. 8	1352	334	64	830
Shutter. Flexible.	H. N. H. Lugin.	492,477	May 30	3372	840	63	1285
Shutter-regulator.	P. Devlin.	489,371	Jan. 3	593	160	62	128
Shutter. Window.	T. Gaskins.	506,393	Oct. 10	1032	257	65	209
Shutter-worker.	L. Kutscher.	494,006	Mar. 21	2008	512	62	1780
Shutter-worker.	T. N. Lupton.	503,866	Aug. 22	2669	669	64	1100
Shutter-worker.	A. Rosenberg.	510,446	Dec. 12	1001	239	65	1614
Shutter-worker.	J. V. Stribling.	502,240	July 25	2735	690	64	545
Shutter-worker.	C. F. Ziegler.	505,283	Sept. 19	1599	416	64	1597
Shuttle-boxes. Self-adjustable supporting-rod for.	T. Birchall.	489,922	Jan. 17	1451	380	62	330
Siccatives. Making.	G. W. Scollay.	510,050	Dec. 5	353		65	1476
Sickle cutter-bar. Rotary.	J. S. Mathews.	493,103	Mar. 7	516	129	62	1461
Sideboard and extension-table. Combined.	C. F. Waters.	504,072	Aug. 29	3004	751	64	1180
Side light or scuttle and ventilator. Combined.	T. Utley.	495,256	Apr. 18	2145	{ 538 539 }	63	429
Sidewalk or building block.	F. C. Klinger.	496,201	Apr. 25	2657	667	63	540
Siding-gage.	J. J. Martin.	494,214	Mar. 28	2361	597	62	1860
Siding. House.	T. L. Hobbs.	506,912	Oct. 17	1890	471	65	383
Sieve. Flour.	M. Eberle.	495,545	Apr. 18	1645	414	63	341
Sieve. Flour-sifting.	A. Schlee.	502,764	Aug. 8	886	{ 217 218 }	64	743
Sieve. Separator.	C. Kind.	500,714	July 4	293	79	64	54
Sieve. Shaking.	H. Simon.	495,190	Apr. 11	1082	{ 268 269 }	63	219
Sifter. Ash.	E. Coon.	499,282	June 13	887	215	63	1559
Sifter. Ash.	E. W. J. H. Dwenger.	489,293	Jan. 3	476	132	62	104
Sifter. Ash.	W. Lewis and A. H. Ross.	508,728	Nov. 14	1206	300	65	1000
Sifter. Ash.	J. A. Murphy.	495,596	Apr. 18	1728	435	63	356
Sifter. Ash.	T. O. Payne.	510,930	Dec. 19	1901	465	65	1790
Sifter. Ash.	D. B. Sanford.	506,263	Oct. 10	804	199	65	165
Sifter. Ash.	G. Wexler.	509,984	Dec. 5	241	56	65	1455
Sifter. Combined flour and meal.	A. Brooks.	494,753	Apr. 4	360	91	63	71
Sifter or separator.	C. Zimmerman.	493,142	Mar. 7	577	144	62	1472
Sifter with reversible closed bottom and cover. Flour.	P. M. Burns.	491,008	Jan. 31	3259	833	62	712
Sifting appliance. Rotary.	A. Rosell.	505,849	Oct. 3	70	17	65	16
Sifting-bag.	P. Diamond.	506,982	Oct. 17	2002	495	65	404
Sign.	M. Holfert.	490,654	Jan. 31	2690	{ 692 693 }	62	601
Sign.	C. Schwartz.	493,045	Mar. 7	429	108	62	1443
Sign.	C. Schwartz.	497,035	May 9	1041	266	63	824
Sign and label. Changeable.	C. A. Gildemeyer.	498,053	May 23	2684	672	63	1147
Sign. Electric illuminated.	H. A. Bierley.	505,346	Sept. 19	1694	436	64	1615
Sign. Illuminated.	A. L. McCormick.	502,007	July 25	2345	{ 587 588 }	64	471
Sign-plate. Embossed.	A. Winkler.	498,923	June 6	313	73	63	1447
Sign. Street-car.	I. Pfingst.	503,552	Aug. 15	2176	543	64	991
Sign. Street or other.	S. Nicolai.	503,489	Aug. 15	2073	517	61	973
Sign. Universal.	A. D. Page and E. J. McAllister.	501,690	July 18	1844	458	64	366

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. Gr.	Vol.	Page.
Signal:							
Sec Cable-road signal.	Railway electric signal.						
Car-signal.	Railway time-signal.						
Coffin-signal.	Railway time and block						
Danger-signal.	signal.						
Electric signal.	Railway torpedo-signal.						
Fog-signal.	Railway-train signal.						
Nautical signal.	Switch-signal.						
Pneumatic signal.	Switchboard-signal.						
Railway-signal.	Time-signal.						
Railway block-signal	Trunk-line signal.						
Railway danger-sig- nal.	Visible signal.						
Signal apparatus.	G. McIntosh.	509,545	Nov. 28	2634	637	65	1296
Signal apparatus and system. Electric	J. W. Lattig.	499,125	June 6	645	155	63	1503
Signal apparatus. Block.	J. H. Frischen.	505,419	Sept. 19	1824	470	64	1639
Signal apparatus. Block.	J. H. Frischen.	505,420	Sept. 19	1828	470	64	1640
Signal apparatus. Block.	A. H. Johnson and T. H. Patenail.	509,127	Nov. 21	1889	462	65	1144
Signal apparatus. Electric	J. W. Lattig.	496,787	May 2	631	168	63	732
Signal apparatus. Electric	J. W. Lattig.	502,626	Aug. 1	633	151	64	683
Signal apparatus. Electric	J. C. A. Xiezopolski and C. Bode.	507,869	Oct. 31	3536	669	65	715
Signal-box. Non-interference	C. E. Ongley.	498,987	June 6	419	97, 98	63	1465
Signal device. Electric.	T. F. Gaynor.	509,218	Nov. 21	2040	493	65	1174
Signal device. Electric.	C. R. Piggins.	504,745	Sept. 12	720	180	64	1419
Signal device. Electric.	C. H. Rudd.	504,752	Sept. 12	732	182	64	1421
Signal device. Electric.	C. Schwenicke.	503,709	Aug. 22	2443	608	64	1055
Signal device. Electric train and switch	G. E. Miller.	507,918	Oct. 31	3610	891	65	728
Signal indicating mechanism. Block	J. H. Frischen.	503,718	Aug. 22	2460	612	64	1058
Signal or other circuits. Electrical apparatus for con- trolling	H. A. Parrish.	509,244	Nov. 21	2084	503	65	1181
Signal receiver. Electric	W. H. Kirnan.	509,171	Nov. 21	1950	476	65	1157
Signal system. Block	C. A. Weller.	505,802	Sept. 26	2507	633	64	1781
Signal-transmitting apparatus	M. Martin.	497,281	May 9	1429	363	63	892
Signal-valve for pneumatic signals	H. R. Mason.	493,438	Mar. 14	1048	270	62	1580
Signal-wire compensator	J. Fisher.	506,106	Oct. 3	477	124	65	93
Signal-wire support.	J. Fisher.	511,132	Dec. 19	2238	549	65	1854
Signals. Electric apparatus for controlling.	M. B. Leonard.	507,518	Oct. 24	2935	720	65	589
Signaling apparatus.	J. W. Graydon.	505,879	Oct. 3	122	31, 32	65	25
Signaling apparatus.	W. H. Hall.	505,102	Sept. 19	1317	340	64	1546
Signaling apparatus.	J. J. Purcell.	497,128	May 9	1188	303	63	851
Signaling apparatus.	H. Wetzer.	496,076	Apr. 25	2476	626	63	506
Signaling apparatus and circuit.	E. J. Hall and F. A. Pickernell.	492,482	Feb. 28	2259	564	62	1246
Signaling apparatus and system. Electric	J. W. Lattig.	496,786	May 2	627	167	63	731
Signaling apparatus. Electric	T. B. Doolittle.	511,731	Dec. 26	3231	792	65	2048
Signaling apparatus. Electric	S. D. Field.	496,602	May 2	325	89, 90	63	678
Signaling apparatus. Electric	W. H. Kenyon.	492,497	Feb. 28	2298	571	62	1253
Signaling apparatus. Electric	L. von Orth.	491,758	Feb. 14	1125	284	62	989
Signaling apparatus. Electric	F. Pearce.	494,345	Mar. 28	2568	647	62	1898
Signaling apparatus. Electric	W. Trafford.	492,545	Feb. 28	2372	590	62	1270
Signaling apparatus. Electrical	J. B. Currier.	491,531	Feb. 14	771	196	62	917
Signaling apparatus. Electro-mechanical block.	M. Corrington.	496,041	Apr. 25	2416	611	63	495
Signaling apparatus. Fog	A. R. Bostwick and J. Duffy.	511,400	Dec. 26	2703	655	65	1951
Signaling apparatus. Police.	W. H. Kirnan.	500,285	June 27	2562	626	63	1878
Signaling apparatus. Train	H. R. Mason.	493,437	Mar. 14	1043	270	62	1579
Signaling apparatus. Train	H. R. Mason. (Reissue).	11,343	May 30	367	953	63	1371
Signaling apparatus. Train	J. S. H. Pellat.	509,447	Nov. 28	2474	595	65	1266
Signaling apparatus. Train	W. J. Smith.	494,234	Mar. 28	2394	604	62	1866
Signaling between vessels upon water	L. I. Blake.	506,150	Oct. 3	555	144	65	107
Signaling-circuit. Electric	W. Daves.	501,183	July 11	1041	264	64	204
Signaling-circuit. Electric	M. Martin.	494,279	Mar. 28	2461	620	62	1878
Signaling-circuits. Electric governor for	J. B. Currier and D. H. Rice.	491,532	Feb. 14	772	196	62	917
Signaling. Electric	T. D. Lockwood and S. J. Larned.	501,087	July 11	874	226	64	175
Signaling machine. Torpedo	C. A. Weller.	501,175	July 11	1032	261	64	202
Signaling to cars. Contact for	F. E. Kinsman.	505,833	Oct. 3	47	13	65	12
Signaling system.	W. E. Decrow.	500,563	July 4	43	13	64	10
Signaling system. Electric	A. J. Wilson and W. W. Salmon.	490,761	Jan. 31	2858	733	62	633
Signaling system. Electric time	J. H. Gerry.	508,215	Nov. 7	389	95	65	830
Signaling system. Electrical.	A. S. McCaskey.	498,289	May 30	3059	761	63	1229
Silk or other fabrics. Machine for watering and fin- ishing	G. Thommen and G. Rothenbücher.	497,360	May 16	1585	762	63	936
Silk. Treating raw.	B. Beyer.	489,919	Jan. 17	1448	793	62	329
Silver cleaning and polishing compound	G. R. Meitzler.	503,612	Aug. 22	2300	764	64	1028
Silver. Cleansing	C. J. Theuerner.	490,816	Jan. 31	2943	764	62	651
Silver. Composition of matter for cleaning.	D. A. Smith.	499,401	June 13	1113	764	63	1599
Silver from ores. Extracting	J. F. N. Macay.	504,109	Aug. 29	3074	764	64	1194
Single-tree or whiffletree clip	E. L. Howe.	497,983	May 23	2577	764	63	1128
Sink	E. Haumann and T. Susemihl.	502,516	Aug. 1	450	108	64	649
Sink and bath-tub	M. A. Linder.	489,485	Jan. 10	785	207	62	181
Sink and dish-drainer. Combined	G. C. Geraty.	510,129	Dec. 5	488	111	65	1501
Sink or basin trap.	W. Kerr.	489,639	Jan. 10	1007	262	62	225

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	In. g.	Vol.	Page.
Sink or other analogous construction	T. J. Donegan and F. W. Duenckel	500,475	June 27	2855	703	63	1930
Sink-trap	S. C. Perkins	495,998	Apr. 25	2353	594	63	483
Sinks. Outlet connection and strainer for	J. Clifford	506,669	Oct. 17	1482	372	65	308
Siphon. Bottling	F. Barthold	504,513	Sept. 5	339	86	64	1333
Siphon closet and tank	P. Harvey	501,506	July 18	1546	390	64	313
Siphon for aerated liquids	G. Ferrand and G. Göttl.	490,742	Jan. 31	2828	726	62	628
Siphon for washbasins, &c. Combined discharge and overflow	C. T. Byrne	495,018	Apr. 11	767	195	63	162
Siphon-motor	F. W. Reinhardt	510,709	Dec. 12	1475	364	65	1701
Siphon or seltzogene for aerated waters	H. J. Nicole	504,235	Aug. 29	3283	820	64	1232
Siphon-top	C. Walter	502,451	Aug. 1	340	82	64	629
Sirup beating and mixing machine	J. Werner	506,384	Oct. 10	1022	255	65	207
Sirup-cooling tank	J. Werner and F. E. Williams	491,031	Jan. 31	3308	844	62	732
Sirup-dispensing apparatus	H. Hoff	500,897	July 4	570	148	64	104
Skate	C. Pack	489,088	Jan. 3	158	43	62	38
Skate	E. G. Stayner	503,624	Aug. 22	2315	577	64	1031
Skate	R. Weigand	506,574	Oct. 10	1338	336	65	269
Skate	J. A. Whelpley	498,200	May 23	2915	725	63	1188
Skate	O. E. Wollert	502,109	July 25	2516	631	64	502
Skate. Extension	M. B. Dunbar	490,872	Jan. 31	3025	778	62	668
Skate. Roller	F. Frankenberg	503,233	Aug. 15	1666	410	64	900
Skate. Roller	R. C. Leedham	504,226	Aug. 29	3265	815	64	1229
Skate. Roller	C. Storla	499,052	June 6	540	127	63	1485
Skate-sharpener	H. McClure	493,174	Mar. 7	626	157	62	1481
Skate truck. Roller	C. G. Hoerle	508,617	Nov. 14	1042	257	65	963
Skating-rink. Artificial-ice	T. L. Rankin	508,755	Nov. 14	1245	310	65	1008
Skating-rink surface	E. Dowald	494,468	Mar. 28	2758	62	62	1933
Skating-rinks. Apparatus for forming, maintaining, and renewing the ice-floors of	J. E. Fuller	489,237	Jan. 3	380	105	62	85
Skein-holder	W. C. Souder	506,138	Oct. 3	535	138	65	104
Sketching apparatus	S. Grefstad	499,224	June 13	798	189	63	1543
Sketching device	T. A. McFarland	490,159	Jan. 17	1860	485	62	412
Skewer for closing fowls	T. R. Fischer	504,777	Sept. 12	775	196	64	1429
Skewer-puller	G. P. Pilling	507,450	Oct. 24	2815	689	65	567
Skid. Drainage	E. I. Purrrington	496,537	May 2	232	61	63	661
Skid or truck. Convertible	M. Munchweiler	492,416	Feb. 28	2155	539	62	1225
Skimmer and sweater. Combined	W. H. Howard	502,122	July 25	2533	635	64	506
Skin-coloring machine	A. F. Jones	498,120	May 23	2783	696	63	1165
Skipping-rope	L. B. Tucker	498,753	May 30	3864	952	63	1371
Skirt-protector	N. J. Buchanan	510,324	Dec. 5	799	193	65	1562
Skirt. Riding	J. Glassman	508,131	Nov. 7	250	63	65	805
Skirt-supporter	J. M. Brewer and B. N. Smith	497,516	May 16	1836	463	63	980
Skirt-supporter	J. E. Leavitt	492,406	Feb. 28	2140	535	62	1221
Skiving-machine	C. S. Fifield	505,198	Sept. 19	1463	378	64	1572
Skiving-machine	J. R. Scott	493,189	Mar. 7	646	164	62	1485
Skiving-machine	J. R. Scott	494,898	Apr. 4	589	148	63	114
Skylight	J. G. Pennyquick	492,363	Feb. 21	2067	516	62	1194
Slag. Apparatus for treating	M. W. Iles	505,552	Sept. 26	2066	527	64	1698
Slag. Treating	M. W. Iles	505,551	Sept. 26	2065	527	64	1698
Slat-tenoning machine	C. D. Marsh	501,892	July 18	2170	537	64	423
Slate-cleaner	E. Fielden	505,787	Sept. 26	2482	626	64	1776
Slate-cleaning device	B. A. Legg	489,152	Jan. 3	259	72	62	60
Slate. Drawing	A. K. Cross	508,468	Nov. 14	796	197	65	920
Slate dressing or planing machine	T. J. Ruch	508,579	Nov. 14	993	243	65	959
Slate-frame	H. S. Semmel	496,798	May 2	652	173	63	735
Slate-picker	A. W. Houser	495,809	Apr. 18	2069	522	63	415
Slate-picker	F. Stoekel and S. Fahringer	500,302	June 27	2595	635	63	1883
Slate-picker	S. Thomas	494,395	Mar. 28	2656	666	62	1914
Slates. Abacus attachment for	H. Stewart	501,379	July 11	1368	64	62	262
Slates. Noiseless attachment for school	G. H. Bartlett	498,456	May 30	3345	833	63	1280
Sled	G. Bishop	511,192	Dec. 19	2331	570	65	1871
Sled	A. W. Ives	502,925	Aug. 8	1165	287	64	796
Sled	M. M. Russell	493,184	Mar. 7	640	163	62	1484
Sled	M. M. Russell	493,185	Mar. 7	642	163	62	1484
Sled	J. W. Taylor	497,143	May 9	1207	308	63	854
Sled	F. N. Wilde and E. F. Campbell	510,221	Dec. 5	643	151	65	1531
Sled-brake	H. Bunker	493,680	Mar. 21	1464	373	62	1675
Sled-brake	P. Chelius	505,391	Sept. 19	1775	460	64	1630
Sled. Coasting	A. R. Ayres	507,200	Oct. 24	2400	591	65	498
Sled. Coasting	G. Seebick	505,993	Oct. 3	300	77	65	58
Sled. Motor	J. W. Drescher	509,595	Nov. 28	2711	656	65	1312
Sled-propeller	H. Roeber	508,980	Nov. 21	1639	402	65	1097
Sled-propeller	F. A. Schaefer	506,079	Oct. 3	434	114	65	84
Sled. Velocipede	L. Thanner	497,290	May 9	1461	368	63	898
Sleigh	H. B. Ellsworth	510,123	Dec. 5	477	109	65	1500
Sleigh	J. C. F. Harris	503,478	Aug. 15	2060	514	64	970
Sleigh	C. G. Regnstrom	504,941	Sept. 12	1041	267	64	1480
Sleigh	F. A. Schaefer	506,080	Oct. 3	436	114	65	85
Sleigh	W. N. Snow	495,845	Apr. 18	2125	534	63	425
Sleigh attachment for wheeled vehicles	G. P. Askin	509,786	Nov. 28	3019	729	65	1370
Sleigh. Bob	G. S. Adams	503,639	Aug. 22	2338	583	64	1035
Sleigh-guard	C. N. Hartling	497,174	May 9	1253	318	63	862
Sleigh-knee	O. G. Anderson and J. R. Sjolander	508,266	Nov. 7	476	115	65	845
Sleigh-runner	W. Du Bois	509,723	Nov. 28	2913	705	65	1349
Sleigh-runner	W. S. Hopkins	505,831	Oct. 3	45	12	65	11
Slicer and grater	C. F. Sperry	503,272	Aug. 15	1725	425	64	910
Slicer and grater. Vegetable	H. O. Barlow	497,009	May 9	1001	258	63	817
Slicer. Potato	H. B. O'Connell	507,383	Oct. 24	2709	666	65	547
Slicer. Vegetable	H. D. Alexander	506,088	Oct. 3	447	117	65	87
Slicing-machine	T. and W. H. Coldwell	508,206	Nov. 7	373	91, 92	65	827
Slicing-machine	P. Ford	501,779	July 18	1995	493	64	393

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	De'c.	Vol.	Page.
Slicing-machine for beet-roots, &c.	R. Bergreen	490,223	Jan. 17	1967	515 516	62	432
Slicing machine. Fruit.	A. J. and W. H. Curtis	503,903	Aug. 22	2723	684	64	1111
Slicing mechanism for bread, &c.	J. Fallows, 2d	504,429	Sept. 5	194	50	64	1307
Sliding gate	S. F. Faucett	503,040	Aug. 8	1343	331	64	828
Sliding gate	A. C. Freshour	492,282	Feb. 21	1940	485	62	1169
Sliding gate	H. Withey	508,666	Nov. 14	1119	276	65	984
Sling for holding corn-shocks, hay, &c.	D. H. Good	503,043	Aug. 8	1348	323	64	829
Sling for jars, cans, &c.	G. B. Wilson	495,080	Apr. 11	862	220	63	179
Slip holder and stripper	W. H. Campbell	499,371	June 13	1049	254	63	1589
Slotting-machine	C. B. Baldwin	493,674	Mar. 21	1452	370 371	62	1672
Sluice. Amalgamating and reducing	J. H. Jory	509,912	Dec. 5	112	25, 26	65	1431
Sluice-box	J. P. Foley	510,474	Dec. 12	1049	251	65	1623
Small-arm. Repeating.	J. Laumann	508,228	Nov. 7	407	99	65	834
Small-arm. Revolving.	H. H. Grenfell and J. G. Accles	501,566	July 18	1641	411	64	331
Small-arms. Ejector for drop-down	C. H. Malcham	499,131	June 6	653	157	63	1505
Smelting and refining furnace. Reverberatory	J. L. Giroux	510,251	Dec. 5	686	164	65	1540
Smelting-furnace	J. L. Giroux	508,381	Nov. 7	660	162	65	880
Smelting-furnace	O. Ludwig	505,112	Sept. 19	1330	343	64	1549
Smelting-furnace	A. Piat. (Reissue)	11,379	Nov. 7	679	166	65	884
Smelting-furnace	E. G. Smith and B. B. Brewer	496,235	Apr. 25	2715	680	63	551
Smelting furnace. Steel	M. Mannaberg	498,670	May 30	3705	915 916	63	1343
Smelting ores and refining metals	C. M. Allen	496,032	Apr. 25	2403	608	63	493
Smoke and gas burner and heat-radiator	E. Dorr	501,670	July 18	1827	435	64	363
Smoke. Apparatus for producing a liquid product of.	A. J. Chase	511,288	Dec. 19	2495	608	65	1901
Smoke. Apparatus for removing impurities from	E. E. Dulier	490,550	Jan. 24	2502	644	62	550
Smoke. Apparatus for removing impurities from	E. E. Dulier	509,798	Nov. 28	3041	735	65	1375
Smoke-arrester	J. Parkin and H. Born	489,715	Jan. 10	1120	289	62	248
Smoke-arrester and separator	H. Born and J. Parkin	493,749	Mar. 21	1583	403	62	1698
Smoke-burner	J. B. Barnes	491,975	Feb. 21	1467	365	62	1071
Smoke-consumer	T. T. Beckett	499,004	June 6	461	108	63	1472
Smoke-consumer	C. Camp	490,539	Jan. 24	2483	640	62	546
Smoke-consumer	P. Diemer	497,018	May 9	1016	260	63	819
Smoke-consumer	J. T. Ellis	491,775	Feb. 14	1161	290	62	996
Smoke-consumer	J. Fereday	491,879	Feb. 14	1322	327	62	1028
Smoke-consumer	T. Gunning	489,381	Jan. 3	608	163	62	131
Smoke-consumer	T. Gunning	496,479	May 2	136	38	63	643
Smoke-consumer	T. G. Hall	494,201	Mar. 28	2341	593	62	1857
Smoke-consumer	T. Lyman	497,330	May 16	1536	387	63	927
Smoke-consumer and spark-arrester. Combined	J. P. Maloney	491,576	Feb. 14	845	214	62	933
Smoke-consuming apparatus	A. Kitson	490,826	Jan. 31	2958	760	62	653
Smoke-consuming furnace	W. and T. H. Ackroyd and J. W. loughby.	497,741	May 16	2177	544	63	1043
Smoke-consuming furnace	W. Arneemann	491,233	Feb. 7	282	70	62	802
Smoke-consuming furnace	W. Arneemann, Jr	491,696	Feb. 14	1036	262	62	972
Smoke-consuming furnace	W. L. Denio	510,631	Dec. 12	1343	330	65	1676
Smoke-consuming furnace	M. Fricke	494,272	Mar. 28	2453	618	62	1876
Smoke-consuming furnace	H. C. Metz	498,959	June 6	370	89	63	1457
Smoke-consuming furnace	C. W. Mills	498,182	May 23	2871	717	63	1181
Smoke-consuming furnace	J. Milton	506,128	Oct. 3	514	133	65	100
Smoke-consuming furnace	P. Möhler	493,284	May 30	3053	760	63	1228
Smoke-consuming furnace	B. Roberts	501,163	July 11	1014	257	64	199
Smoke-consuming furnace	W. O. Thost	497,841	May 23	2344	587	63	1088
Smoke-consuming furnace	C. A. Tinkham	497,392	May 16	1632	412 413	63	945
Smoke-consuming furnace	L. J. Treacy	498,197	May 23	2913	724	63	1187
Smoke-consuming furnace	C. E. Walker	491,931	Feb. 14	1398	349	62	1043
Smoker's combination-case	G. Grant	496,973	May 9	944	248	63	807
Snap-hook	C. J. Jencks	499,361	June 13	1033	250	63	1585
Snap-hook	G. S. Minshall	499,304	June 13	922	223	63	1565
Snap-hook	J. H. Smith	496,012	Apr. 25	2374	600	63	487
Snap-hook. Harness	P. J. Miller	494,820	Apr. 4	477	120	62	92
Snap-hook. Safety	A. J. Sloan	499,942	June 20	1992	484	63	1766
Snap-hook. Safety	D. Y. Wilson	495,237	Apr. 11	1152	280	63	232
Smoke-jack	A. R. Anderson	504,511	Sept. 5	335	85, 86	64	1332
Smoke-preventer	W. Lawrence	502,496	Aug. 1	419	99	64	644
Smoke purifier and consumer	J. Butler	494,522	Mar. 28	2654	714	62	1950
Smokeless furnace	J. V. Burke	489,788	Jan. 10	1236	323	62	271
Smokeless powder	M. E. Leonard	507,279	Oct. 24	2533		65	511
Smoothing-iron. Electrically-heated	S. B. Jenkins	491,312	Feb. 7	418	108	62	826
Snap	H. B. Day	505,158	Sept. 19	1405	360	64	1561
Snap and buckle	D. W. Simmons	491,449	Feb. 7	644	160	62	870
Snap. Harness	H. J. Bickle	508,910	Nov. 21	1532	373	65	1075
Snap. Harness	F. R. Scofield	493,188	Mar. 7	645	164	62	1485
Snap-hook	F. W. Carnell	505,286	Sept. 19	1605	417	64	1599
Snap-hook	E. Covert	509,200	Nov. 21	1999	486	65	1166
Snap-hook	C. W. Cutter	501,875	July 18	2138	530	64	417
Snap-hook	C. J. Jencks	501,621	July 18	1732	431	64	347
Snap-hook	A. B. McDowell	491,852	Feb. 14	1277	316	62	1019
Snap-hook	A. A. Page	504,538	Sept. 5	378	95	64	1340
Snap-hook	A. A. Page	504,539	Sept. 5	379	95	64	1341
Snap-hook	H. P. Richards	489,502	Jan. 10	821	215	62	187
Snap-hook	H. W. Ross	493,300	Mar. 14	842	215	62	1539
Snap-hook	C. H. Smith	505,281	Sept. 19	1595	415	64	1597
Snap-hook	H. W. Tufts	503,446	Aug. 15	1999	496	64	959
Snap-hook and fastener. Combined	C. W. Wahlenius	508,259	Nov. 7	467	113	65	844
Snap. Spring	E. N. Walker	499,615	June 13	1463	350	63	1660
Snatch-block	H. Loud	494,873	Apr. 4	561	141	63	109
Snow. Apparatus for preventing railways from being blocked with	S. H. Dixon	490,545	Jan. 24	2496	643	62	548
Snow. Clearing streets or railway-tracks from	R. A. Healy and E. D. Cundell	506,497	Oct. 10	1225	305	65	246
Snow-flanger. Railway	G. H. Johnson	497,753	May 16	2200	550	63	1047

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Snow. Gas-heated furnace for liquefying.	R. A. Healy and E. D. Cundell	506,498	Oct. 10	1226	305	65	246
Snow-guard	H. M. Esselen	511,295	Dec. 19	2508	611	65	1903
Snow-guard	J. H. Hiller	502,490	Aug. 1	411	97	64	642
Snow-melting machine.	R. A. Healy and E. D. Cundell	506,499	Oct. 10	1227	305	65	246
Snow-melting machines. Pilot-shoe for.	R. A. Healy and E. D. Cundell	506,500	Oct. 10	1229	306	65	247
Snow-plow	D. Jacobs	489,008	Jan. 3	47	14	62	13
Snow-plow	T. C. McAdam	505,366	Sept. 19	1736	449	64	1622
Snow-plow	M. D. Schaller	493,899	Mar. 21	1812	461	62	1742
Snow-plow	O. Spiegel	509,333	Nov. 21	2239	541	65	1210
Snow-plow attachment	N. McKay	505,950	Oct. 3	226	59	65	44
Snow plow or scraper	W. B. Jones	509,811	Nov. 28	3062	739	65	1379
Snow-roller	S. Hapgood	505,944	Oct. 3	218	57	65	43
Snow-shovel	J. Kaercher	502,724	Aug. 8	828	200	64	733
Snow-sweeper	N. C. Bassett	508,668	Nov. 14	1122	276	65	994
Snuff box	C. L. Powell	498,695	May 30	3751	926	63	1350
Soap for removing hair from the skin	J. Mellinger	499,134	June 6	659		63	1505
Soap. Making	J. Grünwald	506,004	Oct. 3	317		65	62
Soap. Manufacturing	J. Schicht	509,049	Nov. 21	1741		65	1116
Soap. Manufacturing toilet	T. C. Stearns	508,777	Nov. 14	1276		65	1014
Soap. Method of and apparatus for producing naphtha-	E. W. Stanton	499,762	June 20	1704	408	63	1715
Soap-press	J. Eckman	504,206	Aug. 29	3236	807	64	1224
Soap-receptacle	M. L. Rouech	490,887	Jan. 31	3054	784	62	674
Soap. Soft	D. Allen	501,036	July 4	788		64	114
Soap suspension attachment	C. A. Breul	508,809	Nov. 14	1323	339	65	1023
Soaps. Process of and apparatus for the manufacture of kneaded or agglomerated	A. and E. des Cressonnieres	500,535	June 27	2953	725	63	1948
Socket-wrench	H. P. Tryon	494,994	Apr. 4	724	184	63	139
Soda and chlorine. Apparatus for the electrolytic production of	E. B. Cutten	505,895	Oct. 3	150	39	65	30
Soda and chlorine. Apparatus for electrolytically producing	E. B. Cutten	510,900	Dec. 19	1844	454	65	1779
Soda and chlorine. Electrolytically producing	E. B. Cutten	491,700	Feb. 14	1041	263	62	973
Soda-fountain	A. Schier	491,272	Feb. 7	332	84	62	812
Soda. Manufacture of	K. J. Sundstrom	492,929	Mar. 7	251	63	62	1408
Soda-water apparatus	J. B. Herron. (Reissue)	11,313	Mar. 14	1376	349	62	1642
Soda-water apparatus	F. H. Lippincott	508,326	Nov. 7	565	139	65	862
Soda-water apparatus	F. H. Lippincott	508,327	Nov. 7	567	139	65	863
Soda-water apparatus	F. C. Peck	504,849	Sept. 12	896	230	64	1453
Soda-water apparatus	A. O'Hara	497,201	May 9	1288	328	63	860
Soda-water fountains. Draft-tube for.	G. W. Sample	498,962	June 6	375	90	63	1458
Soda-water fountains. Sirup-jar and faucet-lever for	E. Haas	505,915	Oct. 3	179	46	65	35
Sodium acetate. Making	W. H. Higgin	511,143	Dec. 19	2254		65	1857
Sofa and bath-tub. Combined	B. S. Maben	496,885	May 9	812	213	63	783
Sofa, table, and bed. Combined	D. W. Palmer	502,579	Aug. 1	553	132	64	607
Solar heat. Apparatus for the utilization of.	M. L. Severy	497,079	May 9	1107	284	63	836
Solar heat. Apparatus for utilizing.	M. L. Severy	496,959	May 9	925	243	63	804
Solar heater	H. E. Paine	509,390	Nov. 28	2342	567	65	1241
Solar heater	H. E. Paine	509,391	Nov. 28	2347	569	65	1242
Solar heater	H. E. Paine	509,392	Nov. 28	2351	570	65	1242
Solar heater	H. E. Paine	509,393	Nov. 28	2353	571	65	1243
Solder and making same. Aluminium	M. H. Lançon	507,822	Oct. 31	3457		65	701
Solder. Preparing	M. Güttner	500,125	June 27	2311		63	1834
Soldering aluminium. Composition for	G. Wegner	490,840	Jan. 31	2978		62	658
Soldering apparatus	H. Miller	492,986	Mar. 7	338	85, 86	62	1426
Soldering. Electric	E. Thomson	496,019	Apr. 25	2381	603	63	489
Soldering-iron	T. Merry	506,011	Oct. 3	327	86	65	64
Soldering-iron and heater. Electric	A. Tinnerholm	500,681	July 4	239	63	64	45
Soldering-iron. Can	F. B. Merrill and G. H. Lovell	498,359	May 30	3194	795	63	1251
Soldering-iron. Electric	S. B. Jenkins	497,793	May 23	2270	570	63	1075
Soldering-iron. Electrically-heated	C. L. Coffin	508,284	Nov. 7	501	121	65	851
Soldering-iron. Electrically-heated	S. B. Jenkins	491,311	Feb. 7	417	108	62	826
Soldering-iron. Electrically-heated	G. R. Meitzler	490,256	Jan. 17	2020	528	62	442
Soldering-iron. Electrically-heated	G. R. Meitzler. (Reissue)	11,364	Sept. 5	635	161	64	1390
Soldering-iron heater	J. Kampf	499,362	June 13	1034	250	63	1585
Soldering-machine	F. H. Palmer	503,159	Aug. 15	1547	251	64	878
Soldering-machine	J. W. Roberts	502,141	July 25	2562	379	64	512
Soldering-machine	J. A. Steward	493,309	Mar. 14	857	644	62	1541
Soldering-machine	J. Wehrin	489,618	Jan. 10	982	256	62	219
Soldering machine. Can	A. W. Livingston	492,034	Feb. 21	1557	388	62	1089
Soldering machine. Can	J. W. Roberts	490,126	Jan. 17	1805	471	62	401
Soldering machine. Can	S. Ruth	489,269	Jan. 3	447	472	62	98
Soldering sheet-metal cans. Machine for	B. J. Malmfelt	499,389	June 13	1078	473	63	1593
Soldering tin cans	H. Pennington	510,931	Dec. 19	1903	261	65	1791
Sole	A. A. Blandy	504,660	Sept. 5	553	465	64	1374
Sole	E. M. Bliss	497,067	May 9	1090	141	63	833
Sole	W. E. Trice	490,998	Jan. 31	3243	280	62	709
Sole and heel plate	J. I. E. Nelson	504,995	Sept. 12	1136	828	64	1498

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Sole and heel plates. Machine for making.....	F. Davison.....	490,972	June 20	2036	{ 493 494 495 }	{ 63 63 63 }	1774
Sole-channeling machine.....	F. J. Freese.....	506,630	Oct. 10	1415	{ 354 355 }	{ 65 65 }	283
Sole-channeling machine.....	F. J. Freese.....	506,631	Oct. 10	1416	355	65	284
Sole-channeling machine.....	C. F. Stanbon.....	500,438	June 27	2809	692	63	1921
Sole-cutting machine.....	M. E. Knight and H. B. Steele.....	494,784	Apr. 4	416	104	63	81
Sole. Electric shoe.....	R. F. Carnes.....	495,782	Apr. 18	2031	514	63	408
Sole-gouging machine.....	Z. T. French and W. C. Meyer.....	510,127	Dec. 5	483	110	65	1501
Sole-hammering machine.....	S. A. West.....	493,199	Mar. 7	659	168	62	1488
Sole-inking machine.....	C. B. Hatfield.....	492,798	Mar. 7	41	10	62	1367
Sole-leveling machine.....	M. V. Bresnahan and J. J. Heys.....	498,619	May 30	3621	{ 896 897 }	{ 63 63 }	1328
Sole-leveling machine.....	S. A. West and F. L. Clark.....	489,771	Jan. 10	1213	318	62	266
Sole. Metal shoe.....	J. W. Guice.....	495,131	Apr. 11	984	247	63	201
Sole. Pneumatic.....	F. Moore.....	503,034	Nov. 7	83	24	65	773
Sole. Pneumatic shoe.....	A. W. Foster.....	510,504	Dec. 12	1093	263	65	1632
Sole-rounding machine.....	H. Loewer.....	502,421	Aug. 1	285	{ 68 69 70 }	{ 64 64 64 }	619
Sole-slotting machine.....	W. P. Bradford.....	492,185	Feb. 21	1791	447	62	1138
Sole-trimming machine.....	S. Ross, Jr.....	489,876	Jan. 10	1351	352	62	295
Soles, &c. Machine for cutting.....	A. M. Stickney.....	506,801	Oct. 17	1705	{ 428 429 }	{ 65 65 }	349
Soles. Making imitation.....	G. W. Dixon.....	491,732	Feb. 14	1089	275	62	982
Soles to uppers. Machine for uniting.....	L. Goddu.....	490,621	Jan. 24	2610	{ 672 673 }	{ 62 62 }	571
Soles to uppers. Machine for uniting.....	L. Goddu.....	490,622	Jan. 24	2619	{ 674 675 }	{ 62 62 }	573
Soles to uppers. Machine for uniting.....	L. Goddu.....	490,624	Jan. 24	2629	{ 676 677 }	{ 62 62 }	575
Solutions. Regenerating.....	F. Gruessner.....	481,632	Jan. 10	1001	—	62	223
Sorting and separating loose substances into various grades of fineness. Machinery for.....	J. M. Rishworth, S. Ingham, and J. Vickers.....	493,521	Mar. 14	1185	303	62	1604
Sorting materials according to size. Machine for.....	W. S. Lockhart.....	500,771	July 4	382	99	64	71
Sorting or sifting apparatus.....	G. Eisner.....	511,517	Dec. 26	2883	701	65	1985
Sound-recording instrument.....	E. L. Wilson.....	489,666	Jan. 10	1043	{ 271 272 }	{ 62 62 }	232
Sound-vibrations. Tablet for recording.....	J. E. Wassenich.....	505,910	Oct. 3	174	44	65	34
Souvenir-holder.....	T. F. Gaynor.....	509,889	Dec. 5	72	18	65	1424
Sower. Broadcast seed.....	C. Bollinger.....	502,604	Aug. 1	599	142	64	675
Sower. Broadcast seed.....	W. E. Pratt.....	506,542	Oct. 10	1292	323	65	259
Sower. Seed.....	J. A. Gleixner and P. Schaff.....	496,515	May 2	195	53	63	654
Sower. Seed.....	M. J. Nightingale and J. B. Stearns.....	502,051	July 25	2424	610	64	485
Sowing-machine.....	R. C. Blakey.....	495,083	Apr. 11	865	221	63	180
Sowing-machine. Seed.....	O. B. Ruppe.....	508,986	Nov. 21	1646	405	65	1098
Space-bar for line-casting machines.....	W. S. Scudder.....	494,899	Apr. 4	591	149	63	115
Spade attachment.....	G. H. Orthwein.....	493,110	Mar. 7	528	132	62	1463
Spader or digger.....	G. Keizer.....	510,266	Dec. 5	712	172	65	1544
Spark-arrester.....	C. O. Heggem.....	489,866	Jan. 10	1339	349	62	293
Spark-arrester.....	H. B. Maxwell.....	491,367	Feb. 7	512	{ 131 132 }	{ 62 62 }	845
Spark-arrester.....	W. S. Pittman.....	489,263	Jan. 3	440	121	62	97
Spark-arrester.....	G. H. Shoemaker.....	503,171	Aug. 15	1569	366	64	882
Spark-arrester.....	N. W. Spencer.....	503,174	Aug. 15	1573	377	64	883
Spark-arrester and ejector. Combined.....	T. E. Austin.....	500,648	July 4	181	47	64	36
Spark-arrester and smoke-condenser. Locomotive.....	G. Airey.....	495,387	Apr. 11	1390	347	63	275
Spark-arrester. Locomotive.....	H. C. Smith.....	495,380	Apr. 11	1379	344	63	273
Spark-catcher.....	A. T. Brewer.....	490,242	Jan. 17	2001	523	62	438
Spark-guard.....	B. A. Estep.....	498,108	May 23	2761	690	63	1161
Speaking-tube.....	C. A. Bartliff.....	501,486	July 18	1517	381	64	307
Speaking-tube.....	C. A. Bartliff.....	501,487	July 18	1518	381	64	307
Speaking-tube.....	H. Rose.....	490,364	Jan. 24	2215	577	62	494
Speaking-tube apparatus.....	J. W. Black.....	493,059	Mar. 7	445	112	62	1447
Spear. Bel.....	M. C. Kroll.....	504,166	Aug. 29	3163	789	64	1209
Spectacle-bow wire or other articles. Means for forming.....	F. Ecaubert.....	498,466	May 30	3357	{ 836 837 }	{ 63 63 }	1283
Spectacle-case.....	H. C. Brigg.....	494,624	Apr. 4	158	37	63	32
Spectacle-eye-shield.....	J. D. Warren.....	492,125	Feb. 21	1692	422	62	1117
Spectacle-frame.....	A. E. Francis.....	505,650	Sept. 26	2259	572	64	1735
Spectacle-frame.....	J. S. Spencer.....	502,782	Aug. 8	920	224	64	750
Spectacle or eyeglass frame.....	N. Lazarus.....	500,014	June 20	2101	508	63	1785
Spectacle or eyeglass frame.....	W. E. Stevens.....	495,918	Apr. 18	2238	564	63	447
Spectacle or eyeglass lenses. Machine for grinding the edges of.....	T. A. Willson and H. Bilgram.....	508,196	Nov. 7	359	88	65	825
Spectacles.....	H. W. Collins.....	510,240	Dec. 5	673	160	65	1537
Spectacles.....	S. Orth.....	503,803	Aug. 22	2585	645	64	1084
Spectacles.....	J. F. Sumner.....	509,967	Dec. 5	199	46	65	1447
Spectacles.....	M. F. Wickliffe.....	508,457	Nov. 14	776	191	65	917
Spectacles. Mirror attachment for.....	M. Murray.....	498,018	May 23	2630	658	63	1138
Spectatorium.....	S. Mackaye.....	494,068	Mar. 21	2107	537	62	1797
Speculum.....	H. Dickinson, Jr.....	498,633	May 30	3638	900	63	1331
Speculum.....	M. E. Van Meter.....	497,064	May 9	1087	279	63	833
Speech, &c. Apparatus for recording and reproducing.....	C. A. Randall.....	502,382	Aug. 1	220	52, 53	64	606
Speech. Apparatus for recording and reproducing articulate.....	C. A. Randall.....	502,383	Aug. 1	224	53, 54	64	607
Speed-indicator.....	J. M. Napier.....	498,483	May 30	3379	842	63	1286
Speed-indicator.....	H. T. Smith.....	490,889	Jan. 31	3056	789	62	674
Speed-indicator and alarm. Recording.....	G. T. McLauthlin and J. Naylor, Jr.....	506,406	Oct. 10	1060	264	65	214
Speed indicator and recorder. Automatic.....	W. C. Fletcher.....	492,493	Feb. 28	2291	569	62	1252
Speed-indicator for shafting.....	H. C. Andersen.....	502,649	Aug. 1	668	162	64	690
Speed-indicator for shafting.....	W. F. Dial.....	508,686	Nov. 14	1144	282	65	989
Speed-recorder.....	J. C. Henry.....	502,614	Nov. 14	1039	256	65	967

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Speed-varying device	E. Croasdale	490,104	Jan. 17	1768	460	62	393
Sphere. Armillary	S. M. Gibbs	511,420	Dec. 26	2738	662	65	1958
Sphere. Dynamical-arranged celestial	M. Turnbull	506,084	Oct. 3	441	115 116	65	86
Spice-box	A. J. Worthen	502,453	Aug. 1	344	82	64	629
Spike	G. W. Fisher	511,236	Dec. 19	2401	585	65	1884
Spike	W. R. Funk	502,856	Aug. 8	1037	254	64	772
Spike-extractor	E. Anderson	492,977	Mar. 7	326	82	62	1423
Spikes or nails. Machine for making	H. Greer	505,980	Oct. 3	275	72, 73	65	54
Spindle:							
See Spinning-spindle.							
Spinning and doubling spindle.							
Spindle	G. E. Chandler	507,994	Nov. 7	24	8	65	763
Spindle	W. A. Chandler	498,952	June 6	357	85	63	1455
Spindle	F. M. Day	490,245	Jan. 17	2005	524	62	439
Spindle	G. O. Draper	510,848	Dec. 12	1739	429	65	1749
Spindle	J. P. Kelly	499,123	June 6	614	154	63	1503
Spindle-adjusting device	W. A. Chandler	510,404	Dec. 12	932	224	65	1601
Spindle and bearing therefor.	G. H. Allen	511,719	Dec. 26	3212	787	65	2045
Spindle and bearing therefor.	G. W. Knight	508,322	Nov. 7	561	138	65	861
Spindle and bearing therefor.	J. W. Wattles	509,982	Dec. 5	238	55	65	1454
Spindle and its support	W. E. Allen	494,453	Mar. 28	2739	687	62	1929
Spindle and retaining device therefor	J. H. Northrop	508,235	Nov. 7	421	102	65	836
Spindle attachment	L. W. Huyck	503,240	Aug. 15	1674	412	64	902
Spindle-band stretcher	D. J. Winn	506,295	Oct. 10	863	213	65	176
Spindle-bearing	J. H. Northrop	503,061	Aug. 8	1369	338	64	833
Spindle bolster and step	C. G. Buttrick	490,337	Jan. 24	2167	565	62	485
Spindle. Duplex	J. Duffy	489,292	Jan. 3	474	131	62	103
Spindle fastening device	F. Singleton	495,712	Apr. 18	1918	483	63	387
Spindle for machines for winding quills	E. Atwood	508,160	Nov. 7	298	74	65	813
Spindle-retainer for sleeve-whirl spindles	A. E. Rhoades	504,281	Aug. 29	3353	838	64	1246
Spindle-retaining device	J. H. Northrop	505,173	Sept. 19	1427	367	64	1565
Spindle-retaining device	J. H. Northrop	505,174	Sept. 19	1429	368	64	1565
Spindle-retaining device	J. H. Northrop	505,721	Sept. 26	2378	600	64	1756
Spindle. Sleeve-whirl	J. T. Covo	502,225	July 25	2704	682	64	540
Spindle-support.	J. H. Northrop	503,060	Aug. 8	1568	338	64	833
Spindle-support.	J. H. Northrop	508,742	Nov. 14	1226	305	65	1005
Spinner and twister for silk, &c. Up	J. H. Shearn	496,582	May 2	296	80	63	673
Spinning and balling machine.	J. H. Monroe and I. Courtenay	500,343	June 27	2669	654	63	1897
Spinning and doubling frame. Ring-	G. Shepherd and H. Midgley	501,736	July 18	1916	476	64	379
Spinning and doubling frame. Ring-	G. Shepherd and H. Midgley	501,737	July 18	1923	477	64	380
Spinning and doubling frame. Ring-	G. Shepherd and H. Midgley	501,738	July 18	1928	477	64	381
Spinning and doubling spindle	R. Crabtree and E. Gillow	500,857	July 4	512	133 134	64	93
Spinning and doubling yarns. Apparatus for	J. Walker	499,068	June 6	561	133 134	63	1489
Spinning and twisting frames. Thread-breaking device for	J. T. Collins	506,159	Oct. 3	569	147	65	110
Spinning and twisting machine	E. E. Bradley	504,861	Sept. 12	913	235 236	64	1456
Spinning-flier	J. Good	500,062	June 20	2181	531	63	1799
Spinning-flier and attachment thereto	J. Shaw	506,947	Oct. 17	1948	482	65	394
Spinning-frame. Cap	N. Hicks	510,861	Dec. 12	1776	436	65	1755
Spinning-frame. Ring-	C. C. Kent	501,427	July 11	1430	359	64	275
Spinning-frame separator mechanism	E. Whittum	491,276	Feb. 7	340	86	62	814
Spinning-frame yarn-separator	A. D. Chandler	496,186	Apr. 25	2630	662 663	63	536
Spinning frames. Separator mechanism for ring-	C. L. Hildreth	498,265	May 30	3025	753	63	1223
Spinning frames. Separator mechanism for ring-	C. L. Hildreth	498,266	May 30	3028	754	63	1223
Spinning frames. Separator mechanism for ring-	C. L. Hildreth	498,267	May 30	3030	754	63	1223
Spinning frames. Separator mechanism for ring-	C. L. Hildreth	498,268	May 30	3031	754 755	63	1224
Spinning frames. Separator mechanism for ring-	C. L. Hildreth, S. G. Stephens, and C. Whitaker	498,264	May 30	3022	753	63	1222
Spinning frames. Separator mechanism for ring-	C. F. Randall	498,305	May 30	3103	773	63	1236
Spinning frames. Separator mechanism for ring-	C. Whitaker	498,338	May 30	3151	786 787 788	63	1245
Spinning frames. Separator mechanism for ring-	C. Whitaker	498,339	May 30	3160	788	63	1247
Spinning frames. Separator mechanism for ring-	C. Whitaker	498,340	May 30	3163	788 789	63	1247
Spinning frames. Separator mechanism for ring-	C. Whitaker	498,341	May 30	3167	789	63	1247
Spinning frames. Separator mechanism for ring-	C. Whitaker	498,342	May 30	3170	790	63	1248
Spinning frames. Separator mechanism for ring-	C. Whitaker	505,500	Sept. 26	1949	502 503 504	64	1677
Spinning frames. Separator mechanism for ring-	C. Whitaker	505,501	Sept. 26	1959	505 506	64	1678
Spinning-jenny stop-motion	B. Bodell	499,280	June 13	882	213 214	63	1558
Spinning-machine	G. A. Collins, Jr.	496,083	Apr. 25	2489	628	63	508
Spinning-machine	J. A. Collins	500,318	June 27	2629	643	63	1889
Spinning-machine attachment	L. Croes, E. R. Mergaert, and J. Lapin	500,758	July 4	365	95	64	68
Spinning-machine. Hemp-	C. E. Baldner	501,475	July 11	1498	377	64	288
Spinning-machine ring	C. H. Chapman	501,243	July 11	1130	287	64	220
Spinning-machine separator	C. A. Taft	506,140	Oct. 3	537	139	65	104
Spinning-machine separator mechanism	E. M. Whittum	494,954	Sept. 12	1059	271	64	1484
Spinning-machine spindle	C. G. Buttrick	505,507	Sept. 26	1979	508	64	1681
Spinning-machine spindle	W. G. Morrison	492,415	Feb. 28	2153	538	62	1324
Spinning-machine traveler-ring	H. L. Peirce	504,997	Sept. 12	1139	292	64	1499
Spinning-machines. Saddle for top rolls of	E. Dixon	493,912	Mar. 21	1839	469	62	1747
Spinning-machine	D. P. German	510,909	Dec. 19	1857	457	65	1782
Spinning-mule	J. Burns	498,105	May 23	2758	689	63	1161

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Spinning or other rollers. Machine for making.....	F. F. Molié.....	504,813	Sept. 12	838	{ 214 215 }	64	1440
Spinning or twisting apparatus.....	L. F. Weiss.....	506,754	Oct. 17	1629	409	65	335
Spinning-ring.....	E. S. Draper.....	491,962	Feb. 14	1445	359	62	1053
Spinning-ring.....	G. O. Draper.....	500,999	July 1	731	192	64	133
Spinning-ring and traveler.....	C. H. Chapman.....	491,526	Feb. 14	764	194	62	915
Spinning-spindle.....	T. Wrigley.....	492,080	Feb. 21	1621	402	62	1103
Spinning-spindle and support therefor.....	H. D. Klotz.....	501,792	July 18	2019	498	61	396
Spinning-spindle bolster.....	J. H. Northrop.....	503,911	Aug. 22	2740	687	61	1114
Spinning-spindle-driving mechanism.....	C. Schrepfer.....	501,666	July 18	1805	449	64	360
Spinning-spindle mount.....	H. D. Klotz.....	498,980	June 6	410	96	63	1464
Spinning-spindle. Self-balancing.....	E. E. Bradley.....	504,860	Sept. 12	912	235	64	1456
Spinning-spindle support.....	H. D. Klotz.....	493,034	Mar. 7	414	103	62	1440
Spirits from amylaceous materials. Manufacture of.....	E. Polgar.....	497,814	May 23	2295		63	1080
Spittoon.....	A. Pusel.....	509,555	Nov. 28	2650	641	65	1300
Spittoon-carrier.....	G. B. Nagle.....	504,607	Sept. 5	480	123	64	1359
Spittoon for railway-cars.....	K. Weinberger.....	501,635	July 18	1755	437	64	352
Splasher-holder.....	S. Wilkins.....	496,928	May 9	885	232	63	797
Spoke-bending machine.....	P. Gendron.....	500,383	June 27	2727	670	63	1907
Spoke-fastening.....	H. H. Baker.....	496,844	May 9	725	192	63	767
Spoke-grinding machine.....	G. J. Covert, G. W. and I. L. Price.....	502,174	July 25	2632	661	64	524
Spoke-holder.....	F. M. Lewis.....	498,719	May 30	3806	938	63	1360
Spokeshave.....	H. D. Lanfair.....	508,427	Nov. 14	733	181	65	908
Spoke-awaging machine.....	P. Gendron.....	503,791	Aug. 22	2571	640	64	1081
Spoke washer. Wheel.....	R. W. and T. J. Cave.....	493,397	Mar. 14	963	254	62	1568
Sponge and soap holder.....	T. M. Hilliard.....	505,360	Sept. 19	1722	445	64	1020
Sponge-cup.....	R. Hitchcock and H. D. Waite.....	490,653	Jan. 31	2689	692	62	601
Sponge-moistener.....	J. S. McClung.....	496,605	May 2	422	129	63	707
Sponges, brushes, &c. Substitute for.....	W. M. Taylor.....	489,697	Jan. 10	1091	282	62	242
Spool.....	E. Hubbard.....	501,513	July 18	1562	393	64	315
Spool-carrier stop mechanism.....	A. Bayler.....	504,796	Sept. 12	802	204	64	1433
Spool-dressing machine.....	E. Hubbard.....	501,512	July 18	1559	392	64	315
Spool for winding thread. Stamped or folded metal sheet.....	C. Böhrlinger.....	492,657	Feb. 28	2555	632	62	1306
Spool-holder.....	E. C. Jenkins.....	491,261	Feb. 7	318	81	62	809
Spool-holder.....	H. H. Thomas.....	509,498	Nov. 28	2560	619	65	1283
Spool-holder and tension. Combined.....	H. A. Bates.....	490,096	Jan. 17	1755	458	62	391
Spool-support for mules.....	T. C. Dill.....	490,950	Jan. 31	3167	811	62	694
Spool-thread cabinet.....	J. W. Hayden.....	493,087	Mar. 7	490	{ 122 123 }	62	1457
Spools from fibrous pulp. Machine for making.....	E. Hubbard.....	499,427	June 13	1155	277	63	1606
Spooler. Doubling drum.....	E. R. Bullock.....	490,822	Jan. 31	2950	757	62	652
Spooler-spindle. Front.....	F. W. Easton.....	511,266	Dec. 19	2454	598	65	1293
Spooler stop-motion.....	G. P. Bosworth.....	493,206	Mar. 7	671	171	62	1490
Spooling-machine.....	J. W. Foster.....	499,668	June 13	1536	370	63	1673
Spooling-machine stop-motion.....	J. W. Foster.....	499,665	June 13	1532	369	63	1672
Spooling-machine stop-motion.....	C. O. Lightner and F. W. Fransway.....	494,298	Mar. 28	2492	{ 628 629 }	62	1884
Spooling-machine thread-guide.....	W. L. Richmond.....	497,819	May 23	2308	580	63	1081
Spooling-machine tube-holder.....	J. W. Foster.....	499,667	June 13	1535	370	63	1672
Spooling yarn. Bobbin-holder for.....	J. D. Aiken.....	510,309	Dec. 5	780	189	65	1557
Spoon.....	W. J. Osterman.....	510,286	Dec. 5	745	120	65	1550
Spoon.....	G. A. Schlechter.....	499,332	June 13	970	234	63	1573
Spoon-holder.....	J. R. Blair.....	510,835	Dec. 12	1688	419	65	1740
Spoon or analogous article.....	J. Staren.....	511,100	Dec. 19	2177	536	65	1242
Spoons, forks, &c. Cleaner for.....	J. H. Moulder.....	499,467	June 13	1220	291	63	1618
Spoons, forks, knives, &c. Manufacturing.....	G. W. Peck.....	509,094	Nov. 21	1836	449	65	1134
Sporting-ball.....	R. B. Whitel.....	495,863	Apr. 18	2155	540	63	430
Spout for metallic vessels. Separable.....	C. I. McLaughlin.....	500,933	July 4	619	163	64	113
Spout. Sap.....	J. F. Warner.....	509,980	Dec. 5	231	54	65	1453
Spout. Sap.....	A. H. Wood.....	506,386	Oct. 10	1024	255	65	207
Spout, &c. to vessels. Attaching.....	S. Walter.....	509,412	Nov. 28	2394	580	65	1249
Spray. Window-garden.....	B. F. Sill.....	502,590	Aug. 1	569	136	64	670
Sprayer.....	A. G. Provine.....	498,696	May 30	3752	926	63	1350
Sprayer. Portable.....	J. E. Albinson.....	489,780	Jan. 10	1226	321	62	269
Spraying and sprinkling machine. Portable.....	T. Peppeler.....	510,287	Dec. 5	746	181	65	1550
Spraying apparatus.....	H. D. Shutt and E. T. Ragland.....	494,652	Apr. 4	196	49	63	40
Spraying device.....	J. J. Dugan.....	503,455	Aug. 15	2012	499	64	961
Spring: See Red-spring. Medicine-case spring. Bicycle-seat spring. Pump-spring. Bolster-spring. Seat-spring. Car-spring. Vehicle-spring. Carriage-spring. Vehicle draft-spring. Compound spring. Wagon-spring. Door-spring. Wagon-bolster spring. Draft-spring. Wagon-seat spring. Elliptic spring. Watchcase-spring.							
Spring.....	J. H. Dales.....	508,288	Nov. 7	506	122	65	852
Spring.....	H. Kaufmann.....	490,389	Jan. 24	2249	585	62	501
Spring.....	C. H. Yarrington.....	490,938	Jan. 31	3144	807	62	690
Spring and shackle. Combined.....	H. K. James and L. G. Mayer.....	503,087	Aug. 8	1414	349	64	841
Spring attachment for the wheels or other parts of cycles and other vehicles.....	W. E. Hart, Sr. and Jr.....	510,538	Dec. 12	1182	284	65	1646
Spring-bolt and box.....	G. F. Starkweather.....	505,491	Sept. 26	1934	498	64	1674
Spring-check.....	R. L. Allen.....	498,099	May 23	2749	687	63	1159
Spring-clip.....	W. J. Kauffman.....	510,345	Dec. 5	829	200	65	1567
Spring-coiling machine.....	J. Monzel.....	499,794	June 20	1750	{ 423 424 }	63	1723
Spring-compressing apparatus.....	E. E. Chain.....	510,956	Dec. 19	1948	476	65	1799
Spring-forming machine.....	O. S. and W. S. Foster.....	493,428	Mar. 14	1028	266	62	1576
Spring-jack cleaner.....	C. G. Brady.....	509,867	Dec. 5	25	5	65	1415
Spring-jack switch.....	C. E. Scribner.....	489,570	Jan. 10	913	238	62	206

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Spring-motor.....	F. Briggs.....	504,907	Sept. 12	987	{ 253 254 }	64	1471
Spring-motor.....	T. L. Everhart.....	502,288	Aug. 1	43	11	64	575
Spring-motor.....	E. Herrington.....	494,203	Mar. 28	2344	593	62	1857
Spring-motor.....	W. Howard.....	504,808	Sept. 12	826	{ 209 210 }	64	1438
Spring-motor.....	D. H. Smith.....	491,140	Feb. 7	125	33	62	772
Spring-motors. Device for winding.....	S. Baker.....	498,836	June 6	151	37	63	1419
Spring protection.....	H. A. Garben.....	499,649	Jan. 10	1020	266	62	228
Spring-setting machine.....	E. Cliff.....	496,722	May 2	522	139	63	714
Spring-setting machine.....	O. S. and W. S. Foster.....	490,845	Jan. 31	2984	765	62	659
Spring support. Elliptic.....	W. S. Noyes.....	500,600	July 4	95	27	64	19
Spring-tongue switch.....	C. F. Street.....	490,323	Jan. 24	2143	559	62	490
Springs. Gear connection for platform-sprinkler.....	J. P. Farrell.....	501,411	July 11	1414	354	64	271
See Automatic sprinkler. Leach-sprinkler. Electric sprinkler. Street-sprinkler. Fire-sprinkler. Thermostatic sprinkler. Lawn-sprinkler.							
Sprinkler.....	L. M. Berry.....	489,408	Jan. 3	644	174	62	138
Sprinkler.....	F. E. Caton and F. B. Warring.....	504,965	Sept. 12	1086	278	64	1489
Sprinkler.....	C. E. Piper.....	499,144	June 6	671	161	63	1508
Sprinkler.....	H. K. Potter.....	504,134	Aug. 29	3110	779	64	1200
Sprinkler.....	H. K. and J. L. Potter.....	504,069	Aug. 29	3000	750	64	1179
Sprinkling device.....	H. I. Schanck and C. B. Ellis.....	491,377	Feb. 7	529	135	62	849
Sprinkling device for traveling bands.....	C. McDowell.....	498,917	June 6	299	69	63	1445
Sprinkling-machine.....	W. A. Collins.....	490,900	Jan. 31	3093	793	62	680
Sprinkling-tanks. Strainer-cover for.....	F. E. Bowman.....	493,965	Mar. 21	1941	494	62	1766
Sprocket-wheel.....	V. Bélanger.....	504,486	Sept. 5	285	73	64	1323
Sprocket-wheel.....	J. A. Brown.....	499,627	June 13	1477	355	63	1663
Sprocket wheel and chain.....	J. B. Grueter and O. Jackson.....	511,137	Dec. 19	2243	550	65	1855
Square.....	S. H. Bretz.....	509,292	Nov. 21	2167	521	65	1197
Square and bevel-gage. Combined.....	J. W. Yingling.....	497,938	May 23	2505	635	63	1116
Square attachment.....	W. F. Lantz.....	503,050	Aug. 8	1356	335	64	831
Square. Bevel.....	A. Hetu.....	491,351	Feb. 7	491	126	62	841
Square. Carpenter's.....	F. D. Dunnington.....	501,774	July 18	1988	492	64	391
Square. Combination.....	H. K. Austin.....	490,893	Jan. 31	3062	786	62	675
Square. Folding try.....	J. E. Duncan.....	489,413	Jan. 3	650	176	62	140
Square hinge. Folding.....	E. De Camp.....	510,529	Dec. 12	1169	282	65	1644
Square. Separable.....	H. M. Stocking and E. L. Vroom.....	490,994	Jan. 31	3238	827	62	708
Square. T.....	J. W. Bramwell.....	502,112	July 25	2521	632	64	504
Square. Try.....	A. Walentowitz.....	500,727	July 4	317	84	64	60
Squib. Miner's.....	W. Johnson.....	496,227	Apr. 25	2700	677	63	548
Stables, &c. Floor for.....	J. Beadle.....	502,946	Aug. 8	1199	295	64	801
Stacker.....	A. Buchanan, Jr.....	492,777	Mar. 7	9	2, 3	62	1360
Stadia-rod.....	N. Housinger.....	507,008	Oct. 17	2041	505	65	412
Stage apparatus.....	R. H. Richards.....	495,232	Apr. 11	1145	286	63	230
Stage apparatus.....	J. F. Byrne.....	510,772	Dec. 12	1584	394	65	1720
Stage appliance. Theatrical.....	J. Patten.....	501,099	July 11	907	232	64	180
Stage. Fireproof.....	D. I. Towers.....	494,043	Mar. 21	2065	528	62	1790
Stage. Floating.....	W. Hargreaves.....	497,240	May 9	1354	344	63	881
Stage-illusions. Apparatus for use in.....	S. Mackaye.....	490,488	Jan. 24	2402	620	62	530
Stage. Sliding.....	A. Morrill.....	495,032	Apr. 11	817	206	63	171
Stage. Telescopic.....	S. Mackaye.....	490,485	Jan. 24	2397	620	62	529
Staging-bracket.....	S. Mackaye.....	490,486	Jan. 24	2398	620	62	529
Staging or scaffolding. Adjustable.....	J. B. Kenison and M. F. Burk.....	511,625	Dec. 26	3066	750	65	2018
Stagings. Hand implement for taking down building.....	A. Farland.....	499,826	June 20	1811	441	63	1733
Stagings, &c. Implement for dismantling builders'.....	J. J. Maher.....	493,632	Mar. 21	1387	352	62	1660
Stair-builder's laying-out tool.....	G. H. Cutting.....	494,417	Mar. 28	2686	674	62	1920
Stair cover or mat.....	C. H. Callahan.....	494,322	Mar. 28	2526	{ 636 637 }	62	1891
Stair-curve.....	J. W. Zimmerman.....	507,725	Oct. 31	3291	805	65	670
Stair-pad. Mitered.....	W. S. King.....	499,636	June 13	1491	358	63	1665
Stair-rod.....	E. Goldman.....	499,728	June 20	1635	394	63	1704
Stairs. Storm-step for outdoor.....	H. H. McBride.....	511,355	Dec. 26	2616	635	65	1937
Stake-holder.....	W. Moller.....	501,211	July 11	1080	274	64	213
Stake-shoe.....	J. S. Whitworth.....	506,385	Oct. 10	1023	255	65	207
Stalk-breaker.....	C. Hedges.....	492,520	Feb. 28	2332	579	62	1260
Stalk-chopper.....	W. S. James.....	494,528	Mar. 28	2869	717	62	1952
Stalk-cutter.....	J. L. Townsend.....	489,047	Jan. 3	104	29	62	26
Stalk-cutter.....	H. G. Cady.....	494,248	Mar. 28	2413	608	62	1869
Stalk-cutter.....	J. A. Duckworth.....	507,676	Oct. 31	3223	789	65	656
Stalk-cutter.....	J. H. Herring.....	510,789	Dec. 12	1605	400	65	1726
Stalk-cutter.....	W. M. Mueller and O. F. Burford.....	504,934	Sept. 12	1029	265	64	1479
Stalk-cutter and cultivator. Combined.....	G. M. Snodgrass.....	511,658	Dec. 26	3114	{ 760 761 }	65	2027
Stalk-cutter, root-puller, and cultivator. Combined.....	G. M. Snodgrass.....	511,657	Dec. 26	3111	760	65	2026
Stalk-cutting machine.....	W. and J. Allingham.....	508,906	Nov. 21	1524	371	65	1073
Stalk or trash cutter.....	M. W. Lane.....	499,744	June 20	1664	400	63	1708
Stall. Animal.....	D. S. Phillips.....	502,829	Aug. 8	1000	243	64	765
Stall. Cattle.....	J. Aeberly.....	502,599	Aug. 1	588	140	64	674
Stall-cleaner.....	E. Knudson.....	501,948	July 25	2261	565	64	456
Stall-drain.....	M. Logan.....	502,004	July 25	2341	{ 586 587 }	64	470
Stall-drain.....	H. Schiffer.....	505,232	Sept. 19	1512	394	64	1581
Stall-floor.....	S. G. Brown.....	502,221	July 25	2698	681	64	539
Stall-floor.....	M. St. Germain.....	490,931	Jan. 31	3136	804	62	689
Stall-floor drain.....	G. L. Ludwig.....	495,203	Apr. 11	1098	273	63	222
Stallion-shield.....	O. B. Fales.....	505,824	Oct. 3	34	9	65	10
Stallion-shield.....	J. W. Fitzgerald.....	508,100	Nov. 7	200	53	65	796
Stamp.....	C. H. Shaw.....	494,172	Mar. 28	2289	580	62	1845
Stamp.....	C. W. Tremain.....	502,839	Aug. 8	1016	{ 247 248 }	64	768

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Stamp and signal device. Combined electric time-	T. F. Gaynor	509,217	Nov. 21	2036	{ 492 493 }	65	1173
Stamp. Automatic time-	W. B. Martindale	497,331	May 16	1538	387	63	927
Stamp-box	W. S. Sillocks, Jr.	495,067	Apr. 11	841	214	63	175
Stamp-canceler	J. F. Cowdery	511,410	Dec. 26	2718	659	65	1954
Stamp-canceling machine	M. V. B. Ethridge	503,886	Aug. 22	2628	657	64	1092
Stamp-canceling machines. Feeding mechanism for	M. V. B. Ethridge	496,872	May 9	782	{ 207 208 }	63	778
Stamp. Corner dust-shield	G. F. Skinner	499,857	June 20	1866	453	63	1743
Stamp. Hand-	C. H. Burgess	508,865	Nov. 14	1423	353	65	1041
Stamp. Hand-	E. H. Dodge	507,067	Oct. 17	2138	530	65	428
Stamp. Hand-	J. E. Dunham	506,586	Oct. 10	1355	340	65	272
Stamp. Hand-	M. P. Dyart	508,292	Nov. 7	510	124	65	852
Stamp. Hand-	H. H. Norrington	505,172	Sept. 19	1426	367	64	1565
Stamp. Hand-	K. E. Wiberg	504,546	Sept. 5	391	99	64	1343
Stamp-holder. Pocket	T. A. Brouwer, Jr.	490,783	Jan. 31	2898	744	62	641
Stamp. Marking-	C. L. Anton	509,858	Dec. 5	8	2	65	1412
Stamp-mill and amalgamator	C. Carter and A. H. Bell	508,679	Nov. 14	1136	260	65	988
Stamp-mill cam	A. Amsbury	502,219	July 25	2696	6-0	64	538
Stamp-mill cam	G. A. Thompson	493,129	Mar. 7	555	138	62	1468
Stamp-mill guide	W. H. Brown	495,876	Apr. 18	2177	547	63	434
Stamp-mill guide	E. Major	490,973	Jan. 31	3203	818	62	701
Stamp-mill guide	E. Major	499,130	June 6	652	157	63	1505
Stamp. Ore-	J. W. Marshall	493,385	Mar. 14	967	249	62	1565
Stamp. Perforating-	C. M. Danner	504,106	Aug. 29	3067	{ 767 768 }	64	1192
Stamp. Perforating-	J. Stewart	500,258	June 27	2525	{ 617 618 }	63	1871
Stamp. Postage-	G. M. Bright	492,912	Mar. 7	226	57	62	1403
Stamp. Registering or counting hand-	S. A. Harrison	493,498	Mar. 14	1148	293	62	1597
Stamp-safe	L. Briggs	501,762	July 18	1974	488	64	389
Stamp-stem guide.	H. P. Grugin	505,400	Sept. 19	1793	463	64	1634
Stamp-stem guide.	T. Pilkington	510,990	Dec. 19	2012	497	65	1809
Stamp-vending machine	W. H. Kaltenbeck	507,368	Oct. 24	2685	{ 660 661 }	65	542
Stamps, &c. Apparatus for collecting and arranging postage-	H. A. Kröttsch	508,948	Nov. 21	1595	390	65	1087
Stamps to letters. Machine for affixing postage-	A. S. Kibby	503,933	Aug. 22	2771	694	64	1120
Stamping in colors	E. A. W. Wolter	509,109	Nov. 21	1858		65	1138
Stamping. Inking and cleaning apparatus for die-	A. G. Beater	504,465	Sept. 5	248	65	64	1316
Stamping-machine	D. F. Oliver	504,682	Sept. 5	606	155	64	1384
Stamping machine. Date-	A. Lucchesini	495,187	Apr. 11	1078	267	63	218
Stamping mill. Ore-	J. W. Marshall	493,384	Mar. 14	966	249	62	1564
Stamping-press. Hydraulic	C. A. Knight and C. P. Higgins	495,591	Apr. 18	1721	434	63	355
Stanchion	W. S. Angell and C. A. Wiun	496,390	May 2	6	2	63	620
Stanchion	A. F. Scoville and J. E. Genung	498,862	June 6	195	48	63	1427
Stanchion. Cattle-	H. Heitman	509,031	Nov. 21	1712	423	65	1110
Stanchion. Cattle-	W. Morgan	504,605	Sept. 5	476	122	64	1358
Stand:							
See Album-stand.	Map-stand.						
Book-stand.	Music-stand.						
Display-stand.	Reading-stand.						
Displaying-stand.	Sad-iron stand.						
Flower-stand.	Switch-stand.						
Fruit or vegetable stand.	Umbrella-stand.						
Hat-stand.	Waiter's stand.						
Lamp-stand.	Washstand.						
	Zither-stand.						
Stand	W. Kadletz and R. B. Stocker	500,006	June 20	2089	506	63	1783
Stand for umbrellas, hats, coats, &c	A. S. Ross	503,708	Aug. 22	2442	608	64	1055
Staple	L. P. Peterson	506,721	Oct. 17	1575	395	65	325
Staple-bending machine.	A. S. Thompson	505,862	Oct. 3	96	25	65	20
Staple-driving tool	S. C. Davidson	493,758	Mar. 21	1597	406	62	1701
Staple-extractor	H. T. Knight	499,637	June 13	1492	358	63	1666
Staple-making machine	W. P. White	493,040	May 23	2663	666	63	1143
Staple-setting machine	I. Marnaux	501,891	July 18	2169	537	64	423
Staples. Device for holding metallic	W. J. Brown	491,235	Feb. 7	284	71	62	802
Staples. Machine for the manufacture of.	S. C. Davidson	503,264	Aug. 15	1713	{ 422 423 }	64	909
Stapling-machine	E. G. Cohen	489,730	Jan. 10	1141	295	62	252
Stapling-machine	G. Hay	500,576	July 4	59	17	64	12
Starch and cattle-food. Making	A. Behr	491,234	Feb. 7	283		62	802
Starch. Manufacture of	J. Dubiel	493,689	Mar. 21	1478	379	62	1678
Starch out of collars. Machine for squeezing the	A. W. Cummings	509,512	Nov. 28	2585	625	65	1288
Starching apparatus. Fabric-	J. M. Beiermeister	493,905	Mar. 21	1821	464	62	1744
Starching-machine	T. J. Blake	501,476	July 11	1499	{ 377 378 }	64	288
Starching-machine	W. E. Dewey	505,896	Oct. 3	153	39	65	30
Starching-machine	C. J. Dion	489,556	Jan. 10	891	233	62	201
Starching-machine	E. Hurlburt	499,228	June 13	802	{ 190 191 }	63	1544
Starching-machine	C. F. Stone	492,311	Feb. 21	1984	494	62	1179
Starching-machine	T. A. Thorsen	505,282	Sept. 19	1596	{ 415 416 }	64	1597
Station-indicator	S. S. Ackles	500,457	June 27	2834	698	63	1926
Station-indicator	A. W. Chormann	501,477	July 11	1501	378	64	288
Station-indicator	M. Fiset	493,763	Mar. 21	1603	{ 407 408 }	62	1702
Station-indicator	M. Manuel	498,280	May 30	3049	758	63	1227
Station-indicator	H. G. Krasky	502,625	Aug. 1	630	151	64	632
Station-indicator	G. D. O'Grady and J. R. Collins	501,096	July 11	900	231	64	179
Station-indicator	J. B. Ragan	489,499	Jan. 10	816	214	62	186
Station-indicator	J. Rodriguez	507,168	Oct. 24	2337	{ 575 576 }	65	467

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Station-indicator	J. Seebold	495,123	Apr. 11	972	244	63	199
Station-indicator	H. T. Kelly and W. J. Neilson	500,082	June 20	2205	538	63	1803
Station-indicator	T. W. Stewart and W. E. Johnson	499,895	June 20	1928	468	63	1755
Station-indicator operating mechanism	W. Schloesser	505,609	Sept. 26	2185	552	64	1721
Station potential-indicator	C. F. Scott	500,543	June 27	2970	729	63	1951
Stave-bending machine	J. Deters	508,506	Nov. 14	860	213	65	933
Stave-bending machine	C. Sommer	501,697	July 18	1854	461	64	368
Stave-crozing machine	H. Campbell	492,138	Feb. 21	1711	426	62	1121
Stave-dressing machine	D. F. Miller	500,666	July 4	222	58	64	42
Stave-finishing machine	W. Merrill	496,271	Apr. 25	2769	693	63	562
Stave-forming apparatus	T. J. Sullivan	506,280	Oct. 10	842	207	65	171
Stave-hollowing machine	A. M. Benson	501,910	July 25	2209	551	64	446
Stave-jointing machine	J. Pleukharp and W. K. Liggett	503,493	Aug. 15	2077	518	64	973
Stave-making machine	W. L. Kellogg	492,905	Mar. 7	213	52, 53	62	1400
Stave. Non-shrinking	R. F. Wilson	489,063	Jan. 3	123	33	62	31
Stave rounding, crozing, and chamfering machine	J. Pleukharp and W. K. Liggett	511,028	Dec. 19	2057	509	65	1818
Stave-sawing machine	H. F. Hawkes and F. E. Hersey	499,829	June 20	1816	442	63	1735
Stave-sawing machine	B. D. Whitney	489,772	Jan. 10	1214	318	62	266
Stave trimming and jointing machine	W. J. Wright	492,702	Feb. 23	2615	648	62	1318
Staves. Machine for dressing bucked	C. Sommer	504,461	Sept. 5	238	63	64	1315
Staves. Machine for dressing rived	A. M. Benson	502,271	Aug. 1	10	3	64	568
Staves. Machine for finishing twisted	D. F. Miller	509,233	Nov. 21	2068	499	65	1178
Staved vessel. Cylindrical	C. L. Mann	503,055	Aug. 8	1363	337	64	832
Stay and fastener. Combined dress	M. Trisdorfer	504,004	Aug. 29	2910	729	64	1162
Stay-bolt	J. Nixon	502,827	Aug. 8	997	243	64	764
Stay. Dress	M. M. Beeman	507,875	Oct. 31	3545	872	65	717
Stay. Dress	I. Bray	494,242	Mar. 28	2406	607	62	1868
Stay. Dress	G. S. Brown	499,513	June 13	1305	307	63	1632
Stay. Dress	M. E. Kellogg	502,436	Aug. 1	312	75	64	623
Stay. Dress	J. Kendrick	501,078	July 11	855	222	64	171
Stay. Dress	J. B. Moore	509,480	Nov. 28	2537	612	65	1278
Stay. Dress	D. H. Warner	495,618	Apr. 18	1764	445	63	362
Stay. Garment	H. Johnston	494,064	Mar. 21	2101	535	62	1796
Steak-crusher	P. L. Mars	510,513	Dec. 12	1109	268	65	1634
Steam and air engine	J. Hauser and J. Whittaker	489,148	Jan. 3	255	70, 71	62	50
Steam and water gage. Recording	E. Holthaus	503,968	Aug. 29	2848	714	64	1152
Steam. Apparatus for condensing exhaust	F. L. McGahan	493,733	Mar. 21	1555	396	62	1693
Steam. Apparatus for purifying and removing extraneous matter from	C. M. Baum	505,085	Sept. 19	1293	333	64	1541
Steamboat	W. Grosse	495,410	Apr. 11	1424	358	63	281
Steamboat	C. Hagan	509,808	Nov. 28	3058	738	65	1378
Steam-boiler	C. P. Adams	492,253	Feb. 21	1899	474	62	1160
Steam-boiler	C. Ahrens	495,868	Apr. 18	2164	542	63	432
Steam-boiler	F. M. Ashley	500,733	July 4	325	87	64	61
Steam-boiler	J. J. Barclay	501,047	July 11	811	211	64	163
Steam-boiler	T. C. Best	498,949	June 6	350	84, 85	63	1453
Steam-boiler	G. A. Crane	492,936	Mar. 7	260	66	62	1410
Steam-boiler	P. J. and F. W. Doll	503,834	Aug. 22	2626	657	64	1092
Steam-boiler	G. Dürr	498,465	May 30	3357	836	63	1283
Steam-boiler	G. Dürr	501,612	July 18	1715	428	64	345
Steam-boiler	E. F. Edgar	498,324	May 30	3230	803	63	1259
Steam-boiler	J. A. Eno	505,940	Oct. 3	211	53, 54	65	42
Steam-boiler	M. N. Forney	510,636	Dec. 12	1351	331	65	1678
Steam-boiler	J. E. Gresty	503,700	Aug. 22	2431	605	64	1053
Steam-boiler	J. J. Hahn	499,828	June 20	1815	441	63	1734
Steam-boiler	R. Joy	495,977	Apr. 25	2323	527	63	477
Steam-boiler	R. Joy	507,735	Oct. 31	3304	808	65	672
Steam-boiler	J. Lapp	494,211	Mar. 28	2357	596	62	1859
Steam-boiler	H. A. Laughlin	490,118	Jan. 17	1788	466	62	397
Steam-boiler	H. A. Laughlin	490,119	Jan. 17	1790	467	62	398
Steam-boiler	H. A. Laughlin	490,120	Jan. 17	1793	468	62	398
Steam-boiler	H. A. Laughlin	509,318	Nov. 21	2211	534	65	1205
Steam-boiler	T. E. McNeill	489,712	Jan. 10	1115	287	62	247
Steam-boiler	D. P. McQueen	490,303	Jan. 24	2108	549	62	472
Steam-boiler	L. A. Olsen	495,829	Apr. 18	2100	528	63	421
Steam-boiler	C. C. Peck	498,941	June 6	336	79, 80	63	1451
Steam-boiler	D. A. Reagan, F. D. Saupp, and A. A. Hibbs	492,766	Feb. 28	2721	677	62	1339
Steam-boiler	D. Rousseau	508,532	Nov. 14	915	224	65	943
Steam-boiler	C. L. Seabury	497,432	May 16	1699	428	63	956
Steam-boiler	M. L. Severy	495,324	Apr. 18	1609	405	63	335
Steam-boiler	M. L. Severy	503,005	Aug. 8	1294	316	64	818
Steam-boiler	A. Stirling	491,451	Feb. 7	646	161	62	871
Steam-boiler	R. B. Vaughn	499,948	June 20	1999	485	63	1767
Steam-boiler and fire-box therefor	C. W. Hullings	495,939	Apr. 18	2264	570	63	451
Steam-boiler and furnace	C. R. and G. A. Ayer	498,500	May 30	3418	848	63	1293
Steam-boiler and furnace	C. R. and G. A. Ayer	498,501	May 30	3420	849	63	1293
Steam-boiler and furnace	C. R. and G. A. Ayer	498,606	May 30	3585	888	63	1323
Steam boiler and heater	J. Lapp	491,804	Feb. 14	1205	301	62	1005
Steam-boiler and water-heater	T. C. Andrews	490,940	Jan. 31	3149	807	62	691
Steam-boiler or hot-water heater	A. Boyce	497,625	May 16	2002	500	63	1010
Steam-boiler. Sectional	N. A. Boynton	491,979	Feb. 21	1473	367	62	1073
Steam-boiler. Sectional	G. Engel	490,741	Jan. 31	2826	726	62	627
Steam-boiler. Sectional	G. Engel	496,153	Apr. 25	2586	651	63	527

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Steam-boiler. Sectional	W. M. Mackay	496,089	Apr. 25	2496	{ 630 631	{ 63	510
Steam-boiler. Water-tube	M. J. Dodds	489,374	Jan. 3	596	161	62	128
Steam by the aid of molten slag. Apparatus for generating	E. A. Ashcroft	510,395	Dec. 12	919	221	65	1599
Steam-calorimeter	R. C. Carpenter	492,710	Feb. 28	2629	651	62	1322
Steam-calorimeter	R. C. Carpenter	494,057	Mar. 21	2084	532	62	1793
Steam-chest-cover casing	E. W. Mackenzie-Hughes	505,164	Sept. 19	1411	363	64	1562
Steam-coil. Superheating	H. C. Potter	500,242	June 27	2502	612	63	1868
Steam-engine	J. Abell	510,561	Dec. 12	1219	296	65	1653
Steam-engine	R. T. Abell	511,488	Dec. 26	2842	687	65	1977
Steam-engine	F. B. Allen	496,966	May 9	935	{ 245 246	{ 63	806
Steam-engine	E. H. Allred	500,462	June 27	2840	699	63	1927
Steam-engine	P. E. Berthier	506,765	Oct. 17	1650	{ 413 414	{ 65	339
Steam-engine	C. F. Christopher	498,895	June 6	259	61	63	1438
Steam-engine	A. Collmann	494,412	Mar. 28	2680	672	62	1919
Steam-engine	G. H. Conklin	506,473	Oct. 10	1191	296	65	240
Steam-engine	G. A. Coveyew	493,250	Mar. 14	748	192	62	1523
Steam-engine	F. M. Davis	502,707	Aug. 8	805	{ 194 195	{ 64	728
Steam-engine	J. Dow	498,634	May 30	3640	{ 901 902	{ 63	1331
Steam-engine	J. H. Eickershoff	501,223	July 11	1098	279	64	216
Steam-engine	D. C. Givens	501,829	July 18	2063	509	64	405
Steam-engine	E. W. Harden	490,349	Jan. 24	2192	{ 570 571	{ 62	459
Steam-engine	A. Knudsen	496,689	May 2	473	137	63	705
Steam-engine	A. Knudsen	501,793	July 18	2020	{ 498 499	{ 64	397
Steam-engine	G. de Laval	495,742	Apr. 18	1966	{ 493 496	{ 63	396
Steam-engine	G. Marshall	504,399	Sept. 5	139	36, 37	64	1296
Steam-engine	J. R. Maxwell	498,806	June 6	87	22	63	1404
Steam-engine	H. W. Nipher	505,991	Oct. 3	297	76, 77	65	58
Steam-engine	C. E. Ongley	508,043	Nov. 7	94	27	65	776
Steam-engine	E. F. Peacock	497,987	May 23	2581	646	63	1129
Steam-engine	S. H. Rathburn	495,516	Apr. 18	1599	403	63	334
Steam-engine	J. W. Sargent	502,763	Aug. 8	885	217	64	743
Steam-engine	W. P. Scates	503,988	Aug. 29	2886	722	64	1158
Steam-engine	J. S. Sherman	507,173	Oct. 24	2346	577	65	479
Steam-engine	G. Smith	491,141	Feb. 7	126	33	62	773
Steam-engine	G. Smith	501,581	July 18	1662	415	64	335
Steam-engine	R. D. Werden	500,749	July 4	345	91	64	64
Steam-engine	C. White	507,468	Oct. 24	2839	694	65	572
Steam-engine	J. Wright	491,002	Jan. 31	3246	{ 829 830	{ 62	709
Steam-engine. Balanced	C. A. Ball	489,917	Jan. 17	1443	{ 378 379	{ 62	329
Steam-engine. Direct-acting	W. A. Drewett	497,443	May 16	1715	433	63	959
Steam-engine. Direct-acting	J. A. Groshon	499,730	June 20	1638	{ 394 395 396	{ 63	1705
Steam-engine. Duplex	C. M. Miller	510,184	Dec. 5	575	134	65	1518
Steam. Extractor for grease, grit, &c., from exhaust.	W. Webster	490,461	Jan. 24	2355	610	62	520
Steam-engine stop mechanism	W. M. Wood	497,529	May 16	1856	468	63	924
Steam-gages. Electrical pressure-indicator for	E. G. Smith	490,725	Jan. 31	2801	718	62	623
Steam-generating apparatus	A. Kreusler	502,418	Aug. 1	282	67	64	618
Steam-generator	G. Dürr	497,233	May 9	1339	{ 340 341	{ 63	878
Steam-generator	A. W. Finlayson and E. Popkins	500,803	July 4	432	113	64	80
Steam-generator	J. Hunter	498,272	May 30	3038	756	63	1225
Steam-generator	H. Hyde	497,881	May 23	2412	{ 602 603	{ 63	1100
Steam-generator	A. Kreusler	502,729	Aug. 8	834	202	64	734
Steam-generator	A. Langton	491,217	Feb. 7	256	63	62	796
Steam-generator	R. G. Packard	489,495	Jan. 10	805	212	62	184
Steam-generator	W. J. Rauton	489,689	Jan. 10	1078	280	62	240
Steam-generator	E. E. Roberts	507,504	Oct. 24	2906	{ 714 715	{ 65	583
Steam-generator	E. E. Roberts	507,505	Oct. 24	2909	{ 715 716	{ 65	584
Steam-generator	R. G. Ruffles	507,169	Oct. 24	2340	576	65	478
Steam-generator	C. H. Shaw	498,699	May 30	3757	927	63	1351
Steam-generator	C. R. Shepler	490,928	Jan. 31	3129	803	62	687
Steam-generator	T. L. and T. J. Sturtevant	500,166	June 27	2382	578	63	1846
Steam-generator	J. R. Vance	494,180	Mar. 28	2304	584	62	1849
Steam-generator	H. L. Wilson	499,816	June 20	1789	{ 434 435	{ 63	1731
Steam generator and heater. Combined	A. Kreusler	502,728	Aug. 8	833	201	64	733
Steam-generator and smelting-furnace	J. L. Giroux	500,886	July 4	557	144	64	102
Steam generator and superheater	J. Bonicard	507,644	Oct. 31	3179	778	65	648
Steam-generator furnace	C. E. Stockford	507,692	Oct. 31	3244	{ 794 795	{ 65	660
Steam generator or heater	F. X. Brunelle	491,523	Feb. 14	761	193	62	915
Steam-heater	C. E. Wakeman	492,174	Feb. 21	1774	{ 443 444	{ 62	1135
Steam-jet conveyer for ashes or other light substances.	W. McClave	490,583	Jan. 24	2541	654	62	557
Steam-jet conveyer for ashes or other light substances.	W. McClave	490,584	Jan. 24	2543	{ 654 655	{ 62	558
Steam-motor	E. A. Edwards	504,493	Sept. 5	304	77	64	1326

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. sr.	Vol.	Page.
Steam-motor	E. A. Edwards	505,350	Sept. 19	1702	{ 439 440	{ 64	1617
Steam-muffler	D. Goff	503,534	Aug. 15	2141	{ 537 173	{ 64	985
Steam-muffler and heating apparatus. Combined.....	C. E. Healy	491,482	Feb. 7	689	{ 174	{ 62	880
Steam or gas regulator	W. H. Pierce	501,437	July 11	1443	{ 361	{ 64	278
Steam or hot-water heater	C. Phelps	506,859	Oct. 17	1799	{ 452	{ 65	366
Steam or pneumatic engine	J. W. Powers	493,840	Mar. 21	1720	{ 439	{ 62	1725
Steam passenger-boat	A. McDougall	500,411	June 27	2766	{ 682	{ 63	1914
Steam plant	E. B. Coxé	510,582	Dec. 12	1259	{ 306	{ 65	1660
Steam plant	E. B. Coxé	510,583	Dec. 12	1261	{ 306	{ 65	1660
Steam plant	E. B. Coxé	510,585	Dec. 12	1265	{ 307 308	{ 65	1661
Steam-regulator. Automatic	J. Solter	505,179	Sept. 19	1435	{ 369	{ 64	1566
Steam-separator	C. E. Wollé and A. Trout	511,314	Dec. 19	2534	{ 617	{ 65	1908
Steam-separator	A. J. Wright	492,081	Feb. 21	1622	{ 403	{ 62	1103
Steam-separator	A. J. Wright	492,082	Feb. 21	1624	{ 403	{ 62	1103
Steam-separator. Safety	A. J. Wright	492,083	Feb. 21	1627	{ 404	{ 62	1104
Steam-shovel	J. M. Boudrie and T. McManus	511,110	Dec. 19	2196	{ 539	{ 65	1846
Steam-superheater with independent furnace	L. Uhler	510,658	Dec. 12	1395	{ 342 343	{ 65	1686
Steam-tight coupling	L. M. Rouse	508,765	Nov. 14	1258	{ 314	{ 65	1011
Steam-trap	C. M. Baum	506,806	Oct. 17	1714	{ 431	{ 65	351
Steam-trap	H. Creamer	509,202	Nov. 21	2004	{ 487	{ 65	1167
Steam-trap	O. Gassett	508,300	Nov. 7	522	{ 126 127	{ 65	855
Steam-trap	E. H. Gold	492,495	Feb. 28	2295	{ 570	{ 62	1253
Steam-trap	W. J. Gregg	509,846	Nov. 28	3114	{ 752	{ 65	1388
Steam-trap	M. Hey	502,708	Nov. 14	1180	{ 291	{ 65	995
Steam-trap	R. R. Leitch	508,727	Nov. 14	1205	{ 299	{ 65	1000
Steam-trap	F. A. Littlefield	491,486	Feb. 7	695	{ 176	{ 62	882
Steam-trap	C. A. Schroyer	510,651	Dec. 12	1381	{ 338	{ 65	1683
Steam-trap	J. Q. C. Searle	495,377	Apr. 11	1372	{ 342 343	{ 63	271
Steam-trap	J. Zimmerman	506,760	Oct. 17	1643	{ 411	{ 65	337
Steam-trap. Thermostatic	E. E. Gold	507,268	Oct. 24	2512	{ 619 620	{ 65	508
Steamer	G. Wiley	493,849	Mar. 21	1736	{ 442	{ 62	1728
Steamer and drier. Grain	G. Y. Smith	498,731	May 30	3833	{ 945	{ 63	1365
Steamer. Chain	E. I. and E. A. Pfeifer	491,492	Feb. 7	701	{ 178	{ 62	883
Steamer for tempering wheat	F. Beall	510,954	Dec. 19	1946	{ 475	{ 65	1799
Steamer. Oyster	W. A. Ramage	492,970	Mar. 7	313	{ 80	{ 62	1421
Steamer. Spindle-shaped ocean	W. L. Winans	504,120	Aug. 29	3086	{ 773	{ 64	1196
Steamer. Wheat	H. B. Shamp	493,225	Mar. 7	702	{ 179	{ 62	1496
Steaming apparatus	H. G. Hall	506,224	Oct. 10	730	{ 182 183	{ 65	150
Steaming liquids	A. Werner	490,523	Jan. 24	2461	{ 634	{ 62	542
Steel, &c. Composition for supercarburizing	H. A. Harvey	498,390	May 30	3237	.....	{ 63	1260
Steel. Converting malleable iron into	A. J. Hindermeyer	492,679	Feb. 28	2584	.....	{ 62	1311
Steel-founding	J. G. McRoberts	504,761	Sept. 5	69	{ 19	{ 64	1284
Steel-hardening apparatus	E. Tweedy	500,379	July 4	703	{ 184	{ 64	128
Steel-hardening apparatus	H. Wilisch	501,393	July 11	1386	{ 347	{ 64	266
Steel in low-carbon steel. Increasing percentage of	J. A. Hunter	498,063	May 23	2697	.....	{ 63	1149
Steel ingots. Soaking-pit for	A. J. Shaw	505,728	Sept. 26	2390	{ 604	{ 64	1758
Steel into wrought-iron. Converting cast	W. Parkinson	511,648	Dec. 26	3098	.....	{ 65	2024
Steel. Manufacturing	T. Alderdice	491,035	Jan. 31	3313	.....	{ 62	724
Steel. Manufacturing	A. E. Hunt	493,090	Mar. 7	494	.....	{ 62	1457
Steel. Manufacturing	C. Walrand and E. Legenisel	503,816	Aug. 22	2603	.....	{ 64	1087
Steel-melting furnace. Open-hearth	J. W. Wailes	501,200	July 11	1065	{ 269 270	{ 64	209
Steel or iron. Apparatus for manufacturing	J. Heaton and G. H. Holden	501,140	July 11	973	{ 248	{ 64	192
Steel or iron. Apparatus for the manufacture of	J. Heaton and G. H. Holden	501,138	July 11	968	{ 247	{ 64	191
Steel or iron. Apparatus for the manufacture of	J. Heaton and G. H. Holden	501,139	July 11	971	{ 248	{ 64	191
Steel plates, &c. Apparatus for shaping, hardening, and tempering	J. B. Armstrong	499,368	June 13	1042	{ 253	{ 63	1587
Steel. Process and composition of matter for the manufacture of	J. B. Jenkins	490,660	Jan. 31	2702	.....	{ 62	603
Steel ribbons. Apparatus for coloring	J. Logan	510,352	Dec. 5	837	{ 202	{ 65	1569
Steel-shaping apparatus	J. A. Potter	498,304	May 30	3101	{ 772 773	{ 63	1235
Steering apparatus	T. Ellis	493,692	Mar. 21	1483	{ 380	{ 62	1679
Steering apparatus	W. T. Johnston	491,212	Feb. 7	245	{ 62	{ 62	794
Steering apparatus for submarine vessels	J. P. Holland	492,960	Mar. 7	298	{ 75	{ 62	1418
Steering apparatus. Hydraulic	C. S. Irwin	507,135	Oct. 24	2281	{ 560	{ 65	467
Steering apparatus. Tow	J. R. and J. B. Wilson	510,749	Dec. 12	1540	{ 382	{ 65	1713
Steering-engine	W. Craig	509,511	Nov. 28	2584	{ 625	{ 65	1287
Steering-gear. Electric	F. L. and L. H. Dyer	498,160	May 23	2833	{ 709 710	{ 63	1174
Steering-gear. Electric	L. S. Van Duzer	493,000	Mar. 7	358	{ 91	{ 62	1430
Steering-gear. Electrical	C. W. Ayton	507,522	Oct. 31	2947	{ 723	{ 65	605
Steering-gear. Ship	W. A. Oglethorpe	499,569	June 13	1388	{ 331 332	{ 63	1647
Steering-gear. Vessel's	R. H. Chase and J. J. Daly	497,706	May 16	2131	{ 532	{ 63	1034
Steering mechanism	J. Christensen	495,622	Apr. 18	1772	{ 446	{ 63	363
Steering vessels. Drag for	L. Boucher	508,271	Nov. 7	484	{ 117	{ 65	847
Stencil-trap	T. C. Beaumont	491,330	Feb. 7	447	{ 115	{ 62	833
Stencil apparatus	H. Sorg	495,604	Apr. 18	1738	{ 438	{ 63	358
Stencil-machine	A. J. Bradley	494,546	Apr. 4	15	{ 3, 4	{ 63	5
Stencil-plates. Making	J. Brodrick	505,698	Sept. 26	2344	.....	{ 64	1750
Stencils. Apparatus for the manufacture of	E. de Zuccato	498,149	May 23	2820	{ 705	{ 63	1172
Step. Folding	H. J. Climer	504,966	Sept. 12	1087	{ 278	{ 64	1489
Stereoscope	A. Wagner	502,450	Aug. 1	340	{ 81	{ 64	629
Stereotype or electrotpe plates. Base for	H. Fietisch, Jr	509,075	Nov. 21	1789	{ 440	{ 65	1125
Stereotyping	G. Eastwood	503,950	Aug. 29	2818	{ 704	{ 64	1146

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sterilizing apparatus.....	E. Adam and M. O. Rehfuß.....	510,757	Dec. 12	1557	389	65	1716
Sterilizing apparatus.....	A. V. M. Sprague.....	505,967	Oct. 3	257	68, 69	65	51
Sterilizing apparatus.....	A. V. M. Sprague.....	509,560	Nov. 28	2659	644	65	1302
Still.....	N. W. Condict, Jr.....	493,247	Mar. 14	745	191	62	1592
Still.....	H. Hinz.....	511,424	Dec. 26	2744	664	65	1959
Still. Druggist's.....	C. E. R. Beck.....	509,282	Nov. 21	2144	515	65	1192
Still for the distillation and purification of hydrocarbons.....	T. McGowan.....	492,421	Feb. 28	2160	540	62	1226
Still-lining.....	T. McGowan.....	492,419	Feb. 28	2158	539	62	1225
Still-retort.....	J. Freel.....	504,917	Sept. 12	1003	259	64	1474
Still. Tar or petroleum.....	W. H. Stelwagon.....	503,996	Aug. 29	2897	725	64	1160
Still.....	E. C. Emde.....	509,726	Nov. 28	2917	706	65	1350
Stilt. Shoe.....	W. R. Steuart.....	493,663	Mar. 21	1435	365	62	1668
Stirrup.....	J. T. Crone.....	499,283	June 13	888	215	63	1559
Stirrup.....	B. E. Riker and A. Green.....	509,139	Nov. 21	1904	465	65	1147
Stirrup-holder. Safety.....	J. J. Rooney.....	500,512	June 27	2923	718	63	1942
Stirrup. Saddle.....	J. A. Krewson.....	494,005	Mar. 21	2007	511	62	1779
Stitching machine. Staple.....	F. S. Bradley and J. P. Lavigne.....	496,634	May 2	382	{ 103 104 }	63	689
Stitching machine. Wire.....	E. R. Johnson.....	496,314	Apr. 25	2844	{ 710 711 }	63	576
Stock-cutter. Rotary.....	I. Hardee.....	492,675	Feb. 28	2578	639	62	1310
Stock in herds. Apparatus for handling.....	M. M. Fairman.....	506,680	Oct. 17	1497	{ 376 377 }	65	310
Stock-rack.....	P. Hewitt.....	491,886	Feb. 14	1330	329	62	1029
Stock-rack.....	A. Seeburger.....	499,757	June 20	1699	407	63	1714
Stock securing and releasing device.....	C. K. J. Raben.....	510,365	Dec. 5	857	206	65	1573
Stock-yard gate.....	J. M. Keith.....	510,511	Dec. 12	1104	266	65	1634
Stocking and knitting same.....	E. R. Branson.....	495,660	Apr. 18	1836	459	63	374
Stocking and knitting same.....	J. H. Woodward.....	500,700	July 4	266	72	64	50
Stocking-stretcher.....	C. Greiner.....	501,065	July 11	837	218	64	168
Stocking-supporter.....	O. Huff.....	508,883	Nov. 14	1443	357	65	1044
Stocking-supporting catch.....	L. G. Abbott.....	498,218	May 23	2942	732	63	1192
Stockings. Manufacture of.....	L. N. D. Williams.....	502,941	Aug. 8	1191	293	64	800
Stoker. Automatic.....	J. H. Johns.....	497,073	May 9	1099	{ 282 283 }	63	835
Stoker. Mechanical.....	F. O. Ruppert.....	508,985	Nov. 21	1645	404	65	1098
Stone. Apparatus for manufacturing artificial.....	F. Zernikow.....	493,141	Mar. 7	576	144	62	1472
Stone. Artificial.....	C. George.....	507,801	Oct. 31	3426	840	65	695
Stone. Artificial.....	M. Laffont.....	501,794	July 18	2021	.....	64	397
Stone. Artificial.....	M. Laffont.....	501,888	July 18	2164	.....	64	422
Stone. Artificial.....	M. Laffont.....	501,889	July 18	2165	.....	64	422
Stone. Artificial.....	J. Lorenz.....	509,924	Dec. 5	128	.....	65	1434
Stone. Artificial.....	J. W. Turner.....	502,023	July 25	2380	.....	64	477
Stone-boat.....	O. H. Eddy.....	508,169	Nov. 7	311	77	65	816
Stone-boats. Metallic crook for.....	W. Allen.....	500,363	June 27	2699	662	63	1902
Stone-breaker.....	A. J. Gates.....	491,096	Feb. 7	50	13, 14	62	758
Stone breaker or crusher.....	A. J. Gates and L. J. Hewes.....	507,118	Oct. 24	2234	552	65	459
Stone. Building.....	E. Smith.....	507,562	Oct. 31	3018	741	65	818
Stone-channeling machine.....	S. H. Holley.....	508,016	Nov. 7	57	16, 17	65	768
Stone-channeling machine.....	Z. Lassar.....	497,379	May 16	1611	407	63	941
Stone composition. Artificial.....	H. Gallinowsky.....	500,485	June 27	2871	.....	63	1932
Stone. Composition of matter for artificial.....	H. Endemann.....	489,377	Jan. 3	601	.....	62	129
Stone. Compound for artificial.....	A. Möhle.....	508,033	Nov. 7	82	.....	65	773
Stone-cutter.....	L. C. Trent.....	498,995	June 6	442	104	63	1468
Stone-cutting and stone-dressing machinery. Automatic.....	W. Errington.....	505,624	Sept. 26	2201	557	64	1724
Stone-cutting machine.....	A. McDonald.....	503,156	Aug. 15	1542	379	64	877
Stone-cutting machine.....	M. A. Pigott.....	490,721	Jan. 31	2795	717	62	622
Stone-cutting machine.....	T. Shea, J. L. Woodbury, and F. A. Whipple.....	511,715	Dec. 26	3206	786	65	2043
Stone-cutting machine.....	O. Thomas.....	499,152	June 6	684	164	63	1509
Stone-dressing machine.....	E. G. Lind and K. P. Gustafsson.....	492,033	Feb. 21	1555	388	62	1089
Stone-dressing machine.....	C. Lohr.....	511,628	Dec. 26	3071	751	65	2019
Stone-gathering machine.....	C. J. Clark.....	491,984	Feb. 21	1480	{ 368 369 }	62	1074
Stone. Machine for sawing blocks of.....	A. Jeansaume.....	508,825	Nov. 14	1348	{ 333 334 }	65	1027
Stone. Manufacture of artificial.....	F. F. von Ainbach.....	505,082	Sept. 19	1287	.....	64	1541
Stone. Manufacture of artificial.....	A. H. Frear.....	506,847	Oct. 17	1782	.....	65	363
Stone molding and surfacing machine.....	W. B. Ward.....	496,022	Apr. 25	2389	604	63	490
Stone-planer.....	C. Biganess.....	496,719	May 2	518	138	63	713
Stone. Production of artificial.....	G. M. Breinig.....	505,747	Sept. 26	2416	.....	64	1762
Stone-quarrying machinery. Guide for the cylinders and cross-heads of.....	A. Ball.....	503,691	Aug. 22	2417	602	64	1050
Stone-saw.....	D. C. Miller.....	500,592	July 4	83	23	64	16
Stone-sawing machine.....	W. P. Barclay.....	497,400	May 16	1643	{ 415 416 }	63	947
Stone-sawing machine.....	G. E. Fossick.....	507,357	Oct. 24	2669	656	65	539
Stone-sawing machine.....	J. Peckover.....	500,034	June 20	2135	517	63	1791
Stone-sawing machines. Operating diamond.....	G. N. Williams, Jr.....	490,464	Jan. 24	2359	611	62	521
Stone-separator.....	J. Cornelius and E. R. Collins.....	490,947	Jan. 31	3164	811	62	693
Stool and foot-rest. Combined.....	J. K. Phillips.....	498,081	May 23	2723	681	63	1154
Stool and table. Combined.....	C. E. Cunningham and F. W. Dankmeyer.....	510,411	Dec. 12	942	227	65	1603
Stool. Cane.....	A. L. Chapman.....	504,326	Sept. 5	20	6	64	1275
Stool. Cane.....	O. P. Dabney.....	499,719	June 20	1618	391	63	1701
Stool. Cane.....	E. C. Phillips.....	498,487	May 30	3386	843	63	1288
Stool. Convertible.....	F. Graham and I. E. Curtis.....	499,104	June 6	611	147	63	1497
Stool. Foldable.....	F. S. Patton.....	504,241	Aug. 29	3290	822	64	1233
Stool. Folding.....	T. Wootton.....	509,639	Nov. 28	2780	668	65	1325
Stool. Folding camp.....	S. E. Reutter.....	506,255	Oct. 10	795	197	65	162
Stool. Milking.....	O. A. Moody.....	504,992	Sept. 12	1132	290	64	1497
Stool. Piano.....	J. Dierdorf.....	502,069	July 25	2451	690	64	490

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Diag.	Vol.	Page.
Stool. Piano.....	C. W. Munz.....	493,441	Mar. 14	1056	272	62	1581
Stool. Piano.....	C. O. Parsons.....	493,111	Mar. 7	529	132	62	1463
Stool. Piano.....	J. R. Peartree.....	504,683	Sept. 5	607	155	64	1384
Stool. Piano.....	W. T. Smith.....	505,256	Sept. 19	1549	404	64	1588
Stool. Store.....	G. F. Steese.....	505,138	Sept. 19	1373	352	64	1555
Stop and waste device.....	H. C. Apel.....	495,575	Apr. 18	1698	428	63	351
Stop device.....	T. A. Edison.....	491,993	Feb. 21	1491	372	62	1077
Stop-motion.....	H. H. Cummings.....	510,677	Dec. 12	1426	352	65	1691
Stop-motion for rotary machine parts.....	W. O. Crain.....	489,849	Jan. 10	1321	344	62	289
Stopper: See Boiler-flue stopper. Flue-stopper. Bottle-stopper. Jar-stopper.							
Stopper-fastener.....	G. Nichols.....	511,645	Dec. 26	3094	755	65	2023
Stopper lock. Screw.....	E. W. Luce.....	490,356	Jan. 24	2202	574	62	491
Stopping and reversing mechanism.....	J. B. Clyne.....	497,665	May 23	2395	598	63	1097
Storage-battery.....	C. W. Kennedy.....	507,139	Oct. 24	2286	561 562	65	468
Storage-battery.....	F. A. La Roche.....	496,126	Apr. 25	2550	642	63	520
Storage-battery.....	C. J. Reed.....	504,455	Sept. 5	227	61	64	1313
Storage-battery.....	E. P. Usher.....	509,266	Nov. 21	2118	509	65	1188
Storage-battery.....	E. P. Usher.....	509,267	Nov. 21	2119	510	65	1188
Storage-battery.....	E. P. Usher.....	509,268	Nov. 21	2120	510	65	1188
Storage-battery.....	E. P. Usher.....	509,269	Nov. 21	2121	510	65	1188
Storage-battery.....	E. P. Usher.....	509,270	Nov. 21	2122	510	65	1188
Storage-battery.....	E. P. Usher.....	509,271	Nov. 21	2123	511	65	1188
Storage-battery.....	E. P. Usher.....	509,272	Nov. 21	2125	511	65	1189
Store-service apparatus.....	T. E. Barrow.....	496,147	Apr. 25	2578	648 649	63	525
Store-service apparatus.....	J. M. Burns.....	502,277	Aug. 1	19	5	64	570
Store-service apparatus.....	J. M. Burns.....	502,395	Aug. 1	243	58	64	610
Store-service apparatus.....	A. A. Caille.....	491,076	Feb. 7	22	6, 7	62	752
Store-service apparatus.....	J. T. Cowley.....	502,279	Aug. 1	25	6	64	571
Store-service apparatus.....	J. J. Crist.....	505,875	Oct. 3	114	29	65	23
Store-service apparatus.....	J. H. Goodfellow.....	493,621	Mar. 14	1366	347	62	1640
Store-service apparatus.....	J. H. Goodfellow.....	502,293	Aug. 1	61	14	64	577
Store-service apparatus.....	J. H. Goodfellow.....	505,458	Sept. 26	1887	487	64	1665
Store-service apparatus.....	D. Lippy.....	489,537	Jan. 10	868	227	62	197
Store-service apparatus.....	D. Lippy.....	501,480	July 11	1505	379	64	289
Store-service apparatus.....	C. W. McCormick.....	495,902	Apr. 18	2212	557 558	63	441
Store-service apparatus.....	J. R. Pollock.....	502,012	July 25	2354	590	64	472
Store-service apparatus.....	J. R. Pollock.....	506,072	Oct. 3	423	111	65	82
Store-service apparatus.....	A. J. Slonecker.....	490,168	Jan. 17	1869	488	62	414
Store-service apparatus.....	F. A. Spear.....	505,905	Oct. 3	166	43	65	33
Store-service apparatus.....	H. M. Weaver.....	500,641	July 4	166	43	64	33
Store-service apparatus. Car stop and retainer for.....	T. E. Barrow.....	496,148	Apr. 25	2580	649	63	526
Store-service. Device for removing dust from.....	J. L. McKay.....	510,872	Dec. 12	1800	443 444	65	1759
Store-service track-curve.....	S. W. Barr.....	509,015	Nov. 21	1690	417	65	1106
Stove.....	A. W. Alger.....	490,531	Jan. 24	2474	637 638	62	544
Stove.....	A. W. Alger.....	507,093	Oct. 24	2187	541	65	449
Stove.....	E. J. Daschbach.....	507,219	Oct. 24	2434	600	65	494
Stove.....	P. Frank.....	500,878	July 4	549	142	64	100
Stove.....	M. Gray.....	509,892	Dec. 5	78	19	65	1424
Stove.....	T. N. Hallanger.....	505,463	Sept. 26	1896	488	64	1667
Stove.....	J. Lamb.....	495,555	Apr. 18	1661	419	63	345
Stove.....	M. L. Larson.....	505,772	Sept. 26	2461	620	64	1772
Stove.....	C. H. Melvin.....	493,594	Mar. 14	1318	337	62	1631
Stove.....	A. B. Shaw.....	507,937	Oct. 31	3642	900	65	735
Stove.....	R. M. Smith and C. B. Rose.....	511,222	Dec. 19	2378	580	65	1880
Stove.....	H. Tilden.....	498,826	June 6	130	32	63	1415
Stove.....	H. C. Willings.....	511,483	Dec. 26	2837	686	65	1976
Stove. Air-heating.....	L. P. Converse.....	498,460	May 30	3349	834	63	1281
Stove. Alcohol.....	J. Heller.....	509,765	July 4	373	96	64	69
Stove and attachment therefor. Lamp.....	F. Higbie.....	495,802	Apr. 18	2057	520	63	413
Stove and burner. Oil.....	F. L. McGahan.....	501,357	July 11	1323	331 332	64	254
Stove attachment.....	L. E. Love.....	504,356	Sept. 5	63	17	64	1283
Stove attachment. Cooking.....	R. W. Nye.....	501,574	July 18	1653	413	64	334
Stove-back.....	F. O. Farwell.....	501,412	July 11	1415	354	64	272
Stove-base.....	T. J. W. Robertson.....	506,547	Oct. 10	1298	324	65	260
Stove. Base-heating.....	R. L. Ball.....	489,843	Jan. 10	1314	343	62	288
Stove-board.....	R. J. Hawes.....	495,133	Apr. 11	986	247	63	201
Stove-board.....	J. L. Schultz and A. C. Westlake.....	494,968	Apr. 4	690	177	63	132
Stove burner. Gas.....	L. Stockstrom.....	508,354	Nov. 7	609	149	65	871
Stove burner. Gas.....	A. Weiskittel.....	499,069	June 6	563	134	63	1489
Stove burner. Oil.....	E. M. Wright.....	493,743	Mar. 21	1575	400 401	62	1697
Stove. Camp.....	G. W. Mings.....	506,058	Oct. 3	399	104 105	65	78
Stove-caster.....	J. H. Hall.....	502,189	July 25	2644	667	64	528
Stove-caster.....	A. H. Seyller.....	497,557	May 16	1897	478	63	991
Stove-caster. Adjustable.....	Z. D. Morrow.....	499,561	June 13	1377	328	63	1645
Stove. Combined heating and cooking.....	W. Dengel.....	495,027	Apr. 11	780	199	63	165
Stove. Cooking.....	G. F. Filley.....	497,270	May 9	1403	355	63	889
Stove. Cooking.....	T. Fuller.....	500,569	July 4	50	15	64	11
Stove. Cooking.....	J. M. Kelly.....	510,797	Dec. 12	1622	403 404	65	1728
Stove. Cooking.....	A. Loewenthal.....	499,128	June 6	651	156	63	1504
Stove. Cooking.....	S. M. Stevens.....	494,350	Mar. 28	2576	649	62	1900
Stove-duffs. Method of and apparatus for producing.....	J. F. Essler and H. K. Berkheimer.....	508,002	Nov. 7	35	11	65	765
Stove. Fireplace.....	T. I. Rankin.....	508,341	Nov. 7	584	143 144	65	866

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Stove fire-pot and stoker	D. Brazier	491,333	Feb. 7	451	116	62	834
Stove. Folding camp	J. H. Glasmann	497,275	May 9	1408	357	63	889
Stove for heating and lighting purposes	J. F. Myers. (Reissue)	11,383	Nov. 7	685	{ 167 168 }	65	885
Stove for smoothing-irons. Gas heating	H. Strassner	493,532	Mar. 14	1207	309	62	1604
Stove, furnace, or range grate	C. F. Hutchinson	509,224	Nov. 21	2056	496	65	1176
Stove. Gas.	H. Clayton	492,712	Feb. 28	2632	652	62	1322
Stove. Gas.	J. B. Foley	507,652	Oct. 31	3190	781	65	650
Stove. Gas.	J. Gorton	506,174	Oct. 3	609	156	65	118
Stove. Gas.	T. Hipwell	510,136	Dec. 5	495	113	65	1503
Stove. Gas.	A. A. Phillips and R. A. Wallace	509,583	Nov. 28	2696	652	65	1309
Stove. Gas.	A. Weiskittel	499,623	June 13	1474	354	63	1662
Stove. Gasoline.	C. A. Frayer	499,220	June 13	795	188	63	1543
Stove. Gasoline or vapor.	H. Ruppel	495,063	Apr. 11	834	212	63	174
Stove. Gasoline or vapor.	H. Ruppel	500,747	July 4	343	90, 91	64	64
Stove-grate	C. T. Bastand	496,291	Apr. 25	2799	700	63	567
Stove-grate	F. Will	508,458	Nov. 14	778	191	65	917
Stove. Heating.	J. E. Hunter	499,023	June 6	496	116	63	1477
Stove. Heating.	C. A. C. Koretke	490,478	Jan. 24	2385	617	62	526
Stove. Heating.	I. Lissner	495,349	Apr. 11	1326	332	63	264
Stove. Heating.	D. O. McManis	496,790	May 2	636	170	63	732
Stove. Heating.	W. N. Moore	499,306	June 13	924	{ 223 224 }	63	1565
Stove. Heating.	A. Müller	508,962	Nov. 21	1610	396	65	1091
Stove. Heating.	J. Wilson	508,794	Nov. 14	1301	324	65	1019
Stove-hood	T. A. Call and R. A. Clark	500,259	June 27	2526	618	63	1871
Stove-hood	T. A. Call and R. A. Clark	506,205	Oct. 10	696	176	65	143
Stove-hood	J. Canavan	499,210	June 13	781	186	63	1540
Stove. Hot-blast	G. W. McClure and C. Amsler	496,092	Apr. 25	2504	{ 631 632 }	63	512
Stove. Hot-blast	G. W. McClure and C. Amsler	509,547	Nov. 28	2636	637	65	1297
Stove. Hot-blast	F. C. Roberts	511,253	Dec. 19	2426	591	65	1888
Stove-knob	H. A. Matthews	491,292	Feb. 7	388	99	62	821
Stove. Lamp.	T. Hipwell	506,432	Oct. 10	1111	275	65	224
Stove-lid lifter and kettle holder and drainer	J. H. Gmelin	506,173	Oct. 3	608	155	65	118
Stove-lining	C. Light	494,578	Apr. 4	79	19	63	17
Stove. Oil.	A. Q. Allis	489,138	Jan. 3	236	65	62	54
Stove. Oil.	L. F. Betts	497,760	May 23	2227	557	63	1067
Stove. Oil.	I. Block	500,735	July 4	327	87	64	61
Stove. Oil.	C. H. Boeck	500,367	June 27	2704	664	63	1903
Stove. Oil.	C. H. Boeck	510,236	Dec. 5	667	{ 158 159 }	65	1536
Stove. Oil.	J. De Mooy, Jr., and W. H. Clemes	511,737	Dec. 26	3238	795	65	2050
Stove. Oil.	E. A. Edwards	492,718	Feb. 28	2640	654	62	1324
Stove. Oil.	J. D. Foster and C. A. Hammel	505,244	Sept. 19	1533	400	64	1585
Stove. Oil.	J. D. Foster and C. A. Hammel	505,245	Sept. 19	1534	400	64	1585
Stove. Oil.	J. Goldstein	497,276	May 9	1410	357	63	890
Stove. Oil.	A. R. Welch	509,189	Nov. 21	1984	482	65	1163
Stove. Oil.	A. C. West	506,143	Oct. 3	540	140	65	105
Stove. Oil.	L. F. Wilder	493,740	Mar. 21	1571	399	62	1696
Stove. Oil.	W. H. Wilder. (Reissue)	11,337	May 16	2216	555	63	1050
Stove. Oil heating.	C. Brandt	500,751	July 4	348	94	64	68
Stove. Oil heating.	J. D. Goldstein	504,020	Aug. 29	2929	734	64	1166
Stove. Oil or kerosene	J. D. Goldstein	490,196	Jan. 17	1919	499	62	422
Stove or furnace.	E. Fales	505,448	Sept. 26	1875	482	64	1662
Stove or furnace.	E. Fales	505,449	Sept. 26	1876	483	64	1662
Stove or furnace.	E. Fales	505,453	Sept. 26	1881	484	64	1663
Stove or furnace.	H. C. Hornish	508,474	Nov. 14	807	200	65	922
Stove or furnace.	H. C. Hornish	508,475	Nov. 14	810	201	65	923
Stove or furnace.	W. Krueger	507,017	Oct. 17	2056	508	65	415
Stove or heater.	J. W. Hilton	494,809	Apr. 4	439	114	63	88
Stove or heater.	J. W. Hilton	501,143	July 11	977	249	64	192
Stove or range	F. A. Magee	510,692	Dec. 12	1447	357	65	1695
Stove or range. Cooking	G. F. Filley	497,272	May 9	1406	356	63	889
Stove or range. Cooking	F. A. Magee	494,720	Apr. 4	303	76, 77	63	61
Stove or range grate	C. H. Resor	507,284	Oct. 24	2540	625	65	513
Stove or range name-plate attachment	G. G. Wolfe	509,964	Nov. 21	1759	434	65	1119
Stove-ovens. Adjustable grate for	W. L. Hinds	504,836	Sept. 12	878	226	64	1450
Stovepipe	O. S. Garretson and W. S. Shippe	490,649	Jan. 31	2678	{ 689 690 }	62	599
Stovepipe	W. E. Smith	498,316	May 30	3120	778	63	1239
Stovepipe airing and drying rack	E. Batters and M. Duggan	499,089	June 6	594	142	63	1494
Stovepipe and collar holder. Combined.	I. C. N. Sweet	490,233	Jan. 17	1979	519	62	435
Stovepipe and thimble fastener	W. H. Scott and G. W. Wisner	504,369	Sept. 5	91	23	64	1288
Stovepipe attachment	G. C. Allen	507,094	Oct. 24	2189	{ 541 542 }	65	450
Stovepipe attachment	L. E. Baldwin	502,269	Aug. 1	6	2	64	568
Stovepipe attachment	G. G. Calderwood	503,760	Aug. 22	2530	629	64	1073
Stovepipe attachment	F. Schmidt	498,310	May 30	3110	775	63	1237
Stovepipe-elbows. Machine for making	A. N. Fairman	496,354	Apr. 25	2920	{ 729 730 }	63	590
Stovepipe-fastener	A. P. Fedewa	508,874	Nov. 14	1433	355	65	1043
Stovepipe-fastener	E. W. Mohroff	500,667	July 4	224	58	64	43
Stovepipe-fastener	J. E. Niles	491,949	Feb. 14	1427	356	62	1049
Stovepipe-hanger	W. H. Trepus	502,150	July 25	2583	649	64	516
Stovepipe-joint	L. S. Bonbrake	489,521	Jan. 10	850	221	62	193
Stovepipe-rack	J. S. Jensen and E. Hayes	490,076	Jan. 17	1723	449	62	384
Stovepipe-rack	P. K. Peterson	503,216	Aug. 15	1643	403	64	896
Stovepipe-shelf	C. N. Johnson	497,125	May 9	1184	303	63	850
Stovepipe-shield for tents	W. C. Brown	511,502	Dec. 26	2864	{ 693 694 }	65	1981
Stovepipe-thimble	L. M. Keach and J. C. Nelson	507,657	Oct. 31	3199	783	65	652
Stovepipe-thimble	D. Myers	494,342	Mar. 28	2565	646	62	1898
Stovepipe-thimble	E. F. Neumann	493,641	Mar. 21	1401	355	62	1663

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Stove-polish.....	J. G. Pohlé.....	501,254	July 11	1150	.....	64	224
Stove-polish.....	J. G. Pohlé.....	501,845	July 18	2085	.....	64	408
Stove. Portable.....	A. G. Schmidt.....	499,892	June 20	1925	467	63	1754
Stove. Portable oil.....	F. L. McGahan.....	505,631	Sept. 26	2224	563 564	64	1728
Stove-protector.....	J. F. Bliven.....	504,319	Sept. 5	10	4	64	1273
Stove. Railway-car.....	M. E. Cook.....	495,880	Apr. 18	2183	548	63	435
Stove-reservoir.....	F. S. Lang.....	499,299	June 13	916	222	63	1564
Stove. Sheet-metal.....	C. T. McCarroll.....	496,947	May 9	911	238	63	802
Stove sifting attachment.....	A. E. Trentowsky.....	501,748	July 18	1941	480	64	383
Stove. Slow-combustion.....	H. Serebriakoff.....	510,714	Dec. 12	1484	367	65	1702
Stove. Straw-burning.....	D. A. Robinson and D. R. Hoopes.....	499,330	June 13	967	233	63	1572
Stove. Straw-burning.....	A. L. Thompson.....	497,840	May 23	2342	587	63	1087
Stove. Tailor's.....	A. Lundström.....	497,099	May 9	1032	263	63	822
Stove utensils. Rack for hanging.....	O. Weaver.....	491,502	Feb. 7	718	181	62	887
Stove. Vapor.....	J. E. Donovan.....	489,375	Jan. 3	597	161	62	129
Stove. Vapor.....	C. M. Hollingsworth.....	489,477	Jan. 10	768	203	62	177
Stove. Vapor.....	C. M. Hollingsworth.....	490,655	Jan. 31	2691	693	62	601
Stove. Vapor.....	C. M. Hollingsworth.....	490,656	Jan. 31	2692	693	62	602
Stove. Vapor.....	C. W. Romoser.....	490,085	Jan. 17	1737	452	62	387
Stove. Vapor-burning.....	W. H. Thayer.....	505,643	Sept. 26	2248	569 570	64	1733
Stove ventilating-ring. Heating.....	C. L. Featherston.....	506,310	Oct. 10	881	217	65	179
Stoves. Chill-core for molding sockets for.....	O. Daman.....	493,911	Mar. 21	1838	468	62	1747
Stoves, chimneys, &c. Air-tight door for.....	J. Bahlsen.....	506,387	Oct. 10	1026	255 256	65	207
Stoves. Combined wick-tube and burner-plate for oil.....	W. H. Clemes.....	495,022	Apr. 11	774	196	63	164
Stoves. Deflector for heating.....	C. A. Richardson.....	509,948	Dec. 5	167	39	65	1441
Stoves. Extension-magazine for.....	D. Van Evera and S. Brand.....	497,559	May 16	1899	478	63	991
Stoves. Gas heating attachment for solid-fuel.....	G. W. Graves.....	495,169	Apr. 11	1050	261	63	212
Stoves, &c. Grate for.....	H. Graef.....	503,699	Aug. 22	2430	604	64	1053
Stoves. Heating attachment for cook.....	D. F. Galer.....	501,499	July 18	1536	387	64	311
Stoves. Ignition-charger for gasoline.....	L. C. Thorne.....	496,372	Apr. 25	2956	738	63	598
Stoves or furnaces. Air-pump attachment for.....	G. S. Boyler and F. Rothwell.....	493,967	Mar. 21	1944	495	62	1766
Stoves or furnaces. Air-supplying device for.....	C. J. Kille.....	495,740	Apr. 18	1963	495	63	396
Stoves or ranges. Air-heating device for.....	F. L. Sheppard.....	494,388	Mar. 28	2645	662 663	62	1912
Stoves or ranges. Movable hood for.....	B. F. Carpenter.....	503,343	Aug. 15	1851	458 459	64	932
Stoves or soldering apparatus. Burner for cooking.....	J. V. Svenson.....	500,781	July 4	396	104	64	74
Stoves, &c. Oven-door for.....	J. E. Yeager.....	509,012	Nov. 21	1687	416	65	1106
Stoves, ranges, &c. Grate for.....	J. Tettelbach.....	498,326	May 30	3136	782	63	1242
Stoves, ranges, &c. Oven-door for cooking.....	E. A. Mason.....	501,571	July 18	1646	412	64	332
Stoves. Tank for gasoline or vapor.....	H. Ruppel.....	497,896	May 23	2441	609 610	63	1105
Straightening-machine.....	H. B. A. Keiser.....	489,816	Jan. 10	1272	333	62	279
Strainer.....	W. L. Leggett.....	508,175	Nov. 7	319	79	65	817
Strainer.....	C. L. Wagandt.....	494,355	Mar. 28	2592	651	62	1903
Strainer and elevator. Sugar-cane-juice.....	J. C. Riley.....	492,235	Feb. 21	1873	468	62	1155
Strainer and sieve.....	C. R. Goringe.....	490,786	Jan. 31	2902	745	62	642
Strainer. Coffee.....	R. N. Harris.....	492,981	Mar. 7	330	83	62	1424
Strainer for oil or similar presses.....	M. P. A. Tollin.....	510,732	Dec. 12	1510	373	65	1707
Strainer for rain-water pipes.....	C. H. Dodge.....	504,384	Sept. 5	113	29	64	1291
Strainer or grate for basin-outlets, &c.....	J. Clifford.....	506,668	Oct. 17	1481	372	65	308
Strainer. Pump-spout.....	B. H. Messler.....	504,438	Sept. 5	206	53	64	1309
Strainer. Tea.....	E. Dillingham.....	489,468	Jan. 10	759	201	62	175
Straining soup, &c. Machine for.....	A. J. Stearnes.....	506,746	Oct. 17	1615	406	65	332
Strap.....							
See Breast-strap. Interfering-strap.							
Car hand-strap. Trousers-strap.							
Carrying-strap. Trunk-strap.							
Hitching-strap. Wagon-box strap.							
Horse-blanket strap.							
Strap.....	N. Nilsson.....	494,019	Mar. 21	2032	518	62	1784
Strap-loop.....	E. G. Latta.....	505,710	Sept. 26	2363	597	64	1753
Strap or rope attachment.....	E. R. Robbins and L. L. Walrath.....	503,497	Aug. 15	2083	520	64	974
Strawboard-lining machine.....	M. F. Wilson.....	499,274	June 13	868	210 211	63	1555
Straw-carrier.....	H. and G. Ghère.....	504,212	Aug. 29	3245	809	64	1225
Straw-carrier.....	W. E. White.....	489,425	Jan. 3	676	182	62	145
Straw-carrier chute. Folding.....	A. B., J. N. D., and M. T. Reeves.....	498,028	May 23	2646	661	63	1140
Straw-cutter.....	G. W. Ross.....	490,989	Jan. 31	3233	826	62	707
Straw-cutting machine.....	W. Roecker.....	491,745	Feb. 14	1107	280	62	986
Straw or hay hook.....	K. S. Hawk.....	498,391	May 30	3238	805	63	1260
Straw-stacker.....	S. Bufkin and C. Snyder.....	501,242	July 11	1126	286 287	64	220
Straw-stacker.....	J. Galland.....	499,381	June 13	1063	258 259	63	1591
Straw-stacker.....	M. and C. Heineke.....	501,939	July 25	2251	562	64	453
Straw-stacker.....	J. W. Nethery.....	493,734	Mar. 21	1556	397	62	1693
Straw-stacker.....	A. H. Seebeck.....	492,113	Feb. 21	1674	417	62	1113
Straw-stacker.....	J. H. Siernan.....	509,454	Nov. 28	2482	599 600	65	1268
Straw-stacker.....	J. P. Wheeler.....	497,149	May 9	1216	310	63	855
Straw-stacker attachment.....	G. Boettler.....	496,771	May 2	599	160	63	736
Straw-stacker. Automatic swinging.....	P. Müller.....	509,386	Nov. 28	2336	565 566 432 433	65	1240
Street-cleaning machine.....	H. B. Blanche.....	506,809	Oct. 17	1719	432	65	352
Street-cleaning machines. Gas-heated rotary brush for.....	R. A. Healy and E. D. Cundell.....	506,501	Oct. 10	1231	306	65	247
Street or station indicators. Operating.....	R. B. Ayres.....	498,607	May 30	3587	889	63	1323
Street-roller.....	C. K. Pickles.....	505,800	Sept. 26	2503	632	64	1780
Street-roller.....	R. C. Pope.....	496,794	May 2	642	171	63	733

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Street-roller.....	R. C. Pope. (Reissue)	11,347	June 27	2971	729	63	1951
Street-sprinkler.....	C. A. Clark	500,853	July 4	507	132	64	93
Street-sprinkler.....	G. Langer	497,074	May 9	1101	283	63	835
Street-sprinkler.....	G. Langer	503,093	Aug. 8	1425	351 352	64	842
Street-sweeper.....	T. W. Downs.....	506,423	Oct. 10	1094	271 272	65	221
Street-sweeper.....	T. W. Downs.....	507,354	Oct. 24	2664	655	65	538
Street-sweeper.....	J. Edson.....	490,188	Jan. 17	1904	495 496	62	420
Street-sweeper.....	E. C. Fisher	503,928	Aug. 22	2764	692	64	1119
Street-sweeper.....	E. C. Fisher	509,303	Nov. 21	2183	525	65	1200
Street-sweeper.....	J. R. Gallagher.....	505,455	Sept. 26	1883	485 486	64	1664
Street-sweeper.....	W. Y. Gambee	509,597	Nov. 28	2714	656 657	65	1313
Street-sweeper.....	C. Gurney	507,361	Oct. 24	2674	657 658	65	540
Street-sweeper.....	H. E. Hawk and O. W. Johnson	491,555	Feb. 14	813	205 206	62	926
Street-sweeper.....	B. M. Johnson.....	501,515	July 18	1564	393 394	64	315
Street-sweeper.....	B. Kraph	506,701	Oct. 17	1535	384	65	317
Street-sweeper.....	H. S. Moody and F. R. Smith	507,628	Oct. 31	3142	768	65	641
Street-sweeper.....	T. C. Myers	501,352	July 11	1316	329	64	253
Street-sweeper.....	T. C. Myers	501,353	July 11	1316	329	64	253
Street-sweeper.....	C. Z. O'Neill.....	507,719	Oct. 31	3226	804	65	669
Street-sweeper.....	A. P. Palmer and H. L. Phelps.....	511,543	Dec. 26	2927	712 713	65	1994
Street-sweeper.....	P. Reardon	492,487	Feb. 28	2280	567	62	1249
Street-sweeper.....	J. C. Slawson.....	505,796	Sept. 26	2495	630	64	1778
Street-sweeper.....	F. C. Williams.....	4-2,489	Feb. 28	2284	568	62	1250
Street-sweeper and loader.....	E. Wallace	494,660	Apr. 4	208	52, 53	63	43
Street-sweeper brush.....	J. Jones and A. Gillies.....	500,906	July 4	583	152	64	107
Street-sweeping machine.....	A. Bertram	491,278	Feb. 7	343	67	62	814
Street-sweeping machine.....	T. J. McArthur	498,402	May 30	3252	810	63	1263
Stratcher-key.....	R. H. Graves	496,223	Apr. 25	2696	676	63	547
Striking and strength-testing machine. Con- trolled.....	G. Troxler, Jr.....	495,571	Apr. 18	1687	425 426	63	350
Striking-bag drum.....	F. Medart	489,750	Jan. 10	1181	309	62	260
String instrument.....	E. Böcker	511,009	Dec. 19	2038	503	65	1814
Stringer-plate.....	E. Samuel	504,176	Aug. 29	3184	795	64	1214
Stringing-machine.....	A. C. North.....	489,982	Jan. 17	1560	408 409 410	62	351
Structural iron form.....	T. S. White	496,463	May 2	118	32	63	640
Structural iron form.....	T. S. White	496,464	May 2	119	32	63	640
Structural iron form.....	T. S. White	496,465	May 2	120	32	63	640
Structural iron form.....	T. S. White	496,466	May 2	121	33	62	641
Structural shape.....	E. M. Butz	499,652	June 13	1516	364	63	1669
Structure. Separable skeleton.....	H. P. de Lastelle	491,288	Feb. 7	365	91, 92	62	818
Stud. Glove-fastener.....	A. G. Mead	490,411	Jan. 24	2278	591	62	506
Stud hopper and delivery mechanism.....	C. E. Van Norman.....	502,895	Aug. 8	1106	272	64	785
Stud-spirals. Machine for bending.....	A. Muehlmann.....	497,809	May 23	2289	575	63	1078
Studs. Manufacture of lacing.....	S. N. Smith	498,315	May 30	3120	778	63	1239
Stuffing-box.....	G. H. Hitchcock.....	501,344	July 11	1303	325	64	250
Stuffing-box.....	E. Rhodes	505,369	Sept. 19	1739	450	64	1623
Stuffing-box for meters.....	J. Thomson.....	503,884	Aug. 22	2693	675	64	1105
Stuffing-machine.....	J. Fatka	503,952	Aug. 29	2822	705	64	1146
Stump-extractor.....	J. Abbee	498,150	May 23	2821	706	63	1172
Stump-extractor.....	C. N. Blood	508,401	Nov. 14	702	172	65	902
Stump-extractor.....	P. Hansen	507,121	Oct. 24	2239	553	65	460
Stump-extractor.....	B. Mattress	493,593	Mar. 14	1317	337	62	1631
Stump-extractor.....	W. E. McCall	495,161	Apr. 11	1034	257	63	210
Stump-puller.....	S. C. Rupe	507,935	Oct. 31	3640	900	65	734
Stump-puller.....	T. A. Terrell.....	498,090	May 23	2736	684	63	1157
Submarine boat.....	J. R. Haydon	493,266	Mar. 14	773	197 198	62	1527
Sucker-rod clamp or wrench.....	C. S. Ahner.....	492,380	Feb. 28	2097	523	62	1213
Sucker-rod elevator.....	F. E. Boylan.....	502,169	July 25	2615	659	64	522
Sucker-rod elevator.....	W. H. Downing.....	506,584	Oct. 10	1352	339	65	271
Sucker-rod elevator.....	W. H. Hay	509,433	Nov. 28	2443	588	65	1261
Sucker-rod elevator.....	H. Knox	502,974	Aug. 8	1254	307	64	810
Sucker-rod socket and elevator.....	L. R. Hitchcock.....	511,525	Dec. 26	2896	705	65	1988
Sugar by synthesis. Manufacture of crystallizable.....	J. E. Pellegrini.....	508,747	Nov. 14	1233	307	65	1006
Sugar in molds. Apparatus for refining.....	O. Mengelbier	505,118	Sept. 19	1342	346	64	1551
Sugar. Making invert.....	A. Wohl and A. Kollrepp.....	498,000	May 23	2602	63	1133	
Sugar. Obtaining.....	C. Steffen	489,879	Jan. 10	1357	354	62	297
Sugar. Refining.....	G. Engel	501,878	July 18	2142	531 532	64	418
Sugar. Refining.....	E. Langen	495,614	Apr. 18	1759	531	63	361
Sugar-refining apparatus.....	L. E. A. Prangey.....	502,014	July 25	2356	592 593	64	473
Sugar-refining apparatus.....	L. E. A. Prangey.....	502,015	July 25	2361	593	64	474
Sugar-wagon.....	G. Van Wagenen.....	493,799	Mar. 21	1669	425	62	1715
Sugar-wagon.....	G. Van Wagenen.....	493,950	Mar. 21	1905	485 486	62	1760
Sugar-wagons. Machine for dumping.....	G. Van Wagenen.....	499,265	June 13	854	204 205	63	1552
Sugar-washer regulating device.....	R. P. Johnson.....	511,204	Dec. 19	2349	574	65	1874
Sulky.....	W. S. Bull	495,015	Apr. 11	761	194	63	161
Sulky.....	C. S. Caffrey.....	506,414	Oct. 10	1078	268	65	218
Sulky.....	S. Elliott	494,113	Mar. 21	2190	560	62	1814
Sulky.....	S. Elliott	498,709	May 30	3783	933	63	1355

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Sulky	J. P. Faber	510,248	Dec. 5	682	163	65	1539
Sulky	T. Freeman	502,093	July 25	2490	626	64	429
Sulky	W. A. Galbraith	508,415	Nov. 14	718	177	65	805
Sulky	H. H. Garrard	493,582	Mar. 14	1300	332	62	1628
Sulky	W. J. Hamill	503,137	Aug. 15	1510	371	64	871
Sulky	J. W. Holliday	492,725	Feb. 28	2652	657	62	1326
Sulky	D. W. Locke	503,428	Aug. 15	1974	490	64	954
Sulky	M. McCormick	504,048	Aug. 29	2973	743	64	1174
Sulky	T. J. McMurray	497,596	May 16	1958	490	63	1001
Sulky	S. Nickel	511,092	Dec. 19	2164	533	65	1840
Sulky	C. H. Palmer, Jr.	501,656	July 18	1790	445 446	64	357
Sulky	M. Payne	507,839	Oct. 31	3491	858	65	706
Sulky	M. Payne	508,336	Nov. 7	579	142	65	865
Sulky	J. F. Pray	491,591	Feb. 14	874	220	62	938
Sulky	W. H. Richter	497,501	May 16	1819	458	63	977
Sulky	S. Toomey	499,860	June 20	1869	454	63	1744
Sulky	J. V. Upington	497,224	May 9	1324	337	63	876
Sulky	A. V. Whiteman	496,627	May 2	370	101	63	687
Sulky attachment. Trotting	F. Lohr	493,630	Mar. 21	1385	351	62	1659
Sulky foot-rest	C. A. Russell	494,648	Apr. 4	190	48	63	39
Sulky. Racing	T. Harrington	498,790	June 6	60	14	63	1399
Sulky. Racing	T. Harrington	508,707	Nov. 14	1179	291	65	995
Sulky. Track	H. A. and T. W. McIntosh	502,984	Aug. 8	1269	310	64	813
Sulky. Trotting	M. Payne	506,186	Oct. 3	635	162	65	123
Sulky. Trotting	S. Rowe	497,694	May 23	2437	607	63	1105
Sulky wheel-carrying frame	W. H. Shortsleeve	490,929	Jan. 31	3131	803	62	658
Sulphides. Treating mixtures containing	C. F. Dewey	490,068	Jan. 17	1710	.....	62	381
Sulphur-bearing ores. Roasting	E. W. Stickney	493,193	Mar. 7	652	.....	62	1486
Sulphur candle	C. H. Shaw	501,471	July 11	1491	375	64	287
Sulphur candle or fumigator	R. W. Johnson	499,324	June 13	955	230	63	1571
Sulphur candle or fumigator	R. W. Johnson	499,325	June 13	957	231	63	1571
Sulphur compound	A. Spiegel	495,124	Apr. 11	973	.....	63	199
Sulphur compound of hydrocarbon	E. Jacobsen	495,343	Apr. 11	1319	.....	63	262
Sunshade. Carriage	H. F. Douglass and A. G. Stouder	494,369	Mar. 28	2610	655	62	1906
Sunshade for bicycles or other vehicles	G. H. Hill	494,333	Mar. 28	2551	643	62	1895
Superheater	C. N. Scheetz and J. Ringle	500,514	June 27	2926	718	63	1943
Superphosphates from kettle-residue. Manufacture of	L. Rissmüller and H. Vollbrecht	494,939	Apr. 4	646	.....	63	125
Superphosphates. Manufacture of	L. Rissmüller and H. Vollbrecht	494,940	Apr. 4	647	.....	63	125
Supply and waste pipe	W. A. Eberhart	500,871	July 4	535	138 139	64	97
Support for moving bodies	W. J. Lane	501,949	July 25	2261	565	64	456
Supporter:							
See Garment-supporter. Skirt-supporter.							
Supporting-bracket	S. R. Scottron	505,008	Sept. 12	1154	296	64	1502
Suppositories. Machine for making	C. W. Fox	509,154	Nov. 21	1924	470	65	1151
Surface-gage	B. P. Fortin	508,213	Nov. 7	386	94	65	830
Surface-gage	A. J. Gardiner, Jr.	497,071	May 9	1097	282	63	834
Surface-gage	G. H. Nutt	491,926	Feb. 14	1392	347	62	1042
Surface-gage	P. A. Renko	495,565	Apr. 18	1675	422	63	347
Surgeon's ligature-receptacle	J. E. Lee	490,207	Jan. 17	1944	510	62	427
(Surgical.) Apparatus for curing spinal curvature	G. Gerlitz	492,903	Mar. 7	208	51, 52	62	1400
(Surgical.) Apparatus for treating diseases	E. J. Godman	499,785	June 20	1738	420	63	1721
(Surgical.) Apparatus for treating diseases	E. J. Godman	499,786	June 20	1740	420	63	1721
Surgical appliance	F. Orth	494,436	Mar. 28	2712	680	62	1924
Surgical appliance	F. Orth	494,437	Mar. 28	2713	680	62	1925
(Surgical.) Appliance for spinal complaints	P. B. Shelden	507,172	Oct. 24	2345	.....	65	479
(Surgical.) Appliance for treating diseases of the ear	C. M. Jordan	494,958	Apr. 4	675	174	63	129
Surgical apron	J. H. Morrison	489,132	Jan. 3	229	61	62	53
Surgical catheter	O. de Pezzar	504,424	Sept. 5	186	48	64	1305
Surgical-dressing sterilizer	E. Boeckmann	510,321	Dec. 5	795	192	65	1561
Surgical instrument	A. C. Kellogg	509,226	Nov. 21	2057	496	65	1176
Surgical instrument	F. C. Thompson	496,711	May 2	504	134	63	711
Surgical instrument to cure gapes in fowls	R. B. Donaldson	506,676	Oct. 17	1492	375	65	310
Surgical irrigating-basin	J. H. Morrison	493,280	Mar. 14	806	207	62	1533
Surgical lamp	W. G. Morgan	501,524	July 18	1577	397	64	318
Surgical-ligature receptacle	J. E. Lee	491,315	Feb. 7	422	110	62	827
Surgical-needle holder	J. L. Hanchett	508,939	Nov. 21	1576	386	65	1083
Surgical splint	R. Hoppe	504,218	Aug. 29	3253	812	64	1227
Surgical sutures. Preparing	L. S. Weaver	505,148	Sept. 19	1387	355	64	1558
Surveying-instrument	J. Henderson	510,339	Dec. 5	817	198	65	1565
Suspended chair	M. A. Hart	491,172	Feb. 7	184	47	62	783
Suspender attachment	G. L. Heuler	504,217	Aug. 29	3252	811	64	1226
Suspender cast-off	A. A. MacDonald	502,674	Aug. 1	728	174	64	700
Suspender-end	G. W. Baldwin	489,727	Jan. 10	1137	294	62	251
Suspender-end	W. Bloomberg	504,661	Sept. 5	555	141	64	1375
Suspender-end	J. M. Faust	500,324	June 27	2641	646	63	1292
Suspender-end	S. Froehlich	509,306	Nov. 21	2187	526	65	1201
Suspender-end	E. Gutmann	501,272	July 11	1173	298	64	228
Suspender-end	B. Petchaft	496,095	Apr. 25	2508	633	63	513
Suspender-end cast-off	G. E. Adams	489,445	Jan. 10	717	193	62	167
Suspender-end cast-off	G. E. Adams	489,596	Jan. 10	954	248	62	213
Suspender-end cast-off	G. E. Adams	490,058	Jan. 17	1695	441	62	377
Suspender-end cast-off	G. E. Adams	492,131	Feb. 21	1701	423	62	1119
Suspender fastening device	J. F. Molloy	492,222	Feb. 21	1855	464	62	1151
Suspender-shackle	J. F. Webster	489,443	Jan. 3	710	190	62	152
Suspenders	A. F. R. Arndt	500,524	June 27	2941	722	63	1946
Suspenders	J. H. Bley	502,111	July 25	2520	632	64	503
Suspenders	M. Feldman	483,990	Mar. 21	1984	506	62	1774
Suspenders	C. W. Post	508,048	Nov. 7	101	29	65	777
Suspenders	G. M. Schamba	491,191	Feb. 7	214	54	62	788
Suspenders	J. C. Vollmar	502,792	Aug. 8	939	228	64	753
Suspenders	S. H. Voorhees	511,003	Dec. 19	2028	501	65	1812

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Suspending device	M. M. Wood	493,459	Mar. 14	1086	{ 278 279 }	62	1586
Suspension device	W. C. Homan	509,621	Nov. 28	2753	664	65	1320
Suspension device	W. C. Jennings	489,638	Jan. 10	1006	262	62	224
Suspension-hook	C. H. Thurston	490,996	Jan. 31	3240	827	62	708
Suspensory	T. W. Heinemann. (Reissue)	11,369	Oct. 3	679	171	65	128
Suspensory appliance	S. L. Polock	496,747	May 2	568	152	63	721
Swaging machine. Needle-blank	I. T. Smith	492,589	Feb. 28	2437	{ 606 607 }	62	1284
Swaging machine. Rod	W. H. Dayton	492,574	Feb. 28	2415	602	62	1279
Swaging machine. Wire	W. H. Dayton	492,572	Feb. 28	2413	601	62	1279
Swaging machine. Wire	W. H. Dayton	492,573	Feb. 28	2414	602	62	1279
Swaging rods, &c. Machine for	W. H. Dayton	492,575	Feb. 28	2416	{ 602 603 }	62	1280
Swaging wire, &c. Machine for	W. H. Dayton	492,576	Feb. 28	2419	603	62	1281
Swath-turner	E. C. Blackstone	501,131	July 11	959	245	64	189
Sweater	S. P. Curtis	501,244	July 11	1131	257	64	221
Sweep-mill	J. F. Winchell	509,417	Nov. 28	2401	581	65	1251
Sweeper	W. H. Goldsmith	501,247	July 11	1136	288	64	222
Sweets. Apparatus for manufacturing	P. Lindemann	508,955	Nov. 21	1602	393	65	1088
Swift	J. P. Cronin	497,016	May 9	1014	260	63	819
Swimming apparatus	W. Adelmann	496,105	Apr. 25	2521	637	63	515
Swing	J. J. Brydson and J. A. Greathouse	502,610	Aug. 1	606	144	64	677
Swing	J. W. Shipman	491,379	Feb. 7	532	{ 135 136 }	62	850
Swing	R. A. and G. E. Shorey	501,740	July 18	1932	478	64	382
Swing	W. R. Wilcox	495,923	Apr. 18	2243	565	63	447
Swing	W. R. Wilcox	497,259	May 9	1381	350	63	885
Swing. Double lever	W. R. Wilcox	497,258	May 9	1380	350	63	885
Swing-joint	C. W. Bailey	492,619	Feb. 28	2493	618	62	1294
Swing. Lever	W. R. Wilcox	495,922	Apr. 18	2243	565	63	447
Swinging gate	J. H. Dundas	510,063	Dec. 5	377	83	65	1480
Swinging gate	G. Rohrbach	496,138	Apr. 25	2565	646	63	523
Swinging gate	C. A. Taylor	494,449	Mar. 28	2733	684	62	1928
Swinging gate	G. F. Voight	501,813	July 18	2044	503	61	400
Swinging gate	W. R. White	503,887	Aug. 22	2699	677	64	1106
Swinging gate	J. C. Wilson	502,338	Aug. 1	142	33	64	591
Switch:							
See Automatic switch.	Electric snap-switch.						
Automatic safety-switch.	Electrical switch.						
Car-switch.	Electrical-current switch.						
Circuit-switch.	Elevator-switch.						
Derailing-switch.	Interlocking switch.						
Desk-switch.	Loop-switch.						
Electric switch.	Pole-switch.						
Electric-circuit switch.	Railway-switch.						
Electric-conductor switch.	Railway lock-switch.						
Electric-light switch.	Railway trolley-switch.						
Electric-motor switch.	Safety-switch.						
Electric-motor reversing-switch.	Self-closing and self-locking switch.						
Electric regulating switch.	Spring-jack switch.						
	Spring-tongue switch.						
	Telephone-switch.						
	Time-switch.						
	Tongue-switch.						
	Tramway-switch.						
	Trolley-wire switch.						
Switch	G. Hargreaves	509,896	Dec. 5	84	21	65	1426
Switch	W. H. Robbins	508,840	Nov. 14	1373	339	65	1032
Switch	G. W. Russell, Jr.	499,646	June 13	1505	361	63	1667
Switch	J. W. Tew and J. D. Riggs	502,149	July 25	2581	649	64	515
Switch-actuator	W. F. and W. C. Stedman	503,334	Aug. 15	1839	456	64	930
Switch and safety-fuse	E. P. Morris	490,917	Jan. 31	3116	799	62	685
Switch and signal setting and locking apparatus	J. H. Frischen	497,716	May 16	2144	536	63	1036
Switchboard apparatus. Multiple.	J. J. Carty	505,188	Sept. 9	1447	372	64	1568
Switchboard apparatus. Multiple.	W. M. Goodridge	504,345	Sept. 5	49	14	64	1280
Switchboard apparatus. Multiple.	C. E. Scribner	496,904	May 9	842	224	63	789
Switchboard-circuit and signaling apparatus	F. W. Dunbar and E. S. C. May	509,367	Nov. 28	2300	557	65	1233
Switchboard. Electric	F. W. Mount	504,738	Sept. 12	705	177	64	1416
Switchboard keyboard apparatus. Multiple.	C. E. Scribner	504,249	Aug. 29	3305	826	64	1236
Switchboard. Multiple.	M. G. Kellogg. (Reissue)	11,386	Nov. 14	1509	369	65	1052
Switchboard. Multiple.	M. G. Kellogg. (Reissue)	11,387	Nov. 14	1512	{ 369 370 }	65	1053
Switchboard. Multiple.	M. G. Kellogg. (Reissue)	11,388	Nov. 14	1515	370	65	1054
Switchboard. Power-station	A. L. Rohrer and G. W. Mansfield	508,641	Nov. 14	1083	268	65	977
Switchboard-signal. Electric.	F. W. Dunbar	502,660	Aug. 1	692	166	64	693
Switchboard-signal. Electric.	F. A. Pickernell	503,252	Aug. 15	1694	417	64	905
Switchboard system. Multiple.	C. E. Scribner	496,905	May 9	848	{ 224 225 }	63	790
Switchboard system. Multiple.	C. E. Scribner	503,099	Aug. 8	1434	354	64	844
Switchboard system. Multiple.	C. E. Scribner. (Reissue)	11,306	Feb. 7	735	186	62	890
Switchboard systems. Metallic circuit for multiple.	J. A. Seely	491,252	Feb. 7	305	77, 78	62	807
Switchboard systems. Testing apparatus for multiple.	C. E. Scribner	491,250	Feb. 7	301	77	62	806
Switchboard systems. Testing apparatus for multiple.	C. E. Scribner	496,907	May 9	854	{ 225 226 }	63	792
Switchboard test-circuit. Multiple.	C. E. Scribner	489,100	Jan. 3	183	49, 50	62	43
Switchboard testing apparatus. Multiple.	F. R. McBERTY	509,932	Dec. 5	143	34	65	1436
Switchboard testing apparatus. Multiple.	C. E. Scribner	489,098	Jan. 3	180	49	62	42
Switchboard testing apparatus. Multiple.	C. E. Scribner	489,099	Jan. 3	181	49	62	42
Switchboard testing apparatus. Multiple.	C. E. Scribner	496,906	May 9	851	225	63	791
Switchboard transfer system	C. E. Scribner	502,771	Aug. 8	897	220	64	746
Switchboards. Cabling system for multiple	C. E. Scribner	503,555	Aug. 15	2181	546	64	992

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Switchboards. Lock-switch for electric.....	C. E. Scribner	502,769	Aug. 8	894	219	64	745
Switchboards. System of wiring multiple.....	C. H. Wilson	499,693	June 13	1570	378	63	1678
Switchboards. Test-circuit for multiple.....	C. E. Scribner	502,768	Aug. 8	892	219	64	744
Switchboards. Test-circuit for multiple.....	C. E. Scribner	502,774	Aug. 8	904	221	64	747
Switchboards. Test-signal for multiple.....	C. E. Scribner	502,772	Aug. 8	900	220	64	746
Switchboards. Test system for multiple.....	W. D. Allison	503,115	Aug. 15	1475	363	64	865
Switchboards. Testing apparatus for multiple.....	C. E. Scribner	502,775	Aug. 8	907	221	64	748
Switchboards. Testing system for multiple.....	C. E. Scribner	502,773	Aug. 8	902	221	64	747
Switch clearing, salting, and operating device.....	C. H. Cropsey	507,261	Oct. 24	2499	615	65	506
Switch-closing apparatus.....	J. A. Thatcher	501,382	July 11	1372		64	263
Switch frog. Safety hinge.....	J. E. Dunlevy	507,423	Oct. 24	2772	679	65	559
Switch-lock.....	F. P. Hilburn	499,459	June 13	1209	288	63	1617
Switch-lock. Electrical.....	F. C. Weir and E. W. Harden	494,451	Mar. 28	2736	662	62	1928
Switch movement. Locking.....	J. T. Powers	504,502	Sept. 5	321	82	64	1330
Switch-mover.....	J. Goodfellow	509,370	Nov. 28	2306	558	65	1234
Switch-operating device.....	B. Bartelmes	496,715	May 2	512	136	63	712
Switch-operating device.....	W. Farnowski and F. Guniewicz	506,218	Oct. 10	719	180	65	147
Switch-operating mechanism.....	S. Walker and L. Marshall	509,340	Nov. 21	2249	544	65	1212
Switch-operating mechanisms. Sheave-stand for.....	S. R. and F. A. Wilmot	489,174	Jan. 3	290	80	62	66
Switch-piece and making it.....	A. J. Moxham	500,930	July 4	616	161	64	113
Switch-signal.....	C. A. Herb and H. Meyer	490,387	Jan. 24	2247	584	62	501
Switch-stand.....	F. A. Beeman	491,463	Feb. 7	663	166	62	875
Switch-stand.....	R. H. Canfield	504,964	Sept. 12	1024	277	64	1488
Switch-stand.....	W. C. Meeker	490,576	Jan. 24	2531	652	62	555
Switch-stand.....	M. G. Prutzman	491,812	Feb. 14	1214	304	62	1007
Switch-stand.....	M. G. Prutzman	507,842	Oct. 31	3497	860	65	707
Switch-stand.....	G. Saalmiller	496,066	Apr. 25	2464	622	63	504
Switch-stand.....	W. W. Snow	507,245	Oct. 24	2472	609	65	501
Switch-stand.....	A. A. Strom	498,196	May 23	2911	724	63	1187
Switch-stand.....	R. G. Ward and H. B. Potter	502,154	July 25	2589	651	64	517
Switch stand and lock.....	L. P. Moran, J. O'Brien, and J. Davin	509,754	Nov. 28	2962	716	65	1359
Switches. Device for manipulating.....	D. L. Boland	501,317	July 11	1240	312	64	240
Switching device.....	G. Brewer	508,274	Nov. 7	488	118	65	848
Switching device.....	A. M. Levin	500,335	June 27	2655	650	63	1894
Swivel-bar for temper-screws.....	P. H. Mack	496,315	Apr. 25	2852	711	63	577
Swiveling and clamping joint mechanism. Compound.....	O. C. White	505,584	Sept. 26	2144	543	64	1714
Synchronism. Device for indicating.....	C. F. Scott	508,489	Nov. 14	837	207	65	929
Synchronism-indicator.....	L. Bell	502,695	Aug. 8	763	185	64	721
Synchronous movement. Apparatus for securing.....	R. J. Sheehy	506,271	Oct. 10	820	202	65	167
Syringe.....	G. Bay	498,760	June 6	11	3	63	1390
Syringe.....	C. A. Kenner	493,591	Mar. 14	1313	335	62	1630
Syringe.....	G. S. Oliver	497,250	May 9	1369	347	63	883
Syringe.....	J. M. Wardell	494,048	Mar. 21	2071	529	62	1791
Syringe.....	W. F. Ware	504,764	Sept. 12	749	186	64	1425
Syringe.....	E. G. Wetherbee	507,573	Oct. 31	3048	745	65	623
Syringe case. Hypodermic.....	A. Wolff	506,453	Oct. 10	1146	285	65	232
Syringe case. Hypodermic.....	A. J. Wolff	505,645	Sept. 26	2253	571	64	1734
Syringe-coupling.....	C. E. Longden	506,882	Oct. 17	1845	461	65	374
Syringe. Hypodermic.....	W. H. Brewster	490,242	Jan. 31	2979	764	62	658
Syringe. Hypodermic.....	C. J. Pilling and A. J. McKee	509,676	Nov. 28	2841	686	65	1337
Syringe-tube holder.....	J. C. Parker	489,544	Jan. 10	878	229	62	199
Syringe. Vaginal.....	F. E. Ackley	497,757	May 23	2223	557	63	1067
Syringe. Vaginal.....	A. B. Cruickshank	493,208	Mar. 7	674	172	62	1490
Syringes. Impregnating the water or liquid discharged from.....	S. H. Stott	489,396	Jan. 3	630	170	62	136
T merchant-bar.....	G. H. Reynolds.....	497,253	May 9	1373	348	63	884
Table:							
See Adjustable table. Ironing-table.							
Billiard-table. Kitchen-table.							
Card-table. Railway transfer-table.							
Corpse-dressing table. Saw-table.							
table. Self-serving table.							
Cutting-table. Self-waiting table.							
Display-table. Train-table.							
Drawing-table. Type-writer table.							
Extension-table. Veterinary operating-table.							
Folding table. Wall-table.							
Gynecological wall-table. Work-table.							
Table and writing-cabinet. Combined.....	J. Danner	508,603	Nov. 14	1028	253	65	965
Table-foot. Adjustable.....	F. C. Luethi and J. M. E. Riedel	510,691	Dec. 12	1446	357	65	1695
Table-leaf support.....	M. Reck	506,545	Oct. 10	1295	324	65	260
Table-leaves. Coupling for extension.....	R. Hanaford	489,001	Jan. 3	37	11	62	10
Table-leg fastening.....	J. E. Bohner	496,181	Apr. 25	2625	661	63	535
Table-leg fastening.....	J. A. Buel	494,547	Apr. 4	18	4	63	5
Table-leg fastening.....	J. Volz	495,857	Apr. 18	2146	539	63	429
Table-screen support.....	C. A. Hopkins	505,201	Sept. 19	1473	384	64	1574
Table slide. Extension.....	R. G. Blasius	503,192	Aug. 15	1601	393	64	889
Tables. Adjustable support for bracket.....	J. N. Tiffany	493,605	Mar. 14	1342	342	62	1636
Tablet and copy-holder. Combined writing.....	G. H. Munson and G. B. Haiues	502,574	Aug. 1	543	129	64	666
Tablet and manuscript-holder. Writing.....	B. W. Scott	508,349	Nov. 7	594	146	65	869
Tablet-making device.....	A. Nebeker	506,791	Oct. 17	1689	425	65	346
Tablet. Memorandum.....	H. E. Gifford	506,633	Oct. 10	1418	356	65	284
Tablet. Memorandum.....	A. Marks	510,810	Dec. 12	1639	408	65	1731
Tablet-molding machine.....	C. E. Beardsley	506,807	Oct. 17	1716	432	65	351
Tablet. Roller.....	H. T. Wilson	499,448	June 13	1191	284	63	1613
Tablets. Process of and apparatus for the manufacture of.....	T. Daniels	495,962	Apr. 25	2299	582	63	473
Tack. Carpet.....	E. F. Hopkins	507,541	Oct. 31	2979	730	65	611

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Tack. Carpet.....	W. J. Parkinson.....	504,133	Aug. 29	3109	778	64	1200
Tack. Carpet.....	E. L. Sibley.....	507,722	Oct. 31	3289	805	65	669
Tack-driving machine.....	J. E. Crisp.....	500,319	June 27	2630	643 644	63	1890
Tack-driving machine.....	J. E. Crisp and L. D. Junkins.....	500,225	June 27	2478	604 605	63	1863
Tack-driving machine.....	J. E. Crisp, G. W. Copeland, and T. Barrett.....	505,031	Sept. 12	1192	306	64	1509
Tack-driving machine.....	G. A. Stiles.....	508,780	Nov. 14	1279	318 319	65	1015
Tack-extractor.....	L. S. Denison.....	509,613	Nov. 28	2745	662	65	1319
Tack-lifter.....	M. A. Sheldon.....	491,818	Feb. 14	1222	306	62	1008
Tack or nail machine feeder.....	E. O. Benson.....	495,774	Apr. 18	2018	510	63	406
Tack or nail puller.....	A. B. Schofield.....	490,402	Jan. 24	2267	589	62	504
Tack. Plumber's.....	W. H. Ivory.....	508,822	Nov. 14	1344	333	65	1026
Tack-puller.....	G. J. Capewell.....	501,919	July 25	2224	554	64	448
Tack separating and feeding mechanism.....	S. W. Ladd.....	510,978	Dec. 19	1992	491 492 493	65	1806
Tack-setting machine.....	J. E. Crisp.....	501,872	July 18	2127	527 528	64	416
Tacking-machine.....	S. W. Ladd.....	510,976	Dec. 19	1987	489 490	65	1806
Tacking-machine.....	F. G. Robbins.....	490,988	Jan. 31	3229	825	62	706
Tacking-machine. Hand.....	C. W. King.....	508,547	Nov. 14	934	230 231	65	947
Tacking-machine. Hand.....	A. F. Preston.....	510,443	Dec. 12	993	237 238	65	1612
Tackle-block.....	H. C. Johnson.....	492,496	Feb. 28	2296	570	62	1253
Tag.....	E. C. Buck and W. M. Barnes.....	492,085	Feb. 21	1630	404	62	1104
Tag-attaching implement.....	J. T. Reed.....	504,280	Aug. 29	3352	838	64	1246
Tag-fastener.....	S. E. Adams.....	502,160	July 25	2602	654	64	520
Tag-fastener.....	F. E. Harris.....	509,529	Nov. 28	2614	632	65	1292
Tag-holder.....	J. B. Morgan.....	491,581	Feb. 14	852	216	62	934
Tag-holder.....	C. E. Stowe.....	506,802	Oct. 17	1707	429	65	350
Tag-holder. Umbrella.....	J. Russell.....	490,365	Jan. 24	2215	577	62	494
Tag-machine.....	W. M. Little.....	493,592	Mar. 14	1314	336 337	62	1631
Tags, cards, &c. Machine for cutting.....	C. E. Sawyer.....	509,854	Nov. 28	3133	757 758	65	1392
Tags. Machine for making shipping.....	G. A. Huewe.....	510,641	Dec. 12	1360	333 334	65	1679
Talking-machine.....	J. L. Atkins.....	495,869	Apr. 18	2166	543 544 545	63	432
Tally-board. Croquet.....	H. Mortensen and P. C. Larsen.....	507,444	Oct. 24	2806	687	65	566
Tally-board for roquet. Game.....	A. T. Dana.....	507,111	Oct. 24	2222	548	65	457
Talley-sheet.....	F. W. Barrett.....	505,304	Sept. 19	1636	423	64	1605
Tallying machine. Lumber.....	M. Rhodes.....	496,980	May 9	951	249	63	809
Tank: See Flush-tank. Ore-tank. Flushing-tank. Rendering-tank. Gas-holder tank. Sirup-cooling tank. Measuring-tank. Water-tank.							
Tank-alarm. Electric.....	F. C. Skelton.....	496,067	Apr. 25	2465	622	63	504
Tank-can for varnish, &c.....	C. L. Wagandt.....	505,208	Sept. 19	1483	387	64	1575
Tank-cover. Removable.....	J. R. Rowland.....	494,797	Apr. 4	436	108	63	85
Tank-cover. Removable.....	J. R. Rowland.....	506,016	Oct. 3	333	88, 89	65	65
Tank for conveying acids.....	E. B. Bragg.....	511,674	Dec. 26	3135	766	65	2031
Tank heater. Stock.....	C. F. Ravn.....	505,229	Sept. 19	1509	394	64	1580
Tanks. Construction of.....	W. Forgie.....	492,001	Feb. 21	1504	375	62	1079
Tan-liquor heater, &c.....	E. Owens and M. Lewellyn.....	494,990	Apr. 4	720	183	63	137
Tan-liquor heater.....	F. Vouk.....	499,067	June 6	560	133	63	1489
Tanner's tool.....	W. F. Lawley.....	511,300	Dec. 19	2514	612	65	1904
Tannin from other bodies. Separating.....	O. C. Hagemann.....	510,132	Dec. 5	491	.....	65	1502
Tanning.....	J. H. James.....	506,696	Oct. 17	1525	.....	65	316
Tanning.....	G. Ruemelin.....	503,987	Aug. 29	2885	.....	64	1157
Tanning agents. Making solid extracts of sumac, hemlock, and other.....	P. T. Austen.....	495,768	Apr. 18	2008	.....	63	404
Tanning apparatus.....	F. Chailly.....	508,281	Nov. 7	498	120	65	850
Tanning apparatus.....	J. Davis.....	497,951	May 23	2526	630	63	1119
Tanning hides.....	J. W. Claxton.....	501,586	July 18	1671	520	64	337
Tanning hides.....	W. F. Lawley.....	511,301	Dec. 19	2515	.....	65	1904
Tanning hides or skins.....	W. Zahn.....	504,013	Aug. 29	2921	.....	64	1164
Tanning leather.....	M. Dennis.....	495,028	Apr. 11	783	.....	63	165
Tanning-liquor.....	M. Dennis.....	511,411	Dec. 26	2720	.....	65	1954
Tap.....	E. Hazlehurst.....	504,433	Sept. 5	199	51	64	1307
Tap. Ale.....	J. Neumann.....	494,015	Mar. 21	2025	516	62	1783
Tap. Ale.....	J. Neumann.....	494,016	Mar. 21	2027	516	62	1783
Tap and faucet.....	M. Z. Farrington.....	496,301	Apr. 25	2819	705	63	571
Tap and pump. Beer.....	N. Hardoin.....	493,066	Mar. 7	489	122	62	1456
Tap. Automatic collapsible.....	W. W. Doolittle.....	489,223	Jan. 3	373	103 104	62	84
Tap. Beer.....	H. F. Jacoby.....	498,657	May 30	3686	911	63	1340
Tap. Collapsible.....	A. G. Anderson.....	509,113	Nov. 21	1861	456	65	1139
Tap. Collapsible.....	W. W. Doolittle.....	505,268	Sept. 19	1565	409	64	1591
Tap. Collapsible.....	W. W. Doolittle. (Reissue).....	11,359	Aug. 15	2201	550	64	996
Tap-head. Self-acting.....	S. D. Leland.....	496,420	May 2	43	12, 13	63	626
Tap-holder.....	W. G. Nelson.....	500,291	June 27	2572	628	63	1879
Tap. Porter or beer.....	C. I. Snyder.....	502,835	Aug. 8	1010	246	64	767
Tap-wrench.....	F. C. Williams.....	506,961	Oct. 17	1970	488	65	398
Tapping and emptying device. Barrel.....	S. A. Reinheimer.....	499,592	June 13	1421	340	63	1653
Tapping apparatus. Keg.....	E. Ott.....	490,039	Jan. 17	1665	433	62	371

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Tapping-machine	W. W. Doolittle	489,224	Jan. 3	375	104	62	85
Tapping-machine	W. W. Doolittle	490,273	Jan. 24	2062	539	62	462
Tapping mains. Apparatus for.	A. P. Smith	505,963	Oct. 3	251	67	65	50
Tapping mains under pressure. Machine for.	P. Eley	511,327	Dec. 26	2558	624	65	1925
Tapping or reaming machine. Blank	E. N. Beecher	504,903	Sept. 12	978	252	64	1468
Taper-gage	F. Peterson	501,607	July 18	2038	502	64	399
Target	J. B. Walter	494,285	Mar. 28	2475	624	62	1880
Target practice	J. M. Rice	495,371	Apr. 11	1361	341	63	270
Tawing hides	A. D. Little	498,067	May 23	2702		63	1150
Tawing hides or skins	W. M. Norris	498,077	May 23	2716		63	1153
Tawing hides or skins	W. Zahn	504,012	Aug. 29	2919		64	1164
Tawing hides or skins	W. Zahn	511,007	Dec. 19	2935		65	1814
Tawing skins	W. M. Norris	498,214	May 23	2933		63	1191
Tawing skins	W. Zahn	504,014	Aug. 29	2922		64	1164
Tea-blending machine	T. Crompton	502,283	Aug. 1	31	7	64	572
Tea-kettle	O. W. and J. A. Boston	509,865	Dec. 5	23	5	65	1415
Tea or coffee pot	M. R. Fischer	501,648	July 18	1772	441	64	355
Tea or coffee pot handle	M. Stransky	496,583	May 2	298	80	63	673
Tea-pot, coffee-pot, &c	F. Mann	508,828	Nov. 14	1354	335	65	1028
Teaching arithmetical calculation	J. Gallegos	502,184	July 25	2636	664	64	527
Teaching astronomy and geography. Apparatus for.	A. M. Gregory	501,136	July 11	965	246	64	190
Teaching botany. Appliance for	W. H. Gibson	496,257	Apr. 25	2750	688	63	557
Teaching music. Device for.	R. Thew	510,302	Dec. 5	769	187	65	1555
Teaching penmanship. Appliance for.	W. H. Kingman	503,796	Aug. 22	2578	641	64	1082
Teaching penmanship. Device for	C. R. Wells	507,950	Oct. 31	3665	907	65	739
Teaching penmanship. Device for	C. R. Wells	510,372	Dec. 5	871	210	65	1576
Teaching spelling. Device for.	J. Gallegos	502,183	July 25	2635	664	64	526
Tedder-fork	G. M. Baker	505,807	Oct. 3	4	2	65	3
Teeth-separator	J. W. Ivory	511,619	Dec. 26	3056	745	65	2015
Telautograph	E. Gray	491,347	Feb. 7	477	{ 123 124 9 }	62	839
Telautograph	E. Gray	494,562	Apr. 4	40	{ 11 10 329 530 }	63	9
Telautograph	R. M. Hunter	511,081	Dec. 19	2146	{ 205 206 }	65	1835
Telegraph. Autographic	R. J. Sheehy	506,275	Oct. 10	832	{ 206 207 }	65	170
Telegraph-cable support	F. L. Bedwell	490,534	Jan. 24	2479	639	62	545
Telegraph exchange system. Printing	R. J. Sheehy	506,272	Oct. 10	823	203	65	168
Telegraph for cash-recording systems. Printing	H. K. Hess	505,293	Sept. 19	1616	{ 419 420 }	64	1601
Telegraph instrument. Printing	A. H. Wirsching	496,549	May 2	248	65, 66	63	664
Telegraph-key	J. R. Frank	508,214	Nov. 7	387	94	65	830
Telegraph-key	J. Steiner	509,964	Dec. 5	194	46	65	1446
Telegraph or telephone system	W. R. Kirk	510,430	Dec. 12	971	{ 232 233 }	65	1608
Telegraph-pole	J. W. and C. E. Carver	494,710	Apr. 4	292	73	63	58
Telegraph. Printing	E. V. Baillard	498,529	May 30	3461	858	63	1300
Telegraph. Printing	L. P. Buck and F. D. Sweeten	506,973	Oct. 17	1983	492	65	401
Telegraph. Printing	R. A. Fowden	509,430	Nov. 28	2421	{ 586 587 }	65	1255
Telegraph. Printing	S. R. Linville and L. F. Hettmansperger	504,732	Sept. 12	688	175	64	1412
Telegraph. Printing	D. Murray	498,674	May 30	3710	{ 917 918 919 }	63	1344
Telegraph. Printing	R. J. Sheehy	506,269	Oct. 10	814	201	65	166
Telegraph. Printing	R. J. Sheehy	506,270	Oct. 10	817	{ 201 202 }	65	167
Telegraph. Printing	R. J. Sheehy	506,273	Oct. 10	826	{ 203 204 }	65	169
Telegraph. Printing	J. E. Wright	494,185	Mar. 28	2311	{ 585 586 }	62	1851
Telegraph receiver. Printing	M. D. Porter	491,133	Feb. 7	105	29, 30	62	769
Telegraph-relay	S. P. Freir	493,620	Mar. 14	1364	346	62	1639
Telegraph-relay	F. P. Medina	511,244	Dec. 19	2417	589	65	1887
Telegraph return-signal key. District	J. M. Bell	497,942	May 23	2511	627	63	1117
Telegraph. Signal	C. V. Boughton	509,290	Nov. 21	2162	{ 519 520 }	65	1196
Telegraph. Signaling	M. J. Burns	509,873	Dec. 5	33	8	65	1417
Telegraph. Signaling	W. E. Decrow	493,253	Mar. 14	753	193	62	1524
Telegraph. Speaking	T. A. Edison	492,789	Mar. 7	27	7	62	1364
Telegraph system. Condenser	C. H. Rudd	504,367	Sept. 5	87	22, 23	64	1287
Telegraph-transmitter	R. S. Roberts	491,595	Feb. 14	885	223	62	940
Telegraph-transmitter	C. Willoughby	506,294	Oct. 10	860	{ 212 213 }	65	176
Telegraphic apparatus	A. Heil	503,372	Aug. 15	1900	471	64	941
Telegraphic apparatus. Copying	S. P. Denison	498,911	June 6	290	67	63	1443
Telegraphic call apparatus. Coin-controlled	G. Poore	506,132	Oct. 3	525	136	65	102
Telegraphic messages. Indicating	J. Levi	495,744	Apr. 18	1969	496	63	397
Telegraphic relay	E. Weston	511,005	Dec. 19	2031	502	65	1813
Telegraphic transmitter	H. F. Stinde	511,172	Dec. 19	2296	563	65	1865
Telegraphing. Means for	W. H. Fahrney	495,030	Apr. 11	786	199	63	165
Telegraphy	C. Cuttriss	500,226	June 27	2480	{ 605 606 }	63	1864
Telegraphy	P. B. Delany	510,002	Dec. 5	268	62	65	1460
Telegraphy	P. B. Delany	510,003	Dec. 5	270	62	65	1460
Telegraphy	P. B. Delany	510,004	Dec. 5	274	63	65	1462
Telegraphy	P. B. Delany	510,005	Dec. 5	278	63, 64	65	1462
Telegraphy	P. B. Delany	510,006	Dec. 5	285	64	65	1464
Telegraphy	P. B. Delany	510,007	Dec. 5	289	65	65	1464
Telegraphy	S. D. Field	503,590	Aug. 22	2246	{ 563 564 }	64	1020

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Telegraphy	Z. P. Hotchkiss	489,435	Jan. 3	692	186 187	62	149
Telegraphy	R. J. Sheehy	506,274	Oct. 10	829	204 205	65	169
Telegraphy	P. J. Wicks	499,811	June 20	1781	432 433	63	1729
Telegraphy	J. P. Wooten	509,066	Nov. 21	1764	435 436	65	1121
Telegraphy and telephony	F. H. Brown	490,064	Jan. 17	1703	444	62	379
Telegraphy and telephony. Simultaneous	S. W. Holman	510,508	Dec. 12	1100	265 266	65	1633
Telegraphy. Electric	C. Thom, Jr	510,909	Dec. 5	615	145	65	1526
Telegraphy. Machine	P. B. Delany	507,791	Oct. 31	3403	834 835	65	690
Telegraphy. System of	J. A. Parker and L. L. Summers	510,929	Dec. 19	1893	464 465	65	1789
Telegraphy. System of	C. J. Reed	510,612	Dec. 12	1313	320	65	1670
Telegraphy. Vibratory	S. D. Field	491,163	Feb. 7	166	43	62	780
Telegraphy. Vibratory	S. D. Field	496,513	May 2	191	52	63	654
Telegraph. Electric	C. H. Haskins	502,399	Aug. 1	249	59	64	611
Telemeter. Leveling and measuring	J. F. Santillana	499,939	June 20	1987	423	63	1765
Telemeter system. Electric	F. J. Dibble	490,014	Jan. 17	1621	423 424	62	363
Telemeter systems. Electrical transmitter for	C. W. Ayton	498,871	June 6	212	51, 52	63	1430
Telemeter systems. Receiver for	C. W. Ayton	498,872	June 6	217	52, 53	63	1431
Telemeter-transmitter. Electric	F. J. Dibble	490,012	Jan. 17	1612	421 422	62	362
Telemeter-transmitter. Electric	F. J. Dibble	490,013	Jan. 17	1618	422	62	363
Telephone	C. T. Bloomer	493,907	Mar. 21	1825	465	62	1744
Telephone	J. B. S. Booth and E. J. Falconer	505,087	Sept. 19	1296	334	64	1542
Telephone	S. D. Field	507,728	Oct. 31	3296	806 807	65	670
Telephone	E. M. Harrison	499,108	June 6	617	148	63	1498
Telephone	B. Pickering	498,919	June 6	302	69, 70	63	1446
Telephone	B. Pickering	511,358	Dec. 26	2619	637	65	1937
Telephone	C. E. Scribner	489,990	Jan. 17	1575	412	62	354
Telephone. Acoustic	T. B. Rogers	493,297	Mar. 14	831	212	62	1537
Telephone and signaling circuit	F. A. Pickernell and F. W. Dunbar	494,385	Mar. 28	2635	661 662	62	1911
Telephone apparatus	A. Stromberg and A. Carlson	504,636	Sept. 5	517	134	64	1368
Telephone apparatus from lightning. System for protecting	J. J. Carty	495,179	Apr. 11	1062	264	63	215
Telephone attachment	J. L. Davidson	489,603	Jan. 10	965	251	62	216
Telephone attachment	C. H. Dorenwend	506,646	Oct. 10	1438	361	65	288
Telephone. Automatic	J. Wratisch and S. Gergacsevics	504,011	Aug. 29	2918	732	64	1164
Telephone-cable	S. W. Holman	491,109	Feb. 7	74	20, 21	62	763
Telephone-cable	W. R. Patterson	502,262	July 25	2780	702	64	553
Telephone-cables. Manufacture of	W. R. Patterson	497,335	May 16	1544	389	63	928
Telephone-call	J. H. Kinsman	491,893	Feb. 14	1342	332 333	62	1032
Telephone-call apparatus. Automatic individual	J. Sack	492,110	Feb. 21	1668	415 416	62	1112
Telephone central-station circuit	J. L. McQuarrie	492,484	Feb. 28	2267	565	62	1247
Telephone-circuit	T. Spencer	505,730	Sept. 26	2391	604	64	1758
Telephone-circuit	J. S. Stone	507,568	Oct. 31	3030	743	65	621
Telephone-circuit	J. S. Stone	508,255	Nov. 7	455	111	65	842
Telephone circuit and apparatus	S. J. Larned and F. A. Pickernell	501,085	July 11	867	225	64	173
Telephone circuit and apparatus	J. L. McQuarrie	502,466	Aug. 1	361	87	64	632
Telephone-circuit. Two-station	F. A. Pickernell	511,276	Dec. 19	2468	602	65	1696
Telephone-circuits. Busy-signal for	E. J. Hall and F. A. Pickernell	492,483	Feb. 28	2263	564	62	1246
Telephone-circuits. Station apparatus for	S. J. Larned and F. A. Pickernell	501,086	July 11	870	226	64	174
Telephone diaphragm-holder	S. W. Holman	496,224	Apr. 25	2697	676	63	547
Telephone disturbing-currents. Apparatus for suppressing	F. A. Pickernell	506,884	Oct. 17	1848	461	65	375
Telephone ear attachment	G. M. Brown	493,245	Mar. 14	742	190	62	1522
Telephone. Electric	E. Noriega	508,830	Nov. 14	1357	335 336	65	1028
Telephone-exchange	A. E. McClaren	499,748	June 20	1672	401 402	63	1710
Telephone-exchange apparatus	C. E. Scribner	501,169	July 11	1023	259	64	200
Telephone-exchange apparatus	C. E. Scribner	502,770	Aug. 8	895	220	64	745
Telephone-exchange apparatus	C. E. Scribner	509,186	Nov. 21	1978	481	65	1162
Telephone-exchange switching system	C. E. Scribner	491,688	Feb. 14	1021	258	62	970
Telephone-exchange system	W. W. Jacques	510,863	Dec. 12	1779	437 438 439	65	1555
Telephone-exchange system. Automatic	A. S. McCaskey	498,291	May 30	3073	765 766	63	1231
Telephone-exchange system. Automatic	J. Serdinko	510,195	Dec. 5	592	138 139	65	1522
Telephone-exchange testing apparatus	C. E. Scribner	504,250	Aug. 29	3306	826	64	1236
Telephone-exchanges. Automatic signal for trunk-lines of	O. A. Bell	507,983	Nov. 7	9	4	65	760
Telephone-exchanges. Central-office apparatus and circuit for	E. J. Hall	495,087	Apr. 11	872	223	63	182
Telephone-exchanges. Multiple switchboard for	C. E. Scribner	501,847	July 18	2088	516	64	409
Telephone-exchanges. Multiple-switchboard system for	C. E. Scribner	508,054	Nov. 7	111	31, 32	65	779
Telephone-exchanges. Multiple-switchboard system for	C. E. Scribner	511,464	Dec. 26	2808	679	65	1971
Telephone-exchanges. Spring-jack switch for	C. E. Scribner and W. R. Patterson	489,571	Jan. 10	915	239	62	206
Telephone-exchanges. Trunk-line signaling apparatus and circuit for	E. J. Hall	491,553	Feb. 14	804	204	62	924
Telephone-gage	J. J. Carty and F. A. Pickernell	495,180	Apr. 11	1064	265	63	215

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Invention.	Name.	No.	Date	Monthly volume.		Official Gazette.	
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Telephone handle or holder	B. M. Wilkerson	498,869	June 6	209	50	63	1430
Telephone-index	S. L. Shaffer	493,304	Mar. 14	850	216	62	1540
Telephone. Magneto	C. S. Forbes	500,481	June 27	2865	705	63	1931
Telephone. Magneto	J. A. Brown	506,305	Oct. 10	874	216	65	178
Telephone. Magneto	J. A. Brown	511,118	Dec. 19	2209	542	65	1849
Telephone. Magneto	J. P. Freeman	497,649	May 16	2038	508	63	1017
Telephone. Mechanical	G. H. E. Ricke	496,137	Apr. 25	2564	645	63	523
Telephone. Mechanical	E. W. Warren	501,388	July 11	1380	345	64	264
Telephone memorandum-tablet	W. M. Kleeman	491,777	Feb. 14	1164	291	62	996
Telephone. Portable	B. S. Flanders	502,398	Aug. 1	247	59	64	611
Telephone signaling apparatus and circuit	F. A. Pickernell	501,102	July 11	912	234	64	181
Telephone speaking attachment	W. and G. Weber	509,061	Nov. 21	1756	433	65	1119
Telephone-switch	A. G. Davis	498,243	May 30	2988	744	63	1216
Telephone-switch	J. C. Francis	488,993	Jan. 3	26	8	62	8
Telephone-switch	T. W. Ness	505,170	Sept. 19	1423	366	64	1564
Telephone-switch	C. E. Scribner	501,168	July 11	1021	259	64	200
Telephone-switch	J. Steiner	505,070	Sept. 12	1262	323	64	1522
Telephone switch appliance	P. Rabbidge	489,266	Jan. 3	443	122	62	97
Telephone switch. Magneto	W. Humans	492,019	Feb. 21	1535	383	62	1085
Telephone-switchboard annunciator	F. R. McBerty	498,808	June 6	91	23	63	1405
Telephone-switchboard annunciator	C. E. Scribner	509,956	Dec. 5	181	43	65	1443
Telephone-switchboards. Listening and ringing key for	W. M. Goodridge	493,704	Mar. 21	1495	383	62	1681
Telephone-switchboards. Transfer system for	E. A. Clark	496,859	May 9	756	201	63	773
Telephone system	G. L. Anders	500,545	July 4	5	2, 3	64	4
Telephone system	E. A. Clark	498,236	May 30	2973	741	63	1212
Telephone system	F. R. Colvin	511,589	Dec. 26	3001	731	65	2007
Telephone system	W. W. Davis	505,308	Sept. 19	1640	424	64	1606
Telephone system	J. J. McNally	511,739	Dec. 26	3243	796	65	2051
Telephone systems. Multiple-commutator apparatus for	L. A. Berthon	506,658	Oct. 17	1463	368	65	304
Telephone systems. Signal apparatus for	J. J. O'Connell	509,484	Nov. 28	2540	613	65	1279
Telephone-tablet	J. E. Pruyn	492,587	Feb. 28	2434	606	62	1283
Telephone tablet and arm-rest	J. S. Gold	506,223	Oct. 10	729	182	65	149
Telephone-toll apparatus	W. Gray	510,535	Dec. 12	1178	283	65	1645
Telephone-transmitter	C. T. Bloomer	492,883	Mar. 7	178	43	62	1393
Telephone-transmitter	J. A. Brown	501,610	July 18	1713	427	64	344
Telephone-transmitter	J. A. Brown	504,801	Sept. 12	811	206	64	1435
Telephone-transmitter	J. V. Capek	506,415	Oct. 10	1079	288	65	218
Telephone-transmitter	J. H. Mason	507,715	Oct. 31	3281	802	65	667
Telephone-transmitter	E. Noriega	508,829	Nov. 14	1355	335	65	1028
Telephone-transmitter	N. Parks	504,454	Sept. 5	226	60	64	1313
Telephone-transmitter	C. F. Scattergood	498,309	May 30	3108	774	63	1237
Telephone-transmitter	H. L. Tyler	491,275	Feb. 7	339	86	62	813
Telephone-transmitter circuit and apparatus	J. S. Stone	507,694	Oct. 31	3247	795	65	661
Telephone. Transmitting	S. W. Holman	505,917	Oct. 3	181	46	65	35
Telephones. Coin-controlled lock for	P. Cooke	497,907	May 23	2461	615	63	1108
Telephones. Granulated material for transmitting	W. W. Jacques	495,090	Apr. 11	891		63	186
Telephonic and telegraphic circuits. Station apparatus for	T. Spencer	501,472	July 11	1491	376	64	287
Telephonic apparatus	W. S. Harrison	509,530	Nov. 28	2615	632	65	1292
Telephonic instrument	P. Rabbidge	511,456	Dec. 26	2796	677	65	1968
Telephonic intercommunication. System of	F. R. Colvin	502,091	July 25	2488	626	64	498
Telephonic intercommunication. System of	F. R. Colvin	504,103	Aug. 29	3064	767	64	1192
Telephonic-receiver support	N. L. Burchell and B. L. Nevius, Jr.	501,405	July 11	1405	352	64	269
Telephonic transmission	J. S. Stone	509,965	Dec. 5	195	46	65	1446
Telephoning purposes. Switchboard for	U. H. Balsley	504,464	Sept. 5	245	64	64	1315
Telephony and telegraphy. System of combined	F. A. Pickernell	492,471	Feb. 28	2242	561	62	1243
Telephony. Duplex	W. Marshall	505,638	Sept. 26	2211	560	64	1726
Telephony. Long-distance electric	C. M. Haynes	492,467	Feb. 28	2235	559	62	1241
Telescope	R. H. Richards	495,231	Apr. 11	1144	286	63	230
Telescope box. Double	J. T. Crow	502,952	Aug. 8	1207	297	64	802
Telescopic stand for mathematical and optical instruments, &c.	M. Weyl	505,149	Sept. 19	1388	355	64	1558
Telescoping cup	F. H. Clifford	492,900	Mar. 7	204	50	62	1399
Telethermometer	L. S. Norton and F. E. Hoffman	493,558	Mar. 14	1258	323	62	1619
Telethermometer	H. B. Payne	490,882	Jan. 31	3046	782	62	672
Telethermometer	H. B. Payne	490,883	Jan. 31	3048	783	62	672
Tellurian	W. R. Dunham	493,988	Mar. 21	1980	505	62	1774
Tellurian	M. A. Huntman	491,017	Jan. 31	3273	836	62	715
Telpher system	C. J. Van Depoele	496,329	Apr. 25	2870	717	63	581
Temperature-controlling device	H. B. Tatham, Jr.	511,283	Dec. 19	2484	606	65	1899
Temperature-indicator	J. Bartlett	489,212	Jan. 3	352	99	62	80
Temperature-indicator	C. E. Egan and F. M. Bailey	504,335	Sept. 5	36	11	64	1278
Temperature-regulating apparatus	J. E. Watts	489,052	Jan. 3	110	30	62	28
Temperature-regulator	A. F. Nagle	509,625	Nov. 28	2759	665	65	1321
Temperature-regulator	B. E. Van Auker	494,399	Mar. 28	2660	667	62	1915
Temperature-regulator. Thermo-pneumatic	H. B. Tatham, Jr.	511,066	Dec. 19	2115	523	65	1829
Tempering. Composition of matter for	J. E. Mills	503,801	Aug. 22	2583		64	1084
Tennis fork. Lawn	R. W. Booth	494,913	Apr. 4	612	156	63	118
Tennis-net	C. Hendrickson	497,662	May 16	2061	514	63	1021
Tent	E. E. Mann	499,240	June 13	820	195	63	1547
Tent	B. F. Upton	506,956	Oct. 17	1959	485	65	396
Tent, bed, and knapsack. Combined	A. E. Carr	510,239	Dec. 5	670	159	65	1537
Terret-ring	O. Van Cole	509,004	Nov. 21	1674	413	65	1103
Test-plug. Contractible	M. F. Smith	499,682	June 13	1558	376	63	1676
Test-tube	E. S. Hoare	500,206	June 27	2449	597	63	1858

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Invention.	Name.	No.	Date.	Monthly volume		Official Gazette.	
				Spec.	Dr g.	Vol.	Page.
Testing-machine	O. Reeser	493,784	Mar. 21	1633	416	62	1708
Tether	G. Meyer	498,282	May 30	3051	759	63	1227
Tether or halter-strap	H. T. Crepeau	502,954	Aug. 8	1211	298	64	803
Thaumatrope	J. B. Cox	503,927	Aug. 22	2762	692	64	1119
Thawing out frozen pipes, &c. Device for	D. H. Streeper	501,744	July 18	1936	479	64	352
Theater appliance	S. Mackaye	490,489	Jan. 24	2403	621	62	530
Theater appliance	F. D. Reimau	495,205	Apr. 11	1100	273	63	222
Theatrical device	H. Dumars	501,647	July 18	1770	440 441	64	354
Therapeutic appliance. Electro-	H. C. Royer	497,822	May 23	2311	581	63	1082
Therapeutic device. Electro-	W. E. Washburn	500,172	June 27	2394	581	63	1848
Thermo-electric element	M. Mestern	511,245	Dec. 19	2418	589	65	1887
Thermo-mechanical alarm	P. Krumnscheid	496,519	May 2	201	54	63	655
Thermocauter.	J. E. Lee	490,969	Jan. 31	3197	817	62	700
Thermometer	H. Campbell	504,298	Aug. 29	3382	846	64	1251
Thermometer	J. J. Hicks	496,783	May 2	624	167	63	731
Thermometer	J. J. Hicks	498,651	May 30	3676	909	63	1338
Thermometer	H. F. Maxim and J. M. Price	489,259	Jan. 3	432	120	62	95
Thermometer	G. B. S. O. Möller	497,925	May 23	2485	620	63	1112
Thermometer	A. D. Nordström	499,750	June 20	1690	405	63	1713
Thermometer	J. A. Scollay	494,651	Apr. 4	194	49	63	40
Thermometer	C. J. Tagliabue	493,197	Mar. 7	657	167	62	1487
Thermometer	F. S. Tomey	507,857	Oct. 31	3520	866	65	712
Thermometer. Dial	E. Weston	511,006	Dec. 19	2033	502	65	1813
Thermometer-frame.	A. H. Burr	496,995	May 9	980	254	63	813
Thermometer. Recording	A. Walther	511,258	Dec. 19	2440	595	65	1891
Thermometric alarm	O. Weyrich	509,985	Dec. 5	242	56	65	1455
Thermometric indicator	C. R. H. Erkens	489,075	Jan. 3	140	39	62	34
Thermostat	E. C. C. Krogh	497,800	May 23	2278	573	63	1077
Thermostat	J. R. Roberts	490,926	Jan. 31	3125	802	62	687
Thermostat	I. M. Seamans	489,991	Jan. 17	1577	413	62	354
Thermostat	T. W. Shepherd	493,601	Mar. 14	1337	341	62	1635
Thermostat	H. S. Tunnard and A. M. Keays	509,056	Nov. 21	1749	432	65	1118
Thermostatic instrument	M. Martin	487,923	May 23	2482	620	63	1112
Thermostatic sprinkler	R. Wood	489,180	June 6	735	175	63	1518
Thill-coupling	C. Andrew	493,462	Mar. 14	1090	279	62	1587
Thill-coupling	G. W. Bangher	492,507	Feb. 28	2317	574	62	1257
Thill-coupling	J. R. Benson	489,407	Jan. 3	643	174	62	138
Thill-coupling	G. A. Brown	501,052	July 11	819	213	64	164
Thill-coupling	F. J. Buß	509,017	Nov. 21	1691	417	65	1106
Thill-coupling	C. A. Buflington	496,774	May 2	610	163	63	728
Thill-coupling	C. G. Burdick	509,840	Nov. 28	3104	750	65	1387
Thill-coupling	S. W. Cately	505,438	Sept. 26	1859	478	64	1660
Thill-coupling	W. D. Cobb	501,923	July 25	2231	557	64	450
Thill-coupling	H. Degner	503,739	Aug. 22	2498	621	64	1066
Thill-coupling	A. P. Dodge	499,973	June 20	2039	494	63	1774
Thill-coupling	G. F. Eberle	491,774	Feb. 14	1161	290	62	995
Thill-coupling	H. P. Faris	495,697	Apr. 18	1891	476	63	382
Thill-coupling	R. Fawcett	492,327	Feb. 21	2007	499	62	1183
Thill-coupling	A. W. Fisher	502,620	Aug. 1	623	149	64	681
Thill-coupling	J. H. Hanson	502,816	Aug. 8	980	238	64	761
Thill-coupling	F. M. Hartman	498,114	May 23	2775	694	63	1163
Thill-coupling	R. Hartson	494,476	Mar. 28	2770	695	62	1935
Thill-coupling	A. A. Hazard	505,985	Oct. 3	289	75	65	56
Thill-coupling	J. F. Hempel	502,491	Aug. 1	413	97	64	642
Thill-coupling	J. W. Hoddinott.	500,895	July 4	569	148	64	104
Thill-coupling	J. W. Hoddinott.	510,175	Dec. 5	564	131	65	1516
Thill-coupling	A. E. Hotchkiss	509,165	Nov. 21	1940	475	65	1154
Thill-coupling	A. G. Howland	497,919	May 23	2477	618	63	1111
Thill-coupling	A. Hummer	492,293	Feb. 21	1955	488	62	1172
Thill-coupling	H. W. Lawrence	511,302	Dec. 19	2515	612	65	1904
Thill-coupling	W. F. Leighton	491,182	Feb. 7	200	51	62	786
Thill-coupling	B. F. Lewis	500,101	June 20	2235	544	63	1808
Thill-coupling	C. C. Martin	510,078	Dec. 5	400	88	65	1485
Thill-coupling	A. C. Mathison	491,782	Feb. 14	1170	292	62	997
Thill-coupling	J. F. Matthews and W. E. Dinsmore	497,924	May 23	2484	620	63	1112
Thill-coupling	E. J. Merry	503,910	Aug. 22	2739	687	64	1114
Thill-coupling	J. R. Mikesell	508,896	Nov. 14	1460	362	65	1047
Thill-coupling	J. N. Moehn	504,230	Aug. 29	3273	818	64	1230
Thill-coupling	A. J. Obrist	495,362	Apr. 11	1350	338	63	268
Thill-coupling	T. Oliver	499,393	June 13	1084	263	63	1594
Thill-coupling	M. C. Parker	509,485	Nov. 28	2542	613	65	1279
Thill-coupling	J. S. Patten	494,884	Apr. 4	572	144	63	111
Thill-coupling	J. R. Perkins	508,526	Nov. 14	907	222	65	941
Thill-coupling	G. H. Perry	502,989	Aug. 8	1275	312	64	814
Thill-coupling	G. W. Post	502,380	Aug. 1	218	52	64	606
Thill-coupling	J. B. Poulk	511,061	Dec. 19	2106	521	65	1828
Thill-coupling	T. Ransley, Jr.	505,674	Sept. 26	2299	583	64	1742
Thill-coupling	W. J. Rideout and J. W. Merritt	493,387	Mar. 14	972	250	62	1565
Thill-coupling	M. H. Risser	510,093	Dec. 5	425	94	65	1490
Thill-coupling	H. N. Rose	497,217	May 9	1314	335	63	874
Thill-coupling	R. M. Shaffer	499,475	June 13	1229	293	63	1620
Thill-coupling	P. Stalker	507,765	Oct. 31	3357	822	65	681
Thill-coupling	N. A. Swett	498,732	May 30	3836	945	63	1365
Thill-coupling	M. Todd	501,115	July 11	938	240	64	185
Thill-coupling	W. H. Tydemar	495,855	Apr. 18	2144	538	63	429
Thill-coupling	J. and A. K. Warren	500,171	June 27	2393	581	63	1848
Thill-coupling	E. Wilcox, Jr.	505,502	Sept. 26	1973	507	64	1680
Thill-coupling	N. I. Woolsey	505,691	Sept. 26	2334	591	64	1748
Thill-coupling attachment	W. J. Tone	501,812	July 18	2043	503	64	400
Thill-coupling bolt	C. L. Kelley	502,972	Aug. 8	1252	306	64	810
Thill-coupling. Vehicle	G. M. Weaver, J. Adams, and J. A. Hamilton.	510,220	Dec. 5	641	151	65	1531
Thill-couplings. Antirattler for	H. Bunker.	497,858	May 23	2369	593	63	1092

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Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Thill-couplings. Antirattler for	A. Kraiss	506,822	Oct. 17	1746	439	65	356
Thill-couplings. Antirattler for	W. H. Pardee	502,134	July 25	2552	640	64	510
Thill-couplings. Antirattler for	G. M. Peters and H. K. Forbis	497,968	May 23	2583	646	63	1130
Thill-couplings. Anti-rattler for	E. H. Watrous	490,934	Jan. 31	3139	805	62	689
Thill safety attachment. Vehicle	G. Dippold	491,838	Feb. 14	1252	312	62	1015
Thill support	J. H. Adams	504,146	Aug. 29	3130	783	64	1204
Thill support	G. G. F. Boswell	503,644	Aug. 22	2343	585	64	1036
Thill support	W. E. Derrick	493,487	Mar. 14	1129	289	62	1594
Thill support	A. Meyerhoff	508,330	Nov. 7	571	140	65	864
Thill support	W. H. Musham	499,846	June 20	1842	449	63	1739
Thill support	G. W. Post	491,854	Feb. 14	1270	317	62	1020
Thill support. Vehicle	P. McDonald	497,284	May 9	1442	364	63	894
Thimble.	R. M. Durham	495,790	Apr. 18	2040	517	63	410
Thimbles. Thread-cutting attachment for	M. Fogg	502,036	July 25	2400	604	64	481
Thrasher and binder. Combined	A. L. Gill	500,709	July 4	284	77	64	53
Thrasher and card. Combined flax	J. McGrath	489,493	Jan. 10	797	210	62	183
Thrasher and separator	R. T. Steedley	491,689	Feb. 14	1025	258	62	970
Thrasher, feeder, and separator. Combined automatic	M. O. Godding	489,301	Jan. 3	486	134	62	106
Thrasher grain-saving device	G. W. Ingersoll	490,807	Jan. 31	2930	752	62	647
Thrasher. Traveling	C. Grattan	497,717	May 16	2147	536	63	1037
Thrasher. Traveling	B. Holt	499,113	June 6	628	151	63	1500
Thrashers. Folding straw-carrier for	G. W. Parsons	493,368	Mar. 14	946	243	62	1560
Thrashing-cylinder	W. W. Dingee	493,155	Mar. 7	597	150	62	1476
Thrashing-machine	B. B. Berscheid	496,848	May 9	730	194	63	769
Thrashing-machine	W. H. and J. Butterworth, Jr.	490,944	Jan. 31	3156	809	62	692
Thrashing-machine	A. R. Gustafson	510,253	Dec. 5	689	165	65	1541
Thrashing-machine	W. M. Koppes	491,485	Feb. 7	694	175	62	881
Thrashing-machine	W. N. Springer	502,473	Aug. 1	377	89	64	635
Thrashing-machine	J. N. Wilson	507,771	Oct. 31	3368	824	65	683
Thrashing-machine attachment	J. A. and D. James	490,075	Jan. 17	1721	449	62	383
Thrashing-machine attachment	J. C. Lundy	502,979	Aug. 8	1259	308	64	811
Thrashing-machine band-cutter and automatic feeder	G. W. Morris	495,101	Apr. 11	914	230	63	190
Thrashing-machine band-cutter and feeder	G. W. Parsons	493,367	Mar. 14	944	242	62	1559
Thrashing-machine band-cutter and feeder	W. N. Rumely	496,446	May 2	92	26	63	635
Thrashing-machine band-cutter and feeder	D. C. Ruth	503,002	Aug. 8	1289	315	64	817
Thrashing-machine band-cutter and feeder	F. H. Schafer	503,877	Aug. 22	2683	672	64	1103
Thrashing-machine band-cutter and feeder	J. H. Spurgin	502,592	Aug. 1	571	137	64	671
Thrashing-machine band-cutter and feeder	F. J. Wood	496,764	May 2	590	158	63	725
Thrashing-machine band-cutting and feeding attachment	G. N. Kern and J. W. Fielder	504,220	Aug. 29	3257	812	64	1227
Thrashing-machine band-cutting and feeding attachment	L. and W. Quintus	507,163	Oct. 24	2328	573	65	476
Thrashing machine. Bean or grain	T. A. Miller	504,359	Sept. 5	67	18	64	1284
Thrashing-machine bundle-feeder	F. Robertson	493,296	Mar. 14	829	211	62	1537
Thrashing-machine concave	F. Richter	509,490	Nov. 28	2547	615	65	1281
Thrashing-machine concave	R. N. Watts	489,724	Jan. 10	1135	293	62	250
Thrashing-machine cylinder-hood	E. G. Sachse	506,444	Oct. 10	1129	281	65	228
Thrashing-machine feed-regulator	G. W. Hallett	493,706	Mar. 21	1498	383	62	1682
Thrashing-machine feeder and band-cutter	A. J. Amick	502,162	July 25	2604	655	64	520
Thrashing-machine feeder and band-cutter. Combined	J. G. Williams	502,689	Aug. 1	753	182	64	704
Thrashing-machine feeder and spreader	A. H. Lubking	505,948	Oct. 3	223	58	65	44
Thrashing-machine feeding attachment	G. W. Rucker	501,366	July 11	1341	335	64	257
Thrashing-machine feeding attachment	H. A. Stoltenberg	504,950	Sept. 12	1053	270	64	1483
Thrashing machine. Flax	D. C. Chipman	491,237	Feb. 7	287	72	62	803
Thrashing-machine flax-thrashing attachment	A. Gilmore	502,356	Aug. 1	180	42	64	599
Thrashing machine self-feeder	J. Juel	507,438	Oct. 24	2799	685	65	565
Thrashing-machine separator attachment	R. Keeling	498,123	May 23	2787	697	63	1166
Thread cabinet	F. A. Goodridge	498,784	June 6	52	11	63	1398
Thread case	S. H. Boone	492,658	Feb. 28	2556	632	62	1306
Thread cutter and holder	E. B. Look	495,500	Apr. 18	1577	397	63	330
Thread guide	G. Singleton	507,561	Oct. 31	3017	741	65	618
Thread holder and cutter	E. C. Jenkins	491,260	Feb. 7	317	80	62	809
Thread holder and cutter. Combined	E. C. Jenkins	491,262	Feb. 7	319	81	62	810
Thread-holding cabinet	H. S. Luster	495,351	Apr. 11	1331	333	63	264
Thread-unwinder	C. H. Cowan	508,166	Nov. 7	307	76	65	815
Throw-out	J. F. Guthrie, Jr.	489,530	Jan. 10	861	224	62	195
Thrust-block. Shaft	W. C. and J. A. Paul	491,584	Feb. 14	855	216	62	935
Ticket	C. S. Smith	509,961	Dec. 5	190	45	65	1445
Ticket-case	C. C. Partridge	508,046	Nov. 7	98	28	65	777
Ticket-controlling apparatus	L. J., H. C., and J. H. Hunter	493,931	Mar. 21	1866	476	62	1752
Ticket-controlling machine	L. J. and H. C. Hunter	510,428	Dec. 12	966	231	65	1607
Ticket-holder	G. J. Borgström	493,473	Mar. 14	1105	284	62	1589
Ticket-holder	P. W. Casler	489,627	Jan. 10	992	259	62	221
Ticket-holder	F. H. and W. E. Haskell	501,652	July 18	1780	443	64	356
Ticket-holder	W. B. Moore and G. B. Willett	493,511	Mar. 14	1166	298	62	1600

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Ticket-holder and bill-file. Reversible	F. J. Howell	497,960	May 23	2539	634	63	1121
Ticket holder. Railway	A. M. Lawrence	505,773	Sept. 26	2463	621	64	1772
Ticket-holding device	J. W. Crook	489,069	Jan. 3	132	36	62	33
Ticket. Railway	B. B. Anderson	492,601	Feb. 28	2463	612	62	1289
Ticket-safe and match-holder	T. Martin	503,974	Aug. 29	2854	717	64	1153
Ticket stamping and cutting machine	R. Busek	500,797	July 4	424	111	64	78
Ticket, transfer, and receipt controller	L. J., H. C., and J. H. Hunter	494,001	Mar. 21	1998	509	62	1778
Tie:							
<i>See</i> Bag-tie. Railway-tie.							
Bale-tie. Railway cross-tie.							
Cross-tie. Railway-rail tie.							
Metal tie. Railway-track tie.							
Metallic tie. Umbrella-tie.							
Tie-holder	F. Heavenner	492,202	Feb. 21	1814	454	62	1143
Tie-plate. Brace	E. Samuel	503,806	Aug. 22	2592	647	64	1085
Tights. Equestrienne	J. H. Pike	504,402	Sept. 5	142	37, 38	64	1297
Tie	M. Kaestner	502,725	Aug. 8	829	201	64	764
Tie	C. K. Lamb	499,743	June 20	1663	400	63	1708
Tie construction for walls, arches, &c.	J. A. Flint	497,234	May 9	1939	341	63	879
Tie construction. Illuminating	H. Haustein	505,044	Sept. 12	1211	312	64	1512
Tie-dressing machine	I. Broome	509,868	Dec. 5	26	6, 7	65	1415
Tie-fastener	A. M. Strusholm	492,996	Mar. 7	353	89	62	1429
Tie-fastener	A. M. Strusholm	496,544	May 2	240	63	63	662
Tie-frame	G. H. Holliday and D. A. Brawley	503,369	Aug. 15	1897	470	64	941
Tie. Gutter	G. A. Bedgood	494,620	Apr. 4	153	36	63	31
Tie. Illuminating	D. G. Beeching	510,831	Dec. 12	1682	418	65	1739
Tie. Illuminating	H. Haustein	492,865	Mar. 7	150	36	62	1388
Tie. Illuminating	H. Haustein	509,030	Nov. 21	1711	422	65	1110
Tie. Illuminating	J. Jacobs	493,550	Mar. 14	1236	316	62	1615
Tie-machine	F. Goodfellow	490,110	Jan. 17	1777	463	62	395
Tie machine and cutter	J. Fernald	493,077	Mar. 7	471	119	62	1452
Tie machine. Ridge or gutter	W. Ludowici	493,366	Mar. 14	943	242	62	1559
Tie. Metallic roofing	A. A. Spahmer, Jr.	503,173	Aug. 15	1571	387	64	883
Tie or brick machine	E. M. Freese	496,779	May 2	616	165	63	729
Tie. Roofing	F. Andreu	497,161	May 9	1238	315	63	859
Tie. Roofing	A. M. Cheeseman	511,506	Dec. 26	2870	696	65	1982
Tie. Roofing	A. M. Cheeseman	511,507	Dec. 26	2871	696	65	1983
Tie. Roofing	A. M. Cheeseman	511,683	Dec. 26	3156	771	65	2034
Tie. Roofing	C. W. E. Wutke	491,625	Feb. 14	928	233	62	949
Tie. Sheet-metal bulbous roofing	J. White	511,387	Dec. 26	2683	650	65	1948
Tiles and brick. Apparatus for burning	W. Whitesell	510,458	Dec. 12	1024	244	65	1618
Tiles. Apparatus for ornamenting architectural	I. Broome	493,244	Mar. 14	739	189	62	1521
Tiles. Frame for illuminating	H. Haustein	501,008	July 4	745	195	64	135
Till-alarm	P. Ziegler	502,945	Aug. 8	1197	295	64	801
Till-lock	E. O. Wood	507,957	Oct. 31	3677	913	65	741
Tilling-machine	J. Dages and W. F. Wagner	503,696	Aug. 22	2425	604	64	1052
Tilting gate. Portable	A. Snyder	505,375	Sept. 19	1746	453	64	1624
Timber-hangers. Machine for making metal	H. P. K. Peck and W. McPherson	498,960	June 6	372	89, 90	63	1457
Timber. Preserving	P. Murray	495,991	Apr. 25	2342		63	481
Timber-preserving apparatus	H. F. Eckert	509,724	Nov. 28	2914	705	65	1349
Time-alarm. Electric	C. S. Gibson	498,710	May 30	3785	934	63	1356
Time-alarm. Electric	J. P. Tirrell	489,423	Jan. 3	671	181	62	144
Time apparatus. Automatic intermittent hydraulic	J. F. Franke	511,075	Dec. 19	2134	527	65	1833
Time-detector. Watchman's	O. E. Hausburg	489,532	Jan. 10	863	226	62	195
Time-detector. Watchman's	C. Weinedel	510,745	Dec. 12	1531	380	65	1712
Time-indicating apparatus. Electrical	E. Weston	490,698	Jan. 31	2758	710	62	615
Time-lock	I. G. Blake	504,427	Sept. 5	190	49	64	1306
Time-lock	G. J. H. Goehler	493,862	Mar. 21	1758	447	62	1732
Time-lock	E. S. Phelps. (Reissue)	11,355	Aug. 8	1464	360	64	849
Time-lock	N. B. Rees	493,115	Mar. 7	534	133	62	1464
Time-lock	E. B. Woodward	496,241	Apr. 25	2725	682	63	553
Time-meter. Electric-current	H. H. Pattee	498,021	May 23	2632	658	63	1138
Time-meter. Electric-current	H. H. Pattee	498,022	May 23	2636	659	63	1138
Timepiece-balances. Manufacture of	G. E. Hunter	490,204	Jan. 17	1936	508	62	426
Timepiece-escapement	J. H. Langhorst	504,223	Aug. 29	3261	813	64	1228
Timepiece-hands. Tool for removing	C. G. Ingalls	507,817	Oct. 31	3451	847	65	700
Timepiece repeating mechanism	H. Audemars and H. Sandoz-Sandoz	494,727	Apr. 4	315	79, 80	63	63
Timepiece repeating mechanism	F. Terstegen	502,917	Aug. 8	1138	281	64	791
Timepiece repeating mechanism	F. Terstegen	502,918	Aug. 8	1145	281	64	792
Timepieces. Compensation-balance for	J. Bliss	492,184	Feb. 21	1790	447	62	1138
Time-recorder. Automatic	I. N. Lewis	507,585	Oct. 31	3072	751	65	627
Time-recorder. Electric	C. E. Ongley	505,062	Sept. 12	1241	319	64	1518
Time-recorder. Watchman's	H. Fecht	506,988	Oct. 17	2009	496	65	406
Time-recorder. Workman's	H. D. Bennett	506,410	Oct. 10	1067	265	65	216
Time-recorder. Workman's	F. H. Bolte	491,978	Feb. 21	1470	366	62	1072
Time-recorder. Workman's	S. A. Dean	502,226	July 25	2705	682	64	540
Time-recorder. Workman's	G. W. Heene	491,556	Feb. 14	815	206	62	926
Time-recorder. Workman's	G. W. Heene	491,557	Feb. 14	816	207	62	926
Time-recorder. Workman's	G. W. McAninch	510,811	Dec. 12	1641	408	65	1732
Time-recorder. Workman's	C. Ruprecht	496,005	Apr. 25	2362	597	63	485

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Time-recorder. Workman's	G. F. Sage	500,037	June 20	2138	518	63	1792
Time-recorder. Workman's	M. M. Zellers	508,461	Nov. 14	762	193	65	918
Time-recording apparatus. Workman's	M. Martin	503,430	Aug. 15	1977	491	64	955
Time-signal. Electric	G. W. Van Vianen	499,062	June 6	555	131	63	1488
Time-switch. Electric	J. F. McLaughlin	501,291	July 11	1200	303	64	233
Time system. Electric	W. F. Gardner	490,744	Jan. 31	2832	727	62	628
Tin andterne plates. Apparatus for coating	T. H. Griffiths	510,173	Dec. 5	553	128	65	1515
Tin can	W. Haaker	503,265	Aug. 15	1716	423	64	909
Tin cans. Blank for the manufacture of	W. J. Phelps	495,706	Apr. 18	1909	481	63	385
Tin from iron or steel. Separating	T. Twynam	491,254	Feb. 7	308	62	608	
Tin from solutions. Precipitating oxide of	C. L. C. Bertou	489,624	Jan. 10	989	62	221	
Tin or its alloys. Apparatus for purification of molten	D. Owen	504,238	Aug. 29	3286	821	64	1232
Tin orterne plates. Apparatus used in the manufacture of	J. H. Rogers	496,487	May 2	145	40 41 42	63	645
Tin pan	J. Hillson	501,248	July 11	1136	288 289	64	222
Tin-plate and coating sheet metal. Apparatus for the manufacture of	W. F. Niedringhaus	505,171	Sept. 19	1424	367	64	1565
Tin-plate. Apparatus for the manufacture of	D. Edwards	495,696	Apr. 18	1887	473 474 475	63	382
Tin-plate. Manufacturing	F. Rudolph	492,588	Feb. 28	2436	62	1283	
Tin-plating. Electro	L. Aronson	497,621	May 16	1994	63	1009	
Tinner's stake	F. W. Hinsey	506,234	Oct. 10	764	188	65	156
Tinning-machine	E. Norton and J. G. Hodgson	500,718	July 4	298	81	64	55
Tinsmith's tool	M. B. Potts	506,935	Oct. 17	1933	478	65	391
Tire	A. Ducasble	506,424	Oct. 10	1095	272	65	221
Tire	S. Green	504,032	Aug. 29	2948	738	64	1169
Tire. Air-cushion	J. P. Lavigne	490,827	Jan. 31	2959	760	62	654
Tire and device for inflating same. Pneumatic	T. B. Jeffery	502,003	July 25	2339	566	64	470
Tire. Bicycle	F. W. Huestis	508,943	Nov. 21	1583	388	65	1084
Tire. Bicycle	J. P. Lavigne	490,828	Jan. 31	2961	760	62	655
Tire. Bicycle	J. P. Lavigne	490,830	Jan. 31	2964	761	62	655
Tire. Bicycle	J. P. Lavigne	506,179	Oct. 3	615	158	65	119
Tire. Bicycle	C. E. Luburg	505,530	Sept. 26	2035	519	64	1692
Tire. Bicycle	H. S. Owen	497,965	May 23	2542	635	63	1122
Tire. Bicycle	E. F. Ryder	493,650	Mar. 21	1413	358	62	1665
Tire. Bicycle	F. White	508,456	Nov. 14	775	191	65	916
Tire. Bicycle	O. L. Wullweber	501,239	July 11	1121	285	64	219
Tire. Bicycle	J. A. Wright	502,390	Aug. 1	236	56	64	609
Tire. Bicycle-wheel	J. J. McComish	489,975	Jan. 17	1545	404	62	348
Tire. Carriage-wheel	G. W. Bryan	502,808	Aug. 8	959	233	64	757
Tire-clamp	J. W. Angier	504,017	Aug. 29	2926	733	64	1165
Tire cover. Pneumatic	O. D. Shank	496,909	May 9	858	226	63	792
Tire. Cushion	W. Langmuir	490,714	Jan. 31	2784	715	62	620
Tire. Cushion	W. Langmuir	502,731	Aug. 8	835	202	64	734
Tire. Cycle	L. K. Siggins	497,830	May 23	2324	583	63	1084
Tire. Cycle	A. Straus	491,386	Feb. 7	543	138	62	852
Tire. Cycle-wheel	F. Sweetland	489,509	Jan. 10	830	217	62	189
Tire. Detachable	A. C. Gillette	503,846	Aug. 22	2645	663	64	1096
Tire. Elastic	W. J. Coe	495,218	Apr. 11	1118	279	63	225
Tire. Elastic	A. Hunter	496,361	Apr. 25	2935	733	63	593
Tire-fastener	E. J. Griffiths and J. G. Miller	497,766	May 23	2261	567	63	1074
Tire fastening. Bicycle	J. L. Yost	510,307	Dec. 5	778	189	65	1557
Tire fastening device. Pneumatic	J. S. Smith, C. J. and G. E. Tate	504,284	Aug. 29	3357	839	64	1247
Tire. Flexible	A. and H. Normanton	496,949	May 9	913	239	63	802
Tire. Flexible wheel	E. H. Seddon	508,991	Nov. 21	1651	407	65	1099
Tire for bicycles. Self-holding	J. P. Lavigne	490,829	Jan. 31	2963	761	62	655
Tire for vehicle-wheels. Elastic	G. Hancock	511,733	Dec. 26	3234	793	65	2049
Tire for velocipedes. Pneumatic	R. W. Huss	490,658	Jan. 31	2696	694	62	603
Tire-heater	J. W. Higgason	497,875	May 23	2406	600	63	1099
Tire-heater	L. E. Karnes and K. F. Rice	489,436	Jan. 3	701	187	62	150
Tire-heater	T. J. Skinner	489,042	Jan. 3	97	27	62	24
Tire-inflating device	J. F. Cranston	499,659	June 13	1522	366	63	1670
Tire inflator. Pneumatic	S. H. Ellis	490,620	Jan. 24	2609	672	62	571
Tire. Pneumatic	E. Barrett	493,675	Mar. 21	1454	371	62	1673
Tire. Pneumatic	P. Bouéry	495,777	Apr. 18	2023	511	63	407
Tire. Pneumatic	H. B. Boyd	500,468	June 27	2847	701	63	1929
Tire. Pneumatic	G. F. Callaghan	503,560	Aug. 15	2191	547	64	994
Tire. Pneumatic	W. S. Callaghan	496,336	Apr. 25	2883	720	63	583
Tire. Pneumatic	C. Carey	509,193	Nov. 21	1991	484	65	1165
Tire. Pneumatic	H. Comstock	491,010	Jan. 31	3262	833	62	712
Tire. Pneumatic	D. Dobbins and R. McKenney	504,468	Sept. 5	254	66	64	1317
Tire. Pneumatic	F. Douglas	496,642	May 2	399	108	63	692
Tire. Pneumatic	C. E. Duryea	493,488	Mar. 14	1130	289 290	62	1594
Tire. Pneumatic	S. Elliott	489,295	Jan. 3	478	132	62	104
Tire. Pneumatic	W. C. Fisher	498,777	June 6	42	9	63	1396
Tire. Pneumatic	T. D. Glen, W. Furvis, and S. Smith	503,660	Aug. 22	2366	590	64	1041
Tire. Pneumatic	C. H. Gray	491,479	Feb. 7	686	172	62	880
Tire. Pneumatic	W. W. Greenwood	503,594	Aug. 22	2257	565	64	1021
Tire. Pneumatic	R. R. Gubbins	510,019	Dec. 5	307	69	65	1468
Tire. Pneumatic	C. E. Hadley	492,580	Feb. 28	2426	604	62	1282
Tire. Pneumatic	F. W. Hardwick	501,716	July 18	1886	469	64	374
Tire. Pneumatic	I. W. Heysinger	500,205	June 27	2444	596	63	1857
Tire. Pneumatic	L. Holt	497,575	May 16	1924	484	63	996
Tire. Pneumatic	L. Holt	509,164	Nov. 21	1939	474	65	1154
Tire. Pneumatic	L. Holt	509,903	Dec. 5	102	23	65	1429
Tire. Pneumatic	L. Holt	509,904	Dec. 5	103	23	65	1429
Tire. Pneumatic	F. W. Huestis	498,794	June 6	71	17	63	1401

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Tire. Pneumatic	R. W. Huss	495,974	Apr. 25	2316	585	63	476
Tire. Pneumatic	R. W. Huss	495,975	Apr. 25	2318	585 586	63	477
Tire. Pneumatic	R. W. Huss	500,658	July 4	203	53	64	40
Tire. Pneumatic	R. W. Huss	502,002	July 25	2337	586	64	470
Tire. Pneumatic	J. Iddon	511,698	Dec. 26	3176	777	65	2038
Tire. Pneumatic	F. H. Irons	494,003	Mar. 21	2004	510	62	1779
Tire. Pneumatic	J. D. Keating	494,575	Apr. 4	77	18	63	16
Tire. Pneumatic	W. C. Kepler and F. A. Wegner	506,594	Oct. 10	1365	342	65	274
Tire. Pneumatic	J. A. Kirk and J. E. Hosford	508,621	Nov. 14	1047	258	65	969
Tire. Pneumatic	J. G. A. Kitchen	508,724	Nov. 14	1200	298	65	999
Tire. Pneumatic	G. V. G. Lapsolu	496,571	May 2	283	76	63	671
Tire. Pneumatic	A. A. Long	505,919	Oct. 3	186	46	65	36
Tire. Pneumatic	C. M. Lungren	493,554	Mar. 14	1254	321	62	1618
Tire. Pneumatic	F. H. Mason	503,724	Aug. 22	2469	614	64	1061
Tire. Pneumatic	E. Michelin	497,453	May 16	1730	436	63	962
Tire. Pneumatic	E. J. Miles	511,207	Dec. 19	2356	575	65	1875
Tire. Pneumatic	J. G. Moomy	501,290	July 11	1199	303	64	233
Tire. Pneumatic	F. W. Morgan and R. Wright	496,789	May 2	634	169 170	63	732
Tire. Pneumatic	F. W. Morgan and R. Wright	502,047	July 25	2417	608 609	64	484
Tire. Pneumatic	F. W. Morgan and R. Wright	502,048	July 25	2419	609	64	484
Tire. Pneumatic	A. P. Morrow	507,325	Oct. 24	2614	643	65	528
Tire. Pneumatic	C. H. Pagett	499,574	June 13	1395	333	63	1648
Tire. Pneumatic	C. F. Pease	508,746	Nov. 14	1232	307	65	1006
Tire. Pneumatic	L. J. Phelps	499,174	June 6	727	173	63	1516
Tire. Pneumatic	G. Pickel	500,944	July 4	631	167	64	116
Tire. Pneumatic	A. J. Rosentreter	506,550	Oct. 10	1302	325	65	261
Tire. Pneumatic	W. Sherbondy	499,600	June 13	1433	343	63	1656
Tire. Pneumatic	D. H. Smith	491,296	Feb. 7	393	101	62	822
Tire. Pneumatic	J. S. Smith	505,255	Sept. 19	1548	404	64	1588
Tire. Pneumatic	F. H. Sprang	504,793	Sept. 12	799	203	64	1433
Tire. Pneumatic	S. H. Stubbs	508,996	Nov. 21	1660	409	65	1101
Tire. Pneumatic	P. W. Tillinghast	497,971	May 23	2554	637	63	1124
Tire. Pneumatic	F. Veith	509,978	Dec. 5	228	53	65	1453
Tire. Pneumatic	C. F. Warner	500,639	July 4	163	43	64	33
Tire. Pneumatic	W. A. Warren	491,620	Feb. 14	923	232	62	948
Tire. Pneumatic	W. A. Warren	509,107	Nov. 21	1856	454	65	1138
Tire. Pneumatic	C. K. Welch	494,611	Apr. 4	139	32	63	29
Tire. Pneumatic	T. J. Williams	504,144	Aug. 29	3127	782	64	1203
Tire. Pneumatic wheel	O. F. Persson	503,565	Aug. 15	2196	548	64	995
Tire. Pneumatic wheel	J. B. Rathbun	504,135	Aug. 29	3112	779	64	1200
Tire. Pneumatic wheel	E. Siltberg	497,831	May 23	2325	583	63	1085
Tire-protector	M. H. Lothrop	509,925	Dec. 5	130	30	65	1434
Tire pump. Pneumatic	F. Veith	504,853	Sept. 12	901	232	64	1454
Tire rivet. Vehicle	E. Turney	497,222	May 9	1322	336	63	875
Tire. Rubber	T. S. Buck and B. G. Volger	508,466	Nov. 14	794	196	65	920
Tire. Rubber	W. Golding	493,160	Mar. 7	604	151 152	62	1478
Tire. Self-healing pneumatic	J. R. Morris	496,527	May 2	210	56	63	657
Tire. Self-healing pneumatic	J. R. Morris	496,528	May 2	212	56	63	657
Tire-setter. Hydrostatic	C. L. Grimes. (Reissue)	11,307	Feb. 7	739	187	62	891
Tire-setting apparatus	P. O'Brien	503,435	Aug. 15	1986	492 493	64	957
Tire-shrinker	W. Lehmer	490,751	Jan. 31	2845	730	62	630
Tire-tightener	J. A. Ashford	498,756	June 6	6	2	63	1390
Tire-tightener	A. B. Bowen	495,541	Apr. 18	1641	412	63	341
Tire-tightener	J. N. Cuthbertson	494,507	Mar. 28	2826	709	62	1946
Tire-tightener	E. Fischer	510,473	Dec. 12	1048	251	65	1623
Tire-tightener	M. J. Fitzgerald	492,667	Feb. 28	2569	636	62	1308
Tire-tightener	W. D. Hills	494,334	Mar. 28	2553	643	62	1896
Tire-tightener	C. Vantrees	498,415	May 30	3270	815	63	1267
Tire-tightener	W. J. Young	489,404	Jan. 3	640	173	62	135
Tire-tongs	T. L. Weakly	497,227	May 9	1329	338	63	876
Tire-upsetter	C. H. Cool	508,372	Nov. 7	640	157	65	876
Tire valve. Pneumatic	W. A. Gray	490,904	Jan. 31	3098	794	62	681
Tire valve. Pneumatic	A. M. Shurtleff	494,088	Mar. 21	2138	547	62	1804
Tire valve. Pneumatic	A. M. Shurtleff	494,089	Mar. 21	2140	547	62	1804
Tire valve. Pneumatic	C. K. Welch	503,300	Aug. 15	1776	438 439	64	919
Tire. Valved pneumatic	F. W. Morgan and R. Wright	507,026	Oct. 17	2068	511	65	417
Tire. Vehicle	W. Langmuir	496,418	May 2	41	12	63	626
Tire. Vehicle	F. D. Owen	507,090	Oct. 17	2176	539	65	435
Tire. Vehicle	A. E. Spangler	504,819	Sept. 12	846	217	64	1442
Tire. Vehicle	A. E. Spangler	505,929	Oct. 3	197	50	65	39
Tire. Vehicle	G. F. Stillman	495,277	Apr. 11	1224	306	63	244
Tire. Velocipede-wheel	G. D. Chamberlain	490,425	Jan. 24	2299	597	62	509
Tire. Wagon	C. Zimmermann	493,143	Mar. 7	579	145	62	1473
Tire. Wheel	C. A. Gildemeyer	508,610	Nov. 14	1035	255	65	966
Tire. Wheel	E. H. Grenet	501,588	July 18	1673	417	64	337
Tire. Wheel	R. R. Gubbins	508,306	Nov. 7	536	132	65	857
Tire. Wheel	A. A. and H. C. Kupfer	508,173	Nov. 7	316	79	65	817
Tire. Wheel	C. F. Lavender	503,704	Aug. 22	2436	607	64	1054
Tire. Wheel	H. A. Lozier	498,667	May 30	3700	914	63	1342
Tire. Wheel	H. Myers	502,741	Aug. 8	847	206	64	736
Tire. Wheel	F. D. Owen	507,089	Oct. 17	2173	538 539	65	435
Tire. Wheel	J. T. Smith	501,967	July 25	2289	573	64	458
Tire. Wheel	F. G. Taylor	496,671	May 2	448	121	63	701
Tire. Wheel	F. W. Tucker	497,995	May 23	2591	648	63	1131
Tire. Wheel	C. W. Van Houten	501,386	July 11	1377	344	64	264
Tire. Wheel	C. Wynn	494,947	Apr. 4	655	169	63	126
Tires. Air-valve for pneumatic	W. K. Genet	511,693	Dec. 26	3170	775	65	2037
Tires. Apparatus for manufacturing pneumatic	C. K. Welch	497,464	May 16	1747	440	63	964

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Tires. Automatic inflating device for rubber.....	R. M. Keating.....	491,563	Feb. 14	824	209	62	928
Tires. Clip for holding wheel.....	H. H. Stevens.....	504,117	Aug. 29	3083	772	64	1196
Tires. Combined pressure-gage and safety-valve for pneumatic.....	J. A. and H. A. Lamplugh.....	511,706	Dec. 26	3187	780	65	2040
Tires. Cover for pneumatic.....	O. Toomay.....	499,859	June 20	1868	454	63	1743
Tires. Device for mending pneumatic.....	H. H. Cummings and R. Cowen.....	495,454	Apr. 11	1497	376	63	295
Tires. Inflating device for pneumatic.....	H. H. Johnson.....	507,224	Oct. 24	2440	602	63	495
Tires. Inflating-tube for pneumatic.....	J. B. Rathbun.....	509,097	Nov. 21	1841	450	65	1135
Tires. Mandrel for pneumatic.....	F. W. Morgan and R. Wright.....	496,321	Apr. 25	2860	713	63	579
Tires. Manufacture of pneumatic.....	F. W. Morgan and R. Wright.....	490,035	Jan. 17	1659	{ 431 432 }	62	370
Tires. Means for repairing cycle.....	F. M. Hamman.....	496,359	Apr. 25	2933	732	63	593
Tires. Repairing pneumatic.....	R. Cowen.....	497,634	May 16	2016	502	63	1012
Tires. Repairing pneumatic.....	J. J. Williams.....	503,636	Aug. 22	2334	{ 581 582 }	64	1034
Tires. Repairing-tool for pneumatic.....	C. E. W. Woodward.....	510,664	Dec. 12	1404	345	65	1687
Tires to wheel-rims. Device for securing.....	A. Coningsby.....	510,382	Dec. 5	884	213	65	1578
Tires. Valve for pneumatic.....	F. W. Hardwick.....	501,715	July 18	1885	469	64	374
Tires. Valve for pneumatic.....	E. J. Vauzelle.....	510,215	Dec. 5	633	149	65	1529
Tires. Woven fabric for wheel.....	J. Lyall.....	504,883	Sept. 12	944	244	64	1462
Tires. Woven fabric for wheel.....	J. Lyall.....	505,294	Sept. 19	1626	420	64	1603
Tires. Woven fabric for wheel.....	J. Lyall.....	505,949	Oct. 3	225	58, 59	65	44
Toaster.....	H. Bitner.....	492,517	Feb. 28	2328	578	62	1259
Toaster. Bread.....	E. Leslie.....	509,916	Dec. 5	119	27	65	1432
Toasting iron or tongs.....	F. A. M. Westheimer.....	489,056	Jan. 3	116	31	62	29
Tobacco and packing box.....	C. E. Speaker.....	502,836	Aug. 8	1011	246	64	767
Tobacco-box-clamping machine.....	J. H. Kester.....	494,004	Mar. 21	2005	{ 510 511 }	62	1779
Tobacco-case.....	W. De Haven.....	503,717	Aug. 22	2458	612	64	1059
Tobacco casing and spraying machine.....	R. T. Bass.....	490,262	Jan. 24	2034	{ 532 533 }	62	458
Tobacco. Curing.....	S. E. Haskin.....	497,572	May 16	1920	.....	63	995
Tobacco-curing furnace.....	S. P. Phelps.....	498,858	June 6	190	46, 47	63	1426
Tobacco-curing rack.....	J. R. Brown.....	505,874	Oct. 3	112	28	65	53
Tobacco-cutter.....	A. B. Cosby.....	510,895	Dec. 19	1833	453	65	1777
Tobacco-cutter.....	A. Stuart, Jr.....	489,108	Jan. 3	197	53	62	46
Tobacco cutting and sifting machine.....	L. C. Josselin.....	506,117	Oct. 3	491	{ 127 128 }	65	96
Tobacco-cutting machine.....	J. B. Adt.....	498,454	May 30	3341	{ 831 832 }	63	1280
Tobacco-cutting machine.....	R. S. Reno.....	497,008	May 9	1000	257	63	816
Tobacco dressing and feeding device.....	W. J. Payne.....	493,181	Mar. 7	635	{ 161 162 }	62	1483
Tobacco dressing and feeding machine.....	H. Bohls.....	493,148	Mar. 7	585	{ 146 147 }	62	1474
Tobacco drying, cooling, and ordering apparatus.....	S. P. Mayo and G. A. Peple.....	497,586	May 16	1938	487	63	998
Tobacco-elevator.....	B. F. Vanlandingham.....	495,763	Apr. 18	1995	505	63	402
Tobacco-flavoring machine.....	J. M. King.....	494,960	Apr. 4	677	174	63	130
Tobacco form. Plug.....	E. A. Hancock, E. E. Lovelace, and T. F. Lawless.....	489,900	Jan. 10	1404	363	62	304
Tobacco-frame.....	J. S. Ford and C. F. Westerfield.....	507,797	Oct. 31	3413	837	65	692
Tobacco-hanger.....	J. M. Campbell.....	490,224	Jan. 17	1969	516	62	433
Tobacco-hiller.....	A. F. Bowman, C. H. Ohmart, and A. A. Allen.....	494,621	Apr. 4	154	36	63	32
Tobacco into packets. Machinery for making up....	W. Rose.....	502,637	Aug. 1	647	{ 155 156 157 158 159 }	64	686
Tobacco-leaf stripping and stemming machine.....	G. W. Cable.....	491,871	Feb. 14	1306	{ 322 323 324 }	62	1025
Tobacco. Machine for applying labels to plug.....	D. J. Burr.....	493,476	Mar. 14	1112	{ 285 286 }	62	1590
Tobacco. Machine for clamping and holding boxes containing plug.....	J. H. Kester.....	505,881	Oct. 3	128	33	65	26
Tobacco-moistener.....	W. C. Sheldon.....	501,371	July 11	1353	337	64	259
Tobacco, &c. Packing leaf.....	T. Gibon.....	496,221	Apr. 25	2693	{ 675 676 }	63	547
Tobacco-pail attachment.....	W. H. A. Godfrey.....	496,477	May 2	134	37	63	643
Tobacco-pipe.....	C. S. Bailey.....	493,325	Mar. 14	883	225	62	1546
Tobacco-pipe.....	W. F. Bennett.....	496,769	May 2	597	160	63	726
Tobacco-pipe.....	F. O. Chorley.....	493,150	Mar. 7	589	148	62	1475
Tobacco-pipe.....	W. Demuth.....	491,409	Feb. 7	576	145	62	858
Tobacco-pipe.....	J. Jaque.....	505,202	Sept. 19	1474	384	64	1574
Tobacco-pipe.....	F. J. Kaldenberg.....	493,032	Mar. 7	410	102	62	1439
Tobacco-pipe.....	S. D. Mott.....	495,258	Apr. 11	1191	299	63	239
Tobacco-pipe.....	T. C. Orndorff.....	507,241	Oct. 24	2467	608	65	500
Tobacco-pipe.....	A. Reuss.....	501,808	July 18	2039	502	64	400
Tobacco-pipe.....	O. Schroeder.....	501,302	July 11	1216	308	64	236
Tobacco-pipe.....	S. Shields.....	497,351	May 16	1574	395	63	934
Tobacco-pipe.....	A. G. Stockton.....	496,070	Apr. 25	2467	623	63	504
Tobacco-pipe.....	A. Werner.....	507,951	Oct. 31	3667	908	65	739
Tobacco-pipe cap.....	A. T. Harper.....	499,384	June 13	1070	260	63	1592
Tobacco-pliers.....	M. B. Hatcher.....	499,539	June 13	1338	317	63	1639
Tobacco-press.....	T. Hill.....	489,741	Jan. 10	1165	{ 302 303 }	62	256
Tobacco shaper. Plug.....	R. M. Vaughan.....	501,749	July 18	1943	480	64	384
Tobacco-stem-flattening device.....	I. W. G. Wierman.....	497,437	May 16	1706	431	63	958
Tobacco-stemming machine.....	J. C. Guerrant.....	494,254	Mar. 28	2423	611	62	1871
Tobacco stripping and booking machine.....	J. R. Williams.....	500,647	July 4	176	{ 45 46 47 }	64	35
Tobacco stripping and booking machine. Leaf.....	C. Bowman.....	504,799	Sept. 12	806	205	64	1434
Tobacco-tagging machine.....	J. M. King.....	494,396	Mar. 28	2490	628	62	1883

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Tobacco-wringing machine.	A. B. Cosby	501,328	July 11	1266	317	64	243
Toe. Box.	J. W. Packard	503,614	Aug. 22	2302	574	64	1029
Toe-weight.	J. Buechner	503,404	Aug. 15	1940	482	64	949
Toe-weight.	J. H. Hodgkins.	498,955	June 6	362	87	63	1456
Toe-weight.	J. D. Keller	503,089	Aug. 8	1417	349	64	841
Toilet article. Combined	C. J. Kintner	497,451	May 16	1728	436	63	961
Toilet-glass.	O. Lundershausen	510,076	Dec. 5	398	88	65	1485
Toilet-powder case.	C. P. Thomas	498,412	May 30	3266	814	63	1266
Tongs	H. Aiken	498,498	May 30	3415	847 848	63	1292
Tongs	P. T. Berg	499,702	June 20	1590	354	63	1696
Tongs.	I. W. Cox	507,973	Oct. 31	3700	919	65	745
Tongs.	J. F. Lundahl	510,037	Dec. 5	334	74	65	1472
Tongs	T. Smith	490,510	Jan. 24	2440	629	62	538
Tongs and wrench. Pipe.	H. Hammond	492,199	Feb. 21	1810	452 453	62	1142
Tongs for drawing skelps	W. McCracken	508,738	Nov. 14	1221	304	65	1004
Tongs. Laundry.	T. Eagan	506,479	Oct. 10	1198	298	65	241
Tongs. Pipe.	H. Alexander	508,591	Nov. 14	1008	248	65	961
Tongs. Pipe.	R. C. Jones	497,797	May 23	2274	571	63	1076
Tongs. Pipe.	P. Paulus	506,372	Oct. 10	995	247	65	201
Tongs. Roofer's seaming.	W. L. Heberling	501,509	July 18	1553	390 391	64	313
Tongs. Sliding friction.	C. W. Canfield	491,872	Feb. 14	1311	324	62	1026
Tongue attachment. Wagon.	S. Norton	507,076	Oct. 17	2151	533	65	431
Tongue-depressor and throat-illuminator	G. Nithack	510,516	Dec. 12	1113	269	65	1635
Tongue. Sled.	J. J. Naset	509,820	Nov. 28	3074	743	65	1381
Tongue-support.	H. Barber	493,470	Mar. 14	1101	282	62	1589
Tongue-support.	D. C. Emerson	503,905	Aug. 15	1619	397	64	892
Tongue-support.	J. S. Faulkner	510,249	Dec. 5	683	163	65	1539
Tongue-support.	O. M. Mosher	501,466	July 11	1484	373	64	285
Tongue-support.	W. H. Watts, Jr	509,060	Nov. 21	1755	433	65	1119
Tongue-support.	E. R. Williamson	504,143	Aug. 29	3126	782	64	1203
Tongue-support.	D. H. Young	510,560	Dec. 12	1218	295	65	1653
Tongue-support. Grain-binder	S. Potts	507,591	Oct. 31	3083	753	65	629
Tongue support. Vehicle.	J. Johnson	507,136	Oct. 24	2283	560	65	467
Tongue support. Vehicle.	J. McGinis	492,822	Mar. 7	80	19	62	1373
Tongue support. Wagon.	H. Barber	506,655	Oct. 17	1460	367	65	303
Tongue support. Wagon.	J. F. Tiner	510,728	Dec. 12	1501	371	65	1706
Tongue support. Wagon.	A. Tomlinson	506,567	Oct. 10	1327	332	65	266
Tongue switch.	E. Samuel	503,807	Aug. 22	2592	648	64	1085
Tongue. Vehicle.	W. A. Hanna	492,013	Feb. 21	1530	381	62	1084
Tongue. Wagon.	W. C. Dowling	506,986	Oct. 17	2007	496	65	405
Tongues, &c. Blank for vehicle.	R. R. Singer	507,176	Oct. 24	2351	580	65	480
Tool	C. A. Cutting	495,311	Apr. 11	1273	318	63	254
Tool and handle therefor. Multiple.	R. J. Christy	510,775	Dec. 12	1587	395	65	1722
Tool-box	W. J. Simpson	507,939	Oct. 31	3644	901	65	735
Tool. Catching and holding.	C. E. Griffith	491,642	Feb. 14	954	240	62	955
Tool. Catching and holding.	J. W. Jones	511,148	Dec. 19	2263	554	65	1858
Tool. Combination.	J. D. Barnett	500,551	July 4	22	8	64	6
Tool. Combination.	C. Becker	511,107	Dec. 19	2190	538	65	1845
Tool. Combination.	S. Colley	506,416	Oct. 10	1081	268	65	218
Tool. Combination.	E. C. Durand	496,300	Apr. 25	2818	705	63	571
Tool. Combination.	B. F. Field	491,840	Feb. 14	1255	312	62	1015
Tool. Combination.	W. C. Gilmer	492,532	Feb. 28	2349	583	62	1264
Tool. Combination.	F. W. Heinke	493,088	Mar. 7	492	123	62	1457
Tool. Combination.	A. Knudsen	502,259	July 25	2776	701	64	552
Tool. Combination.	G. Massey	510,981	Dec. 19	1996	493	65	1807
Tool. Combination.	W. H. Menehan	502,525	Aug. 1	471	113	64	653
Tool. Combination.	H. J. Mondor	491,715	Feb. 14	1064	269	62	978
Tool. Combination.	J. N. Parker	495,055	Apr. 11	821	207	63	172
Tool. Combination.	J. D. Patterson	489,390	Jan. 3	622	168	62	134
Tool. Combination.	W. Rankin	494,161	Mar. 28	2274	577	62	1843
Tool. Combination.	A. and F. J. Reinhold	491,189	Feb. 7	211	54	62	788
Tool. Combination.	C. C. Reynolds	489,875	Jan. 10	1350	352	62	295
Tool. Combination.	G. W. Weiss	503,182	Aug. 15	1585	390	64	886
Tool-driver	T. F. McLoughlin	492,693	Feb. 28	2601	644	62	1315
Tool-fastening	R. Douglas	502,708	Aug. 8	807	195	64	728
Tool for grasping and carrying hot utensils	A. H. Ristedt	497,287	May 9	1458	367	63	897
Tool-handle	W. S. Eaton	498,247	May 30	2993	746	63	1216
Tool-handle fastener	L. R. Ligier	511,087	Dec. 19	2159	532	65	1830
Tool-handles, &c. Fastening for	W. H. Thomas	502,107	July 25	2514	631	64	502
Tool-holder	G. Armstrong	492,381	Feb. 28	2098	523	62	1213
Tool-holder	H. E. Britton	509,851	Nov. 28	3129	756	65	1392
Tool-holder	A. A. Griffin	489,678	Jan. 10	1059	276	62	236
Tool-holder	J. Hope	502,039	July 25	2403	605	64	482
Tool-holder	J. C. Hunter	502,564	Aug. 1	528	126	64	663
Tool-holder	J. E. Low and M. Dahl	491,316	Feb. 7	423	110	62	827
Tool-holder	J. E. Low and M. Dahl	491,317	Feb. 7	425	110	62	828
Tool-holder	F. Obiols	511,057	Dec. 19	2101	520	65	1827
Tool-holder	H. V. Smith	501,110	July 11	930	238	64	184
Tool-holder	F. E. Youngs	500,834	July 4	483	126	64	88
Tool-holding box	G. H. Bartlett	498,455	May 30	3342	832 833 689 690	63	1280
Tool. Power-driven	F. H. Cathcart	494,461	Mar. 28	2747	690	62	1930
Tools to handles, &c. Means for uniting	D. Shields	492,474	Feb. 28	2247	561	62	1244
Tooth. Artificial	C. C. Durr	504,126	Aug. 29	3096	775	64	1198
Tooth. Artificial	M. J. F. Kneiff	501,429	July 11	1433	359	64	275
Tooth. Artificial	E. C. Merrill	495,898	Apr. 18	2207	556	63	440
Tooth. Artificial	J. M. Twilley	493,318	Mar. 14	875	222	62	1544
Tooth mold. Artificial.	W. T. Adams	488,976	Jan. 3	1	1	62	3
Tooth mold. Artificial.	R. Brewster	503,826	Aug. 22	2615	653	64	1090
Toothpicks. Machine for manufacturing wooden	J. C. F. Scammon	501,105	July 11	920	235	64	182

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Tooth plate. Artificial.	G. A. Jüterbock	494,065	Mar. 21	2102	535	62	1796
Tooth plate. Artificial.	J. C. Stapleton	494,393	Mar. 28	2654	665	62	1913
Tooth-powder box.	W. A. Spalding	493,528	Mar. 14	1201	307	62	1606
Tooth-roots. Device for measuring	A. I. F. Buxbaum	510,325	Dec. 5	799	193	65	1562
Top.	E. M. Southwick and F. J. Mohr	510,992	Dec. 19	2023	499	65	1811
Top. Flying	M. H. Jackson	507,010	Oct. 17	2047	506	65	413
Top-roll mechanism	F. Morin	506,641	Oct. 10	1430	358	65	286
Top. Spinning	J. L. Brown	501,321	July 11	1249	314 315	64	241
Top. Spinning.	N. McLaren	494,431	Mar. 28	2704	679	62	1923
Top. Spinning.	M. H. Travis	505,969	Oct. 3	259	69	65	51
Torch.	F. C. Rockwell	506,548	Oct. 10	1299	325	65	260
Torch. Fireworks.	T. M. Pierce	494,438	Mar. 28	2715	680	62	1925
Torch. Fireworks.	T. M. Pierce	494,439	Mar. 28	2716	680	62	1925
Torch. Fireworks.	T. M. Pierce	494,440	Mar. 28	2716	681	62	1925
Torch. Fireworks.	T. M. Pierce	494,488	Mar. 28	2787	699	62	1938
Torch. Fireworks.	T. M. Pierce	510,440	Dec. 12	987	236	65	1611
Torch. Plumber's	J. C. Walsh	489,513	Jan. 10	834	219	62	190
Torpedo	S. E. Mower and G. E. Haight	498,183	May 23	2873	717 718	63	1181
Torpedo-holder.	E. P. Turner	493,455	Mar. 14	1081	277	62	1585
Torpedo-placer.	G. E. Hopkins	499,116	June 6	635	153	63	1502
Torpedo-placing machine	C. A. Weller	489,054	Jan. 3	113	31	62	28
Torpedo. Railway.	E. G. Beckwith	501,399	July 11	1396	349	64	267
Torpedo. Submarine.	J. W. Graydon	502,294	Aug. 1	63	14	64	577
Towel-rack.	C. Schermerhorn	504,053	Aug. 29	2980	745	64	1175
Towel-supporter	A. J. McGinnis	507,833	Oct. 31	3482	856	65	705
Tower	K. L. Lehmann	489,963	Jan. 17	1524	399	62	344
Tower	K. L. Lehmann	489,964	Jan. 17	1525	399 400	62	344
Tower. Skeleton.	A. S. Baker	508,078	Nov. 7	159	45	65	788
Tows. Apparatus for indicating the position of	A. Peterson	493,113	Mar. 7	531	133	62	1464
Toy	N. Allen	497,159	May 9	1233	314	63	858
Toy	B. Casler	509,362	Nov. 28	2292	556	65	1232
Toy	H. Dominick, Jr	504,152	Aug. 29	3140	785	64	1205
Toy	C. S. Edwards	500,567	July 4	48	14	64	10
Toy	J. Evans	502,709	Aug. 8	808	195	64	728
Toy	J. G. Hunt	494,002	Mar. 21	2004	510	62	1779
Toy	J. M. Jones	507,911	Oct. 31	3601	888	65	726
Toy	E. F. and L. B. Kellum	511,084	Dec. 19	2154	530 531	65	1837
Toy	K. Knutson	506,435	Oct. 10	1116	277	65	225
Toy	W. H. Lamson	492,963	Mar. 7	303	76, 77	62	1419
Toy	J. D. Latimer	510,919	Dec. 19	1878	461	65	1786
Toy	A. Le Plongeon	502,101	July 25	2500	628	64	500
Toy	P. E. McDonnell	493,895	Mar. 21	1805	460	62	1741
Toy	C. L. Peirce	498,025	May 23	2642	660	63	1139
Toy	M. Schofield	503,387	Aug. 15	1919	476	64	945
Toy	J. Sheppman	503,389	Aug. 15	1921	476	64	946
Toy	E. P. Shetter	507,851	Oct. 31	3511	863	65	710
Toy	E. M. Shreiner and A. Leininger	490,319	Jan. 24	2139	558	62	479
Toy	W. V. Snyder	492,061	Feb. 21	1592	396	62	1097
Toy	A. J. Sobolewski	492,476	Feb. 28	2249	562	62	1244
Toy	S. and W. F. Sweet	496,018	Apr. 25	2380	602	63	489
Toy	J. L. Tate	508,558	Nov. 14	952	234	65	950
Toy	M. Thiele, C. Küpferling, and F. Sichtermann	491,690	Feb. 14	1026	259	62	971
Toy	F. Watzlawik	497,081	May 9	1111	285	63	837
Toy	J. W. Zinn	497,974	May 23	2559	638	63	1125
Toy. Automatic musical	J. P. King	507,014	Oct. 17	2053	507	65	414
Toy bank	R. A. Breul	500,848	July 4	499	129	64	91
Toy base-ball game	J. A. Meaher	491,247	Feb. 7	294	76	62	806
Toy bed or crib	M. E. Converse	510,893	Dec. 19	1832	452	65	1777
Toy bowling-alley	W. S. Reed	505,536	Sept. 26	2042	521	64	1693
Toy building.	G. L. Brower	491,512	June 13	1304	306	63	1632
Toy cart	P. Pollard	494,967	Apr. 4	689	176	63	132
(Toy.) Contrivance for setting traveling objects in motion.	G. Schwabe	495,273	Apr. 11	1215	304	63	242
Toy. Dancing	N. Christianson	509,150	Nov. 21	1918	469	65	1150
Toy derrick	H. Cotton	495,625	Apr. 18	1776	447	63	364
Toy detachable animal and vehicle.	H. C. Ives	499,430	June 13	1162	278	63	1607
Toy. Elastic	O. Carpenter	494,410	Mar. 28	2677	671	62	1918
Toy figure	C. J. Simonot	507,174	Oct. 24	2348	578	65	479
Toy figure	C. Smith	505,679	Sept. 26	2308	586	64	1743
Toy. Flying	C. M. Hollingsworth	510,137	Dec. 5	496	113	65	1503
Toy for games	W. Lawrence	510,033	Dec. 5	328	73	65	1471
Toy game apparatus	E. B. Smith	506,800	Oct. 17	1704	427 428	65	349
Toy. Gyroscopic	C. Adam	510,308	Dec. 5	779	189	65	1557
Toy hoop	W. W. Blackshaw	503,191	Aug. 15	1600	393	64	888
Toy kite	E. S. Boynton	498,379	May 30	3223	801	63	1257
Toy machine-gun	S. Brown	511,069	Dec. 19	2119	523	65	1831
Toy. Mechanical	J. E. Hubley	495,183	Apr. 11	1069	265	63	216
Toy. Mechanical	J. E. Hubley	495,185	Apr. 11	1075	266	63	217
Toy. Mechanical	E. I. Pyle	510,444	Dec. 12	998	238	65	1613
Toy. Mechanical	J. W. Turner	502,790	Aug. 8	935	227	64	753
Toy microscope	H. E. Stauffer	493,529	Mar. 14	1202	307	62	1607
Toy money-bank	C. A. Bailey	506,619	Oct. 10	1398	351	65	280
Toy money-bank. Registering	C. A. Bailey	489,860	Jan. 10	1330	347	62	292
Toy. Mosaic	W. König	510,178	Dec. 5	568	132	65	1517
Toy. Musical	C. Haub and J. F. Dasha	499,292	Oct. 13	900	218	63	1561
Toy or ornamental bird or winged animal	G. H. Newton	507,381	Oct. 24	2705	665	65	546
Toy parachute	G. F. Perkins	494,261	Mar. 28	2436	614	62	1873
Toy pistol.	C. Neuhaus	494,432	Mar. 28	2705	679	62	1923

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Toy pistol.....	H. Tideman.....	496,545	May 2	241	64	63	663
Toy pistol. Repeating.....	J. F. W. Koetter.....	490,568	Jan. 24	2532	649	62	553
Toy. Pneumatic.....	R. B. Tate and J. C. Joseph.....	501,305	July 11	1219	309	64	236
Toy puzzle.....	W. Schott.....	499,333	June 13	971	234	63	1573
Toy rowing-boat.....	G. Groesser.....	506,590	Oct. 10	1359	341	65	273
Toy savings-bank.....	A. Barton.....	496,393	May 2	10	3	63	620
Toy savings-bank.....	W. N. Hunter.....	508,019	Nov. 7	61	17, 18	65	769
Toy soldier.....	C. M. Beaumont.....	505,344	Sept. 19	1692	436	64	1615
Toy steam-engine.....	J. Schoenner.....	506,447	Oct. 10	1133	262	65	229
Toy vehicle.....	F. H. Harris.....	500,805	July 4	435	114	64	80
Toy watch.....	F. Soumat.....	505,966	Oct. 3	255	68	65	50
Toy. Whirling.....	F. E. Williams.....	495,079	Apr. 11	860	220	63	179
Toys. Sectional circular railway for mechanical.....	J. E. Hubley.....	495,184	Apr. 11	1071	266	63	216
Trace.....	I. B. Martin.....	501,252	July 11	1148	329	64	223
Trace.....	E. S. Saettler.....	494,443	Mar. 28	2720	682	62	1926
Trace attachment.....	L. Boyd.....	507,645	Oct. 31	3180	778	65	648
Trace-carrier.....	K. C. Bullard.....	492,508	Feb. 28	2318	575	62	1257
Trace-carrier.....	J. W. Cronan.....	497,167	May 9	1244	316	63	860
Trace-carrier.....	W. A. Mayhall.....	496,425	May 2	50	14	63	628
Trace-carrier.....	E. A. Nichols.....	490,980	Jan. 31	3216	821	62	703
Trace-carrier.....	E. J. Randall and G. S. Chase.....	507,164	Oct. 24	2331	574	65	476
Trace-carrier.....	W. E. Shaw.....	490,317	Jan. 24	2136	557	62	478
Trace-fastener.....	E. S. Andrus.....	507,977	Nov. 7	1	1	65	759
Trace-fastener.....	J. H. Gibson.....	493,264	Mar. 14	769	196	62	1527
Trace-holder.....	C. H. Garrigus.....	499,982	June 20	2053	497	63	1777
Trace-holder.....	J. J. Wheat.....	489,057	Jan. 3	117	31, 32	62	29
Trace or rein supporter.....	J. J. A. Van Patten.....	504,378	Sept. 5	106	27	64	1290
Tracing-wheel.....	S. Newman.....	491,716	Feb. 14	1065	269	62	978
Track-circuit.....	J. B. Stewart.....	491,609	Feb. 14	905	227	62	944
Track-clamp.....	J. P. Kimble.....	499,233	June 13	811	192	63	1545
Track-cleaner.....	A. Chisholm.....	490,269	Jan. 24	2056	538	62	461
Track-cleaner.....	G. W. Ruggles.....	501,028	July 4	773	203	64	141
Track-cleaner.....	C. Mahon.....	490,772	Jan. 31	2874	738 } 739 }	62	636
Track-fastening.....	G. E. Norton.....	504,236	Aug. 29	3284	820	64	1232
Track-fastening.....	J. M. Woodcock.....	490,704	Jan. 31	2770	712	62	617
Track for vehicles. Endless self-laying.....	A. P. Anderson.....	510,668	Dec. 12	1412	348	65	1688
Track-gage.....	A. Altman.....	490,705	Jan. 31	2772	712	62	618
Track hanger. Elevated.....	C. A. Gloekler.....	494,561	Apr. 4	39	8	63	9
Track-jack.....	J. McMurrin.....	504,935	Sept. 12	1031	265	64	1479
Track-jack. Lever.....	J. Henry.....	491,049	Jan. 31	3337	851	62	729
Track-lifter.....	W. L. Whitfield.....	504,259	Aug. 29	3321	830	64	1240
Track liner. Trestle.....	P. B. Dobbins.....	494,553	Apr. 4	28	5	63	7
Track-sanding apparatus.....	O. P. Murry and J. V. K. Walker.....	509,234	Nov. 21	2070	499	65	1179
Track-sanding apparatus.....	C. W. Sherburne.....	489,720	Jan. 10	1129	291 } 292 }	62	249
Track-sanding apparatus.....	C. W. Sherburne.....	506,645	Oct. 10	1436	360 } 361 }	65	288
Track-sanding apparatus.....	C. W. Sherburne.....	508,849	Nov. 14	1387	344 } 345 }	65	1034
Track-sanding apparatus.....	C. W. Sherburne.....	508,850	Nov. 14	1389	345 } 346 }	65	1035
Track-sanding device.....	A. and E. C. Goldsmith.....	500,882	July 4	553	143	64	101
Track-scraper.....	E. J. Emerson.....	498,249	May 30	3996	747	63	1217
Track scraper. Street-car.....	J. Goodfellow and H. A. Newell.....	495,968	Apr. 25	2307	583	63	474
Track structures. Apparatus for the manufacture of.....	V. Angerer and C. A. Psilander.....	490,941	Jan. 31	3152	808	62	691
Tracks. Automatic switch for trolley.....	W. H. Brodie.....	489,179	Jan. 3	300	83	62	69
Tracks. Crossing device for street-car.....	H. Shay and E. Keating.....	499,759	June 20	1701	407 } 408 }	63	1715
Traction-engine.....	A. C. Ames.....	505,151	Sept. 19	1390	356 } 357 }	64	1558
Traction-engine.....	I. C. Gray.....	495,182	Apr. 11	1067	265	63	216
Traction-engine.....	H. C. Hicks.....	493,267	Mar. 14	774	198 } 199 }	62	1528
Traction-engine.....	B. Holt.....	489,811	Jan. 10	1266	332	62	277
Traction-engine.....	B. Holt.....	499,114	June 6	630	152	63	1500
Traction-engine.....	B. Jackson.....	502,820	Aug. 8	987	240 } 241 }	64	763
Traction-engine.....	G. L. Jacques.....	506,695	Oct. 17	1522	382	65	315
Traction-engine.....	G. D. Lowry.....	492,303	Feb. 21	1972	491 } 492 }	62	1176
Traction-engine.....	L. M. Medlin.....	491,846	Feb. 14	1267	314 } 315 }	62	1017
Traction-engine.....	M. Powers.....	510,707	Dec. 12	1470	363 } 364 }	65	1700
Traction-engine.....	J. A. Stout.....	491,385	Feb. 7	540	137 } 138 }	62	851
Traction-engine.....	C. H. Stratton.....	492,637	Feb. 28	2520	624	62	1299
Traction-wheel.....	J. D. Hawes and H. D. McNair.....	509,221	Nov. 21	2053	495	65	1175
Traction-wheel.....	A. G. Rose.....	500,819	July 4	454	120	64	84
Traction-wheel.....	H. W. Wait.....	489,400	Jan. 3	636	172	62	137
Traction wheel and rail.....	H. S. Pruyn.....	505,845	Oct. 3	66	17	65	15
Train-brake. Automatic.....	W. B. Guernsey.....	489,899	Jan. 10	1392	362 } 363 }	62	302
Train-controlling apparatus. Electric.....	F. E. Kinsman.....	492,402	Feb. 28	2128	533	62	1219
Train-stopping device.....	J. B. Gross.....	502,963	Aug. 8	1227	302	64	806
Train-table.....	A. J. Culbertson.....	500,537	June 27	2963	727	63	1950
Trains. Electric circuit for controlling.....	F. E. Kinsman.....	504,042	Aug. 29	2963	741	64	1172
Trammel and calipers. Combined.....	E. Lindner.....	497,802	May 23	2281	573	63	1077
Trammel-point.....	D. Bruno.....	493,062	Mar. 7	449	113	62	1448
Tramway.....	W. W. Baird.....	495,146	Apr. 11	1009	252	63	205
Tramway. Aerial.....	J. H. Dickinson.....	495,397	Apr. 11	1405	353	63	277
Tramway. Aerial.....	J. H. Dickinson.....	495,398	Apr. 11	1407	353	63	278
Tramway. Aerial.....	J. H. Dickinson.....	495,399	Apr. 11	1408	354	63	278

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Tramway. Overhead.	P. F. Werner	491,151	Feb. 7	138	37	62	775
Tramway-switch	A. C. L. Eugstfeld	503,474	Aug. 15	2050	511	64	967
Tramway-switch	J. Meyer and G. F. Starkweather	502,982	Aug. 8	1267	309	64	812
Tramway-switch	J. Y. Porter	492,472	Feb. 28	2245	561	62	1243
Tramway. Wire-rope	C. T. Finlayson	505,397	Sept. 19	1781	462	64	1631
Tramway. Wire-rope	J. T. Huson	508,138	Nov. 7	267	65, 66	65	807
Transfer device. Automatic	T. Morrison	505,921	Oct. 3	190	47	65	37
Transferring-machine	F. L. Delfer	494,129	Mar. 28	2224	566	62	1834
Transferring or stenciling upon transparent or other material. Apparatus for	G. H. Tietjen	493,315	Mar. 14	865	220 221	62	1543
Transformer-motor	O. T. Bláthy	497,113	May 9	1159	297 298	63	845
Transformers. Cooling	E. Thomson	508,654	Nov. 14	1105	272	65	981
Transmitter. Morse	A. F. M. Cornand	511,234	Dec. 19	2398	584	65	1883
Transom-lifter	J. D. Carmody	489,846	Jan. 10	1318	343	62	289
Transom-lifter	F. J. Keck	489,310	Jan. 3	502	138	62	109
Transom-lifter	J. P. Ketteringham	489,311	Jan. 3	503	139	62	109
Transom-lifter	R. Linkletter	508,390	Nov. 7	672	165	65	882
Transom-lifter	E. E. Wolf	492,250	Feb. 21	1892	472 473	62	1159
Transom-pivot	H. Howarth	498,551	May 30	3510	867	63	1309
Transom-pivot	H. Howarth	499,922	June 20	1967	478	63	1762
Transom-pivot	H. Howarth	499,923	June 20	1968	478	63	1762
Transplanter	J. O. and H. H. Bender	490,942	Jan. 31	3153	808	62	691
Transplanter	D. Clow	495,304	Apr. 11	1265	316	63	252
Transplanter	C. D. Manwaring, C. C. and F. G. Nagley	491,290	Feb. 7	385	98	62	820
Transplanter	H. Moon. (Reissue)	11,305	Feb. 7	733	186	62	889
Transplanter	T. Sullivan	494,178	Mar. 28	2301	583	62	1848
Transplanter. Plant	J. L. McFarlin	496,745	May 2	565	152	63	721
Transplanting implement	B. F. Douthit	500,476	June 27	2855	703	63	1930
Transplanting-machine	J. M. Sailer	491,597	Feb. 14	888	223 224	62	940
Transporting horses and other animals. Vehicle for	G. H. Fenton	510,416	Dec. 12	918	228 229	65	1604
Transporting-receptacle	L. P. Rogers and J. Hofman	504,503	Sept. 5	322	83	64	1330
Trap:							
See Animal-trap.	Insect-trap.						
Bird-trap.	Plumber's trap.						
Caterpillar-trap.	Roach-trap.						
Drain-trap.	Sewer-trap.						
Fish-trap.	Sewer-basin trap.						
Fly-trap.	Sewer water-trap.						
Gas-trap.	Sink-trap.						
Grease-trap.	Steam-trap.						
Hog-trap.	Stench-trap.						
Trap	W. J. Vierck	507,190	Oct. 24	2378	587	65	484
Trap for basins, sinks, &c.	P. Falkinburg	510,503	Dec. 12	1092	263	65	1631
Trap for sinks, &c.	J. O'Byrne	511,646	Dec. 26	3095	756	65	2023
Traveling-bag	E. Haskell	511,077	Dec. 19	2137	527	65	1834
Traveling-bag	A. C. Krick	504,840	Sept. 12	882	227	64	1451
Traveling-bag	R. Ponickau	504,850	Sept. 12	897	231	64	1454
Traveling-bag	T. D. Young	495,448	Apr. 11	1488	374	63	293
Traverse-ring	C. W. Rugg	497,076	May 9	1104	284	63	836
Trawl-roller	J. B. J. D'Entremont	490,139	Jan. 17	1829	478	62	406
Tray	W. Kiel	506,120	Oct. 3	494	128	65	97
Tray-board	E. F. Crane	501,204	July 11	1071	272	64	211
Tray. Invalid's hot	Q. T. Lauderdale	489,019	Jan. 3	62	18	62	16
Tray. Jeweler's ring	R. Krueger	504,167	Aug. 29	3164	789	64	1210
Tray. Jewelry	E. Wertheimer	507,864	Oct. 31	3528	868	65	713
Tray. Ring	C. A. Troescher	499,264	June 13	853	204	63	1552
Tread-power	C. F. Search	500,220	June 27	2473	603	63	1862
Treadle	I. S. Bunker	494,460	Mar. 28	2746	689	62	1930
Treadle	J. H. Stewart	502,683	Aug. 1	747	179 180	64	703
Treadle-cushion	J. H. Whitney	503,633	Aug. 22	2328	580	64	1033
Treadle. Swinging	W. E. Sleight	494,747	Apr. 4	350	89	63	69
Treadles. Suspension device for swinging	W. E. Sleight	494,748	Apr. 4	352	89	63	69
Tree-baler	H. O. Thomas	494,353	Mar. 28	2585	650	62	1902
Tree or shrub baler or binder	H. O. Thomas	494,352	Mar. 28	2579	649 650	62	1900
Tree-protector	E. H. Black	503,759	Aug. 22	2529	629	64	1073
Tree-protector	J. M. Crews	503,948	Aug. 29	2817	703	64	1145
Tree-protector	C. Olsen	511,058	Dec. 19	2103	520	65	1827
Tree-protector	M. B. Ryan and P. Ward	490,309	Jan. 24	2127	554	62	476
Tree-support	W. H. Cook	499,520	June 13	1312	309	63	1634
Tree suspender. Fruit	J. Wright	497,853	May 23	2362	592	63	1091
Tree-transplanter	L. H. Rogers	491,135	Feb. 7	113	31	62	770
Tree-transplanting device	D. W. Aylworth	498,608	May 30	3589	889	63	1323
Trees, &c. Compound for protecting	S. M. Brooks	495,957	Apr. 25	2292		63	472
Trees, &c. Guard for	J. L. Majola	494,874	Apr. 4	562	141	63	109
Trees. Protecting the buds of fruit	G. A. Babbitt	496,376	Apr. 25	2965		63	599
Trellis. Flower	W. D. Smith	510,523	Dec. 12	1124	272	65	1637
Trellis. Flower	W. D. Smith	510,524	Dec. 12	1125	272	65	1637
Trellis. Hop	D. Craig	501,991	July 25	2323	580	64	467
Trellis. Vine	A. S. Hart	495,673	Apr. 18	1854	464	63	376
Trellis-wire support and stretcher	W. H. Coulson	491,771	Feb. 14	1154	288	62	995
Trephine	J. A. MacKenzie	493,730	Mar. 21	1547	394	62	1691
Trestle	A. W. Weeks	494,358	Mar. 28	2595	652	62	1903
Trestle. Adjustable	F. Jones	495,492	Apr. 18	1566	394	63	327
Trestle. Extensible	G. H. Jaquess	501,348	July 11	1309	327	64	251
Trick device	W. H. Keiff	508,391	Nov. 7	673	165	65	883
Tricycle	L. Kurtz	493,505	Mar. 14	1159	296	62	1599
Tricycle	A. Leininger and E. M. Shreiner	497,028	May 9	1031	263	63	822

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Tricycle	H. Matzen	498,750	May 30	3860	951	63	1370
Tricycle	A. V. Smith	503,009	Aug. 8	1299	952	64	819
Tricycle	W. V. Snyder	492,060	Feb. 21	1590	318	62	1096
Tricycle	W. V. Snyder	492,062	Feb. 21	1593	395	62	1097
Tricycle	W. V. Snyder	492,063	Feb. 21	1595	396	62	1097
Tricycle	W. V. Snyder	503,991	Aug. 29	2891	723	64	1159
Tricycle	W. V. Snyder	503,992	Aug. 29	2892	723	64	1159
Trimmer:							
See Edge-trimmer.	Nail-trimmer.						
Hedge-trimmer.	Sewing-machine trimmer.						
Hoof-trimmer.	Wall-paper trimmer.						
Leather-edge trimmer.	Wood-trimmer.						
Trimming	G. H. Newton	505,670	Sept. 26	2294	581	64	1741
Trimming-die	J. A. Coleman and A. E. Tenney	507,260	Oct. 24	2497	615	65	505
Trimming for head-coverings. Endless.	G. Yule and W. A. Baglin	497,085	May 9	1116	286	63	838
Trimming-machine.	W. T. Hess	490,848	Jan. 31	2988	765	62	660
Trimming-machine.	M. E. Stockwell	490,837	Jan. 31	2973	763	62	657
Trimming pendant. Dress.	G. F. Hensel	491,350	Feb. 7	490	125	62	841
Trimming. Woven	F. Hassenpflug	506,365	Oct. 10	981	243	65	198
Tripod	W. Bunker and L. W. Butler	496,851	May 9	735	195	63	770
Tripod	T. F. Farrell	497,779	May 23	2254	565	63	1072
Tripod	W. Wood	497,042	May 9	1049	268	63	826
Tripod-head	J. F. Ivarson	508,319	Nov. 7	554	136	65	860
Tripod head. Camera.	S. C. Hopkins and A. Higgins	501,510	July 18	1555	391	64	314
Tripod or stand for cameras or other purposes	A. Vanderbeek	494,401	Mar. 28	2665	668	62	1916
Trolley.	W. H. Brodie	500,375	June 27	2714	667	63	1905
Trolley	G. F. Green	506,492	Oct. 10	1218	304	65	245
Trolley	J. C. Love	490,028	Jan. 17	1649	428	62	369
Trolley and trolley-switch	D. V. B. Smart	510,201	Dec. 5	604	141	65	1524
Trolley-base	J. L. Mauldin	511,634	Dec. 26	3082	753	65	2021
Trolley-catcher	C. A. Lord	498,355	May 30	3188	794	63	1250
Trolley. Double-pole.	T. E. Adams	496,631	May 2	377	102	63	688
Trolley. Electric.	J. W. Kenevel	495,940	Apr. 18	2265	570	63	451
Trolley-guard	G. Moore	502,629	Aug. 1	638	152	64	684
Trolley-head	R. S. Dobbie	502,553	Aug. 1	514	123	64	661
Trolley-head	J. P. Maddox	504,734	Sept. 12	700	176	64	1415
Trolley-lines. Construction of.	G. Q. Seaman	508,771	Nov. 14	1269	316	65	1013
Trolley-lines. Multiple switch for overhead.	W. H. Brodie	492,526	Feb. 28	2342	581	62	1262
Trolley mechanism	J. T. Fuller	509,123	Nov. 21	1878	459	65	1142
Trolley or other wheels. Electro-conducting bearing for electric	E. A. Sperry	505,994	Oct. 3	300	77	65	58
Trolley-pole catcher	E. L. Langheinz	494,871	Apr. 4	558	140	63	108
Trolley-stand	J. R. Griffiths	498,932	June 6	324	76	63	1449
Trolley-stand	S. Harris	491,210	Feb. 7	242	61	62	793
Trolley-support	W. Duncan	500,263	June 27	2532	619	63	1872
Trolley-track	W. H. Brodie	509,650	Nov. 28	2796	673	65	1328
Trolley-wheel	J. J. Goetz and J. A. Smith	491,014	Jan. 31	3266	834	62	713
Trolley-wheel	J. F. Hall	503,136	Aug. 15	1509	371	64	871
Trolley-wheel	E. M. Tonsley	501,548	July 18	1621	405	64	328
Trolley-wheel. Electric	J. W. Clark	503,562	Aug. 15	2193	548	64	995
Trolley-wheel guard	J. N. Akarman and F. Le Noir	507,641	Oct. 31	3173	777	65	647
Trolley wire and hanger.	E. P. Wetmore	502,088	July 25	2483	624	64	497
Trolley-wire clamp-ear	E. B. Gates	509,616	Nov. 28	2750	663	65	1319
Trolley-wire cleaner	M. Shaaber	504,405	Sept. 5	150	39	64	1298
Trolley-wire cleaner	C. H. Thompson	507,247	Oct. 24	2475	610	65	502
Trolley-wire coupling	W. H. Keckelely	492,301	Feb. 21	1966	490	62	1175
Trolley-wire crossing	H. Geise	511,419	Dec. 26	2736	662	65	1957
Trolley-wire crossing. Electric.	E. P. Binford	506,149	Oct. 3	553	144	65	107
Trolley-wire curve	R. M. Hunter	499,167	June 6	714	170	63	1514
Trolley-wire finder	J. Chase	499,095	June 6	599	144	63	1495
Trolley-wire finder	C. G. Cleminshaw and W. H. Bradt	495,692	Apr. 18	1882	471	63	381
Trolley-wire finder	H. C. Jones	503,421	Aug. 15	1965	472	64	953
Trolley-wire hanger	B. B. Betts	507,064	Oct. 17	2134	530	65	427
Trolley-wire hanger	C. B. Elliott	499,662	June 13	1529	368	63	1671
Trolley-wire hanger	A. W. Weston	501,481	July 11	1506	379	64	290
Trolley-wire hanger	G. H. Ricke	509,328	Nov. 21	2226	538	65	1208
Trolley-wire hanger	L. Spillman	499,943	June 20	1993	484	63	1766
Trolley-wire ice-scraper	W. Heston	507,529	Oct. 31	2976	730	65	610
Trolley-wire safety-support	H. K. Whitner	499,270	June 13	862	206	63	1554
Trolley-wire support	L. T. Gibbs	505,457	Sept. 26	1886	486	64	1665
Trolley-wire support	H. A. Hamlin	497,293	May 9	1465	369	63	898
Trolley-wire support	F. E. Head	493,212	Mar. 7	679	173	62	1492
Trolley-wire support	M. Hoopes and O. S. Hertzog	506,043	Oct. 3	375	99	65	73
Trolley-wire support	C. Peterson	499,143	June 6	669	161	63	1507
Trolley-wire support	L. S. Plouts	510,485	Dec. 12	1062	255	65	1626
Trolley-wire support	H. S. Scranton and L. Spillman	489,097	Jan. 3	179	48	62	42
Trolley-wire support	J. E. Walker	510,217	Dec. 5	635	149	65	1530
Trolley-wire switch	G. A. Huben	507,732	Oct. 31	3302	808	65	672
Trolley-wire switch	E. A. Sperry	503,443	Aug. 15	1995	493	64	959
Trolley-wire switch. Overhead.	R. M. Hunter	499,461	June 13	1212	289	63	1617
Trolley-wires. Automatic disconnecter for	R. N. Noyes	500,417	June 27	2776	684	63	1915
Trolley-wires. Means for supporting	S. Harris	506,317	Oct. 10	890	219	65	181
Trolling apparatus.	H. J. Welch	489,110	Jan. 3	199	53	62	46
Trolling-hook	J. Pepper, Jr	496,441	May 2	86	25	63	634
Trolling-spoon	E. F. Pfeleger	501,436	July 11	1442	361	64	277

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Trough:							
See Drip-trough.							
Eaves-trough.	Hog-trough.						
Feed-trough.	Salting-trough.						
	Watering-trough.						
Trough heater. Stock.	A. Hayward	511,333	Dec. 26	2575	627	65	1928
Trousers.	W. L. Birnbaum	498,951	June 6	355	85	62	1454
Trousers.	M. and N. Harris	502,253	July 25	2761	698	64	550
Trousers.	J. L. Schuey	501,964	July 25	2285	572	64	460
Trousers.	J. W. Sheppard	509,693	Nov. 28	2863	691	65	1341
Trousers-guard	J. W. Cooper	498,047	May 23	2674	699	63	1145
Trousers-guard	W. T. Robertson	503,683	Aug. 22	2396	568	64	1046
Trousers-hanger	A. Beracierto	511,579	Dec. 26	2985	728	65	2004
Trousers-hanger	A. Feiner	490,646	Jan. 31	2672	688	62	598
Trousers-hanger	J. A. Jourdan	496,738	May 2	554	149	63	719
Trousers-hanger	A. C. Nash	496,696	May 2	483	129	63	707
Trousers hanger and press. Combined.	C. L. Harper	498,054	May 23	2685	672	63	1147
Trousers-protector	R. T. Matheson	491,845	Feb. 14	1266	314	62	1017
Trousers-strap	G. B. Adams	510,875	Dec. 19	1807	447	65	1773
Trousers-stretcher	R. Bennett	494,241	Mar. 28	2405	607	62	1868
Trousers-stretcher	L. O. Granger	491,062	Jan. 31	3351	855	62	732
Trousers stretcher and shaper	H. F. Featherstone	492,279	Feb. 21	1937	483	62	1163
Trousers-waistband	A. Levy	490,446	Jan. 24	2326	604	62	515
Trowel. Mason's.	A. Roncaglia	509,352	Nov. 21	2275	551	65	1217
Trowel. Pointing.	C. M. Benson	502,872	Aug. 8	1061	261	64	777
Truck	B. Bernstein	497,943	May 23	2513	627	63	1117
Truck	J. Cornelius	492,273	Feb. 21	1929	481	62	1167
Truck	C. L. Huston	490,598	Jan. 24	2566	660	62	562
Truck	M. S. Kelley	504,476	Sept. 5	268	70	64	1320
Truck	A. Murphy	490,716	Jan. 31	2789	716	62	621
Truck	H. B. Owen	503,982	Aug. 29	2865	719	64	1154
Truck and coupling. Combined car	O. Flohr	502,411	Aug. 1	271	64	64	616
Truck and means for automatically arresting the same. Car.	C. H. Griffin	489,473	Jan. 10	764	202	62	176
Truck and stand. Barrel	C. D. Juvinall, D. L. Ingard, and M. H. Brinkerhoff.	489,745	Jan. 10	1172	306	62	258
Truck and stand. Combined barrel	J. Fillman	508,097	Nov. 7	195	52	65	795
Truck bolster. Car.	E. F. Goltra and M. B. Schaffer	504,029	Aug. 29	2944	736	64	1168
Truck bolster. Car.	E. F. Goltra and M. B. Schaffer	504,267	Aug. 29	3332	833	64	1242
Truck-brake	C. C. Higham	492,923	Mar. 7	243	61, 62	62	1407
Truck brake-lock	J. T. De Jounette	496,151	Apr. 25	2584	650	63	527
Truck. Car.	J. E. Anger	508,362	Nov. 7	624	153	65	874
Truck. Car.	W. S. G. Baker	509,355	Nov. 28	2283	553	65	1230
Truck. Car.	J. C. Barber	506,460	Oct. 10	1155	287	65	233
Truck. Car.	W. F. Bradley	492,776	Mar. 7	7	2	62	1360
Truck. Car.	G. M. and J. A. Brill	494,117	Mar. 28	2200	561	62	1829
Truck. Car.	A. A. Brooks	508,276	Nov. 7	491	118	65	849
Truck. Car.	J. W. Cooper	503,831	Aug. 22	2621	655	64	1091
Truck. Car.	G. F. Fischer	503,412	Aug. 15	1947	484	64	950
Truck. Car.	G. H. Graham	496,933	May 9	891	{ 233 } { 234 }	63	798
Truck. Car.	J. H. Graham	503,044	Aug. 8	1349	333	64	829
Truck. Car.	W. H. Hansell	507,001	Oct. 17	2027	501	65	409
Truck. Car.	M. G. Hubbard	500,129	June 27	2318	561	63	1835
Truck. Car.	C. W. Hunt	495,338	Apr. 11	1312	329	63	261
Truck. Car.	C. W. Hunt	495,339	Apr. 11	1313	330	63	261
Truck. Car.	D. King	500,008	June 20	2092	507	63	1784
Truck. Car.	S. D. King	491,263	Feb. 7	320	81, 82	62	810
Truck. Car.	P. M. Kling	492,727	Feb. 28	2654	657	62	1326
Truck. Car.	W. Koedding	495,894	Apr. 18	2202	{ 554 } { 555 }	63	439
Truck. Car.	A. M. Leinwather and E. Riggensbach.	491,897	Feb. 14	1348	{ 334 } { 335 }	62	1033
Truck. Car.	J. L. Levy	502,522	Aug. 1	461	{ 111 } { 112 }	64	651
Truck. Car.	B. F. Manier	510,277	Dec. 5	730	177	65	1548
Truck. Car.	G. W. Mansfield and I. F. Baker	508,956	Nov. 21	1603	{ 393 } { 394 }	65	1089
Truck. Car.	J. T. and C. M. Robinson	495,372	Apr. 11	1364	341	63	270
Truck. Car.	W. Robinson	491,497	Feb. 7	709	{ 179 } { 180 }	62	885
Truck. Car.	G. L. Staebner	495,849	Apr. 18	2132	536	63	427
Truck. Car.	J. Taylor	507,050	Oct. 17	2114	{ 524 } { 525 }	65	494
Truck. Car.	J. Taylor	507,855	Oct. 31	3515	865	65	710
Truck. Car.	A. Twyman	510,370	Dec. 5	868	209	65	1575
Truck. Car.	H. B. Williams	496,145	Apr. 25	2575	648	63	525
Truck. Casket	W. Clouser	495,474	Apr. 18	1539	386	63	332
Truck. Electric-car	J. C. Henry	494,479	Mar. 28	2774	696	62	1935
Truck. Electric-car	G. S. Strong	497,356	May 16	1580	398	63	935
Truck. Electric-car	T. Tripp	489,883	Jan. 10	1365	{ 354 } { 355 }	62	296
Truck. Electric-car	C. F. Winkler	510,661	Dec. 12	1400	344	65	1626
Truck for electric locomotives	J. C. Henry	493,089	Mar. 7	494	123	62	1457
Truck for railway-carriages	E. M. Turner	500,358	June 27	2691	661	63	1900
Truck for railway-carriages. Bogie.	S. Fox	505,159	Sept. 19	1406	{ 360 } { 361 } { 362 }	64	1561
Truck for street-cars. Supplementary	B. Price	492,230	Feb. 21	1867	466	62	1153
Truck-frame	D. L. Barnes	505,152	Sept. 19	1394	358	64	1559
Truck frame. Car.	G. W. Ettenger	506,170	Oct. 3	604	154	65	117
Truck-frame for motor-cars	C. E. Canfield	511,680	Dec. 26	3149	770	65	2033
Truck-frame. Street-car	H. E. Haddock	495,326	Apr. 11	1296	325	63	258
Truck. Hand.	E. Cardarelli	507,106	Oct. 24	2213	547	65	455

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Truck. Hand.....	E. Cardarelli.....	507,483	Oct. 24	2859	701	65	576
Truck. Hand.....	J. M. Coffield.....	499,212	June 13	784	186		1541
Truck. Hand.....	C. G. Curtis.....	501,706	July 18	1873	466	64	371
Truck. Hand.....	G. Lille.....	500,661	July 4	209	54	64	41
Truck. Hand.....	E. S. Rayburn and C. A. Bell.....	490,043	Jan. 17	1673	435	62	373
Truck. Hand.....	H. O. Thomas.....	509,054	Nov. 21	1747	432	65	1117
Truck. Hand.....	N. A. Week and H. J. Moen.....	506,290	Oct. 10	855	210	65	174
Truck. Lumber.....	H. Daniels.....	500,260	July 4	518	135	64	94
Truck. Lumber.....	H. Daniels.....	500,262	July 4	522	136	64	95
Truck. Lumber.....	E. Dodge.....	494,523	Mar. 28	2856	714	62	1051
Truck. Motor.....	J. A. Brill.....	504,800	Sept. 12	807	206	64	1434
Truck. Motor.....	J. A. Brill.....	507,207	Oct. 24	2415	597	65	430
Truck. Motor.....	J. A. Brill.....	507,208	Oct. 24	2422	597		492
Truck. Motor.....	J. A. Brill and W. S. Adams.....	493,234	Mar. 7	716	183	62	1499
					184		
					185		
Truck. Motor.....	J. A. Brill and W. S. Adams.....	504,149	Aug. 29	3133	783	64	1204
					784		
Truck. Motor-car.....	G. W. Lacy.....	503,092	Aug. 8	1421	351	64	842
Truck or vehicle for elevated railways.....	E. M. Turner.....	501,174	July 11	1029	260	64	202
					261		
Truck. Radial car.....	L. J. Hirt.....	511,615	Dec. 26	3049	743	65	2015
Truck safety attachment. Car.....	R. J. Spearing.....	493,661	Mar. 21	1429	364	62	1668
Truck. Store.....	S. M. and M. M. Duffie.....	497,444	May 16	1718	434	63	960
Truck. Street-car.....	S. Harris.....	493,770	Mar. 21	1612	410	62	1704
Truck. Street-car.....	H. F. Shaw.....	502,503	Aug. 1	429	102	64	645
Trucks. Device for raising loaded.....	B. H. Stephens.....	489,339	Jan. 3	548	149	62	118
Trucks. Safety-shoe and brake attachment for car.....	R. J. Spearing.....	493,662	Mar. 21	1432	365	62	1668
Truing-up indicator.....	F. R. Young.....	505,870	Oct. 3	105	27	65	22
Trunk.....	J. J. Bisel.....	504,514	Sept. 5	340	86	64	1333
Trunk.....	W. Denhard, Jr.....	489,732	Jan. 10	1146	296	62	253
					297		
Trunk.....	F. S. Jerome.....	499,835	June 20	1827	444	63	1737
Trunk.....	O. Stechhan.....	508,057	Nov. 7	117	33	65	780
Trunk.....	H. D. Thacker and J. V. Down.....	465,851	Apr. 18	2136	536	63	427
					537		
Trunk.....	G. L. Walker.....	511,180	Dec. 19	2314	567	65	1868
					379		
Trunk.....	J. L. Warren.....	510,743	Dec. 12	1528	380	65	1711
					380		
Trunk.....	A. S. Wilkinson.....	510,459	Dec. 12	1026	245	65	1618
Trunk and couch. Combined.....	M. F. W. Blaisdell.....	499,704	June 20	1593	385	63	1697
Trunk and dressing-case. Combined.....	W. Burkman.....	506,033	Oct. 3	354	94	65	69
Trunk and wardrobe. Combined.....	J. C. Kern.....	502,081	July 25	2471	621	64	495
Trunk. Automatic folding.....	A. E. Scott.....	504,248	Aug. 29	3304	826	64	1236
Trunk-catch.....	O. D. Hunter.....	498,472	May 30	3367	839	63	1285
Trunk. Compartment.....	G. J. Griffiths.....	495,033	Apr. 11	792	200	63	166
Trunk. Convertible.....	A. W. Newell.....	494,590	Apr. 4	104	24	63	22
Trunk-fastening.....	J. Simmons.....	501,259	July 11	1156	256	64	235
					257		
Trunk-fastening.....	F. N. Violet.....	493,456	Mar. 14	1082	278	62	1585
Trunk-handle.....	F. W. Lemberger.....	489,820	Jan. 10	1279	335	62	281
Trunks, hat-boxes, &c. Manufacture of.....	H. Krammer.....	500,912	July 4	591	154	64	109
Trunk-line signal.....	E. S. C. May.....	509,477	Nov. 28	2532	611	65	1278
Trunk-lock.....	W. J. Davis.....	499,971	June 20	2034	493	63	1774
Trunk-strap.....	E. R. Bule.....	494,459	Mar. 28	2745	689	62	1930
Trunk-strap fastener.....	W. H. Mitchell.....	495,701	Apr. 18	1899	477	63	384
Trunk-strap fastener.....	J. Mohring.....	511,350	Dec. 26	2606	634	65	1934
Trunk. Telescopic.....	F. J. Palica.....	497,811	May 23	2292	576	63	1079
Trunk. Traveling.....	W. C. Clark.....	509,197	Nov. 21	1996	485	65	1166
Trunk. Wardrobe.....	J. Rundback.....	497,414	May 16	1664	420	63	951
Trunk. Wardrobe.....	H. C. Urmy and E. Huether.....	489,699	Jan. 10	1093	283	62	243
Trunk, wardrobe, &c. Combined.....	C. Heumader.....	500,391	June 27	2739	673	63	1909
					674		
Trunks, boxes, &c. Internal stay for.....	J. T. Dwyer.....	505,939	Oct. 3	209	53	65	41
Trunks. Material for the manufacture of.....	E. P. Krenkel.....	491,018	Jan. 31	3275	836	62	715
Trunks on stairs. Device for facilitating moving.....	W. H. H. Hallock.....	498,649	May 30	3672	908	63	1337
Trunks, &c. Strengthening-strip for.....	T. N. Rogers.....	500,352	June 27	2684	658	63	1899
Truss.....	C. Cluthe.....	495,305	Apr. 11	1266	316	63	252
Truss.....	W. Danz.....	500,739	July 4	332	88	64	62
Truss.....	P. Fredin.....	504,158	Aug. 29	3147	787	64	1207
Truss.....	J. Gray.....	490,558	Jan. 24	2510	646	62	551
Truss.....	J. A. Hopkins.....	504,837	Sept. 12	879	226	64	1450
Truss.....	B. M. Luginbühl.....	501,796	July 18	2025	499	64	397
Truss.....	D. Pomeroy.....	505,228	Sept. 19	1508	393	64	1580
Truss.....	H. C. Rash.....	503,000	Aug. 8	1286	315	64	816
Truss.....	H. L. Walbridge.....	501,551	July 18	1624	406	64	328
Truss.....	J. T. Watson.....	492,504	Feb. 28	2312	573	62	1256
Truss.....	W. C. Wetmore.....	509,637	Nov. 28	2775	667	65	1324
Truss.....	A. Yost.....	503,223	Aug. 15	1653	406	64	897
Truss-pad.....	G. S. Cranson.....	499,823	June 20	1808	440	63	1733
Tub:							
See Bath-tub. Laundry-tub.							
Folding tub. Washtub.							
Tub or pail making machinery.....	C. D. Ames.....	491,157	Feb. 7	151	39	62	778
Tube:							
See Boiler-tube. Pneumatic dispatch-tube.							
Corrugated tube. Speaking-tube.							
Drainage-tube. Test-tube.							
Paper tube.							
Tube-bending machine.....	A. Stirling.....	493,390	Mar. 14	975	251	62	1566
Tube-cleaner.....	W. F. Bradbury.....	507,965	Oct. 31	3687	916	65	743
Tube compressor.....	J. M. Harper.....	504,268	Aug. 29	3334	833	64	1242

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Ing.	Vol.	Page.
Tube-cutter	F. Jungmann	504,786	Sept. 12	791	200	64	1431
Tube-drawing bench	F. Deming	495,610	Apr. 18	1749	441	63	359
Tube-elevator	W. H. Downing	506,585	Oct. 10	1353	339	65	272
Tube-expander	H. L. Hopkins	511,526	Dec. 26	2897	706	65	1989
Tube for viscous substances	D. W. Clark	493,616	Mar. 14	1360	345	62	1638
Tube-making apparatus	J. Robertson	493,898	Mar. 21	1810	461	62	1742
Tube-splitting machine	J. Moore	495,257	Apr. 11	1190	298	63	239
Tube swaging or expanding machine	W. Vollmer and W. H. Thomas	489,439	Jan. 3	704	188	62	151
Tubes. Apparatus for the electrolytic manufacture of	A. S. Elmore	503,076	Aug. 8	1393	344	64	837
Tubes. Die for forming polygonal	C. P. Higgins	503,962	Aug. 29	2839	709	64	1150
Tubes. Method of and machine for bending	R. Clarke	506,157	Oct. 3	565	146	65	109
Tubing. Coupling for metallic flexible	H. A. Linzeler and P. R. P. Dubault	510,481	Dec. 12	1057	254	65	1624
Tubing. Flexible	G. Commichau	499,713	June 20	1607	388 } 129	63	1700
Tubing. Flexible metallic	W. H. K. Bowley	500,847	July 4	498	129	64	91
Tubing. Flexible metallic	W. H. K. Bowley	507,877	Oct. 31	3547	873	65	717
Tubing. Flexible metallic	S. L. Wiegand	494,972	Apr. 4	696	178	63	133
Tubing. Metal	J. Callan	498,458	May 30	3347	833	63	1281
Tubing. Steam-gage	C. A. G. Winther	500,830	July 4	477	125	64	87
Tubular bodies. Process of and apparatus for manufacturing	H. Ehrhardt	495,245	Apr. 11	1175	294 } 295	63	236
Tubular boiler	E. F. Edgar	505,036	Sept. 12	1201	309	64	1510
Tubular boiler. Circulating	E. L. Martin	498,441	May 30	3317	826	63	1276
Tubular boiler. Upright	F. L. Waterous	489,051	Jan. 3	108	30	62	27
Tubular frame construction	A. Perkins	500,941	July 4	628	165	64	115
Tug-clip. Hame	J. Scott	489,989	Jan. 17	1575	412	62	354
Tug-fastener. Hame	C. Sievers	501,966	July 25	2287	573	64	460
Tug. Hame	J. C. Anderson	497,904	May 23	2455	613	63	1107
Tug. Hame	W. A. Burns	489,706	Jan. 10	1106	285	62	245
Tug. Hame	E. L. Howe	489,007	Jan. 3	47	13	62	12
Tug. Hame	C. H. Scarlett	495,617	Apr. 18	1763	444	63	362
Tug. Hame	J. S. West	509,562	Nov. 28	2663	645	65	1303
Tug. Harness	G. W. Huntley, Jr.	500,131	June 27	2322	562	63	1836
Tug-holder	J. M. Eblesisor	510,449	Dec. 12	1740	429	65	1750
Tug-hook	D. H. Langan	508,521	Nov. 14	899	221	65	940
Tug. Shaft	T. W. Davies	503,564	Aug. 15	2195	548	64	995
Tug. Shaft	J. M. McDonald	490,036	Jan. 17	1661	432	62	371
Tug. Shaft	W. F. Sweet	500,441	June 27	2814	693	63	1922
Tug. Thill	W. F. Niederriter	501,293	July 11	1205	304	64	234
Tug. Thill	M. Potter	493,837	Mar. 21	1716	438	62	1724
Tumbler-washer	O. H. Robinson	491,374	Feb. 7	521	133	62	847
Tumbler-washer	A. Zauner	503,638	Aug. 22	2337	583	64	1035
Tumbling-barrel	J. H. Whiting	502,797	Aug. 8	947	231	64	755
Tunnel-building apparatus	S. I. Morris	498,855	June 6	187	45, 46	63	1426
Tunnel warning device. Safety	G. W. Thompson	498,328	May 30	3137	782	63	1242
Tunneling-machine	G. H. Sherman	490,318	Jan. 24	2137	557	62	478
Tunneling-machine	R. Stanley	504,181	Aug. 29	3197	797	64	1217
Tunneling-machine	R. Stanley. (Reissue)	11,333	May 9	1469	370	63	899
Tunneling or mining machine	R. Stanley	504,179	Aug. 29	3186	796 } 797	64	1215
Tunneling or mining machine	R. Stanley	504,180	Aug. 29	3193	797	64	1216
Tunneling-shield	J. J. Nobbs	499,566	June 13	1383	330 } 331	63	1646
Tunnels. Apparatus for relining	S. I. Morris	504,045	Aug. 29	2969	742	64	1173
Turbine. Steam	E. C. Terry	508,190	Nov. 7	340	84, 85	65	821
Turbines. Apparatus for regulating the speed of	J. L. Furiakovics	506,220	Oct. 10	722	181	65	148
Turfing implement	J. C. Greenfield	504,577	Sept. 5	437	111	64	1351
Turkish bath. Chiffonier	A. J. Cross	500,858	July 4	514	134	64	94
Turnbuckle	W. H. Albach	500,836	July 4	484	126	64	88
Turnstile	W. T. Ellison, Jr., and J. Unsworth, Jr.	501,680	July 18	1827	455	64	363
Turnstile	C. P. Gott	503,698	Aug. 22	2428	604	64	1052
Turnstile. Registering	C. P. Gott	492,353	Feb. 21	2052	512	62	1191
Turn-table	E. W. Edwards	510,592	Dec. 12	1274	310	65	1663
Turn-table	C. A. Shank	495,434	Apr. 11	1463	369	63	229
Turn-table	G. Van Wegenen	492,069	Feb. 21	1603	399	62	1099
Turning crank-pins. Machine for	H. W. Chapman	499,010	June 6	474	110	63	1474
Turning. Device for spheric	C. O. Dost	494,737	Apr. 4	333	85	63	66
Turning irregular forms. Machine for	E. A. Kimball	498,170	May 23	2850	713	63	1178
Turning irregular shapes. Apparatus for	E. R. Fellows	499,977	June 20	2043	495	63	1775
Turning-machine	J. R. Beckett, Jr.	509,423	Nov. 28	2410	583 } 584	65	1253
Turning-machine	Q. W. Booth	506,664	Oct. 17	1474	370 } 371	65	306
Turning-machine	F. H. Richards	497,286	May 9	1447	365 } 366	63	895
Turning machine. Scallop	C. B. Hatfield	509,469	Nov. 28	2517	607	65	1275
Turning machine. Spiral	F. O. Holmstrom	507,619	Oct. 31	3127	765	65	639
Turning pearl buttons or other articles. Mechanism for	J. Cléret	501,922	July 25	2229	556	64	449
Turning tapering surfaces. Tool for	J. Hartness	501,273	July 11	1174	298	64	228
Turpentine-box	D. W. Ketchum	499,388	June 13	1076	261	63	1593
Turpentine-tool	W. Watson	498,593	May 30	3565	884	63	1319
Turret-clamping mechanism	F. H. Richards	500,217	June 27	2469	602	63	1861
Tuyere	C. M. Allen	496,034	Apr. 25	2406	609	63	493
Tuyere	M. W. Iles	497,072	May 9	1098	282	63	835
Tuyere	M. W. Iles	505,549	Sept. 26	2063	526	64	1697
Tuyere	M. W. Iles	505,550	Sept. 26	2064	526	64	1698
Tuyere	J. McClelland	498,565	May 30	3526	872	63	1312
Twine	J. F. Steward	501,970	July 25	2293	561	64	461
Twine-ball-gaging device	P. Hetzel	501,186	July 11	1046	265	64	205
Twine-binder	G. L. Phelps	494,708	Apr. 4	284	72, 73	63	57

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Pr. g.	Vol.	Page.
Twine-bobbins. Tension-regulator for	P. Hetzel	501,187	July 11	1047	265	64	205
Twine-cutter	W. K. Kennard	508,424	Nov. 14	730	180	65	908
Twine-cutter	J. S. Marvin	490,078	Jan. 17	1725	450	62	384
Twine-cutter	J. Quick and T. Nelson	499,364	June 13	1039	252	63	1586
Twine-cutter	C. W. Thomes	494,606	Apr. 4	132	30	63	28
Twine-finishing machine	W. H. Avis	503,936	Aug. 29	2780	697	64	1139
Twine-holder cup and take-up	W. Bentley and J. D. Fuller	494,287	Mar. 28	2477	625	62	1880
Twine-machine feed-regulator	J. F. Steward	502,326	Aug. 1	125	28	64	588
Twine-machines. Automatic feeder for	G. A. Lowry	491,947	Feb. 14	1425	355	62	1048
Twine-making machine	F. G. Becker	495,469	Apr. 18	1531	383	63	321
Twine-making machine	F. G. Becker	507,100	Oct. 24	2205	544	65	454
Twine. Method of and machinery for making	J. F. Steward	501,971	July 25	2294	574	64	461
Twine reel and holder	J. B. Holmes	492,162	Feb. 21	1759	438	62	1131
Twisting and cop-winding machine	C. C. Klein	492,211	Feb. 21	1829	459	62	1146
Twisting and spinning machine spindle	G. Singleton	495,713	Apr. 18	1919	483	63	387
Twisting, doubling, winding, or analogous machines. Stop-motion for	J. and T. A. Boyd	492,603	Feb. 28	2466	613	62	1289
Twisting-machine	G. L. Brownell	499,204	June 13	773	184	63	1539
Twisting-machine	A. B. Bullock	497,762	May 23	2230	558	63	1068
Twisting-machine	G. H. Sellers	497,827	May 23	2320	582	63	1084
Twisting or doubling machine. Yarn	G. A. Draper and A. E. Rhoades	503,905	Aug. 22	2729	685	64	1112
Type	W. W. Bishop	499,507	June 13	1298	305	63	1631
Type	M. G. Merritt	502,736	Aug. 8	841	204	64	735
Type-bar	I. M. Chase	490,739	Jan. 31	2e23	725	62	627
Type-bars and matrices therefor. Machine for producing	O. Mergenthaler. (Reissue)	11,393	Nov. 28	3140	759	65	1393
Type-bars. Machine for producing	J. C. Fowler	510,853	Dec. 12	1747	760	65	1751
Type-cabinet	J. Slocum	509,695	Nov. 28	2864	692	65	1341
Type-case	G. B. Miles	494,760	Apr. 4	367	92	63	73
Type-case	T. D. Oakley	507,718	Oct. 31	3285	803	65	668
Type-die for matrix-making	C. L. Redfield	501,297	July 11	1210	306	64	235
Type-distributing machine	O. S. Bowman	501,597	July 18	1688	421	64	340
Type-distributing machinery	J. Hooker	493,270	Mar. 14	779	200	62	1529
Type-founding apparatus. Adjustable	W. Grothe	501,934	July 25	2246	561	64	453
Type-holder	S. H. Nesbit	501,358	July 11	1325	332	64	254
Type-machine	J. G. Pavyer	495,703	Apr. 18	1901	477	63	384
Type-machine mold	J. G. Pavyer	495,705	Apr. 18	1908	480	63	385
Type-matrices. Spacer for	J. C. Fowler	498,425	May 30	3287	821	63	1270
Type-matrices. Spacer for	J. C. Fowler	498,426	May 30	3290	821	63	1270
Type-matrix	W. Kemp, Jr.	507,275	Oct. 24	2525	622	65	510
Type-mold	F. H. Bultman	507,258	Oct. 24	2494	614	65	505
Type production. Relief	J. W. Hoke. (Reissue)	11,363	Sept. 5	632	161	64	1389
Type-rings. Apparatus for perforating strips for actuating	E. V. Beals	509,860	Dec. 5	12	3, 4	65	1413
Type-setting apparatus	L. K. Johnson	494,572	Apr. 4	71	16, 17	63	14
Type-setting apparatus	L. K. Johnson	494,573	Apr. 4	74	17, 18	63	15
Type-setting machine	W. W. and J. M. Bishop	499,506	June 13	1295	304	63	1631
Type-setting machine	J. I. Haynes	494,564	Apr. 4	53	11	63	11
Type-setting machine	A. V. Ruckmich	493,448	Mar. 14	1063	274	62	1582
Type-setting machine	H. C. and S. D. Snoddy	489,834	Jan. 10	1296	339	62	285
Type-setting machines. Indicator mechanism for	J. Hooker	495,588	Apr. 18	1714	432	63	354
Type-setting machinery	J. A. Kay	492,164	Feb. 21	1761	439	62	1132
Type-setting machinery. Indicator mechanism for	J. Hooker	505,200	Sept. 19	1468	379	64	1573
Type-wheel	T. T. Eckert and G. B. Scott	499,911	June 20	1952	474	63	1759
Type-wheels. Die for making	F. Ecaubert	500,801	July 4	429	113	64	79
Type-wheels. Mold for the formation of	T. T. Eckert and S. Bergmann	498,248	May 30	2994	746	63	1217
Type-writer cabinet	M. Bancroft	505,586	Sept. 26	2149	543	64	1715
Type-writer cabinet	M. Bancroft	505,646	Sept. 26	2255	471	64	1734
Type-writer cabinet	G. C. Billups	500,185	June 27	2414	588	63	1851
Type-writer cabinet	S. L. Condé	491,239	Feb. 7	289	72	62	803
Type-writer cabinet	W. Horrocks	503,418	Aug. 15	1960	487	64	952
Type-writer cabinet	R. B. Sigafos	490,127	Jan. 17	1811	473	62	403
Type-writer cabinet	F. Vetter	490,593	Jan. 24	2556	658	62	560
Type-writer case	P. H. Flynn	495,130	Apr. 11	983	246	63	201
Type-writer clamp	S. L. Condé	497,015	May 9	1013	260	63	819
Type-writer easel	M. Lester	505,557	Sept. 26	2096	532	64	1704
Type-writer manifold device	H. H. Unz	507,189	Oct. 24	2377	566	65	484
Type-writer ribbons. Machine for reinking	J. M. Lowe	506,126	Oct. 3	510	132	65	99
Type-writer table	W. D. Sutton	494,764	Apr. 4	372	133	63	74

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Type-writers. Combined copy-holder and folio-indicator for	H. J. Welch	492,546	Feb. 28	2377	590	62	1271
Type-writing machine	H. T. Bardwell	496,507	May 2	177	49, 50	63	651
Type-writing machine	W. H. Barten	499,498	June 13	1268	302	63	1626
Type-writing machine	F. V. Bartlett	501,909	July 25	2207	550	64	445
Type-writing machine	E. H. Berry	498,100	May 23	2750	687 } 688 }	63	1159
Type-writing machine	G. C. Blickensderfer	491,071	Feb. 7	14	4, 5	62	751
Type-writing machine	W. Bodenbrow, Jr.	491,072	Feb. 7	17	5	62	752
Type-writing machine	C. J. Bond	509,067	Nov. 21	1772	437	65	1121
Type-writing machine	A. T. Brown	503,735	Aug. 22	2487	619 } 187 } 188 } 189 } 190 } 191 } 192 }	64	1064
Type-writing machine	T. Cahill	502,700	Aug. 8	771		64	722
Type-writing machine	W. Clark	493,015	Mar. 7	387	96	62	1435
Type-writing machine	W. Clark	496,219	Apr. 25	2691	675	63	546
Type-writing machine	W. Clark	500,798	July 4	425	112	64	78
Type-writing machine	C. C. Clarke	502,248	July 25	2753	696	64	548
Type-writing machine	F. L. Clifford	496,295	Apr. 25	2802	701	63	568
Type-writing machine	F. L. Clifford	496,296	Apr. 25	2803	702	63	568
Type-writing machine	J. S. Copeland	492,141	Feb. 21	1718	429 } 430 }	62	1123
Type-writing machine	J. C. Cowan	494,977	Apr. 4	703	179	63	134
Type-writing machine	L. S. Crandall	509,720	Nov. 28	2907	703 } 704 }	65	1348
Type-writing machine	L. S. Crandall	509,793	Nov. 28	3030	731 } 732 }	65	1372
Type-writing machine	L. S. Crandall	509,794	Nov. 28	3031	732	65	1373
Type-writing machine	L. S. Crandall	509,795	Nov. 28	3034	733	65	1373
Type-writing machine	J. M. Crary	493,016	Mar. 7	388	97, 98	62	1435
Type-writing machine	F. L. Crass	499,717	June 20	1615	391	63	1701
Type-writing machine	W. S. Cross	510,409	Dec. 12	937	225	65	1602
Type-writing machine	A. Davidson	493,252	Mar. 14	750	192 } 193 }	62	1523
Type-writing machine	G. P. Davis	509,427	Nov. 28	2415	585 } 586 }	65	1254
Type-writing machine	A. Densmore	493,254	Mar. 14	756	193	62	1525
Type-writing machine	A. Densmore	493,255	Mar. 14	757	193	62	1525
Type-writing machine	A. Densmore	507,726	Oct. 31	3292	806	65	670
Type-writing machine	A. Densmore	507,727	Oct. 31	3295	806	65	670
Type-writing machine	T. J. Downing	504,713	Sept. 12	656	166 } 167 }	64	1406
Type-writing machine	T. J. Downing	510,331	Dec. 5	806	195	65	1563
Type-writing machine	J. L. Edland	489,072	Jan. 3	137	38, 39	62	34
Type-writing machine	C. O. Erwin and F. Winkler	499,723	June 20	1625	392	63	1703
Type-writing machine	C. O. Erwin and F. Winkler	506,426	Oct. 10	1100	273	65	222
Type-writing machine	C. O. Erwin and F. Winkler	506,427	Oct. 10	1103	273	65	222
Type-writing machine	G. K. Flower. (Reissue)	11,391	Nov. 28	3137	758	65	1393
Type-writing machine	J. S. Foley	511,416	Dec. 26	2729	661	65	1956
Type-writing machine	E. A. Ford. (Reissue)	11,339	May 16	2219	555 } 556 }	63	1050
Type-writing machine	J. Gardner	505,547	Sept. 26	2059	525	64	1697
Type-writing machine	J. A. Garner	502,072	July 25	2455	616 } 617 }	64	491
Type-writing machine	B. Granville	496,304	Apr. 25	2823	706 } 707 }	63	572
Type-writing machine	E. Green	501,051	July 18	1776	442 } 443 }	64	355
Type-writing machine	J. A. Hamilton	505,521	Sept. 26	2007	513 } 514 }	64	1687
Type-writing machine	J. B. Hammond	494,742	Apr. 4	340	86, 87	63	67
Type-writing machine	J. B. Hammond	501,504	July 18	1542	388 } 389 }	64	311
Type-writing machine	M. B. Harris	489,306	Jan. 3	496	137	62	108
Type-writing machine	A. N. Heine and W. K. H. Woerner	497,177	May 9	1257	319 } 320 }	63	863
Type-writing machine	J. Herran y Bolado	506,816	Oct. 17	1732	435 } 436 }	65	354
Type-writing machine	O. I. Hess	495,135	Apr. 11	988	248	63	202
Type-writing machine	E. E. Hills	492,800	Mar. 7	46	11	62	1368
Type-writing machine	L. D. Hitchcock	504,473	Sept. 5	263	68, 69	64	1319
Type-writing machine	N. H. Lamb	492,812	Mar. 7	63	15	62	1370
Type-writing machine	S. S. Lavey	496,419	May 2	42	12	63	626
Type-writing machine	L. J. Magie	498,129	May 23	2795	699	63	1168
Type-writing machine	H. S. Martin	491,714	Feb. 14	1062	269	62	977
Type-writing machine	H. W. Merritt	489,871	Jan. 10	1345	351	62	294
Type-writing machine	H. W. Merritt	505,057	Sept. 12	1231	317	64	1516
Type-writing machine	H. W. Merritt	505,058	Sept. 12	1233	317	64	1516
Type-writing machine	M. G. Merritt	496,320	Apr. 25	2858	713	63	578
Type-writing machine	M. G. Merritt	510,984	Dec. 19	2001	494	65	1808
Type-writing machine	M. G. Merritt	510,985	Dec. 19	2002	495	65	1808
Type-writing machine	M. G. Merritt and W. E. Burnett	505,059	Sept. 12	1235	318	64	1517
Type-writing machine	M. G. and H. W. Merritt	511,305	Dec. 19	2519	613	65	1905
Type-writing machine	M. K. Morris	506,712	Oct. 17	1554	389	65	321
Type-writing machine	W. A. Phillips	498,691	May 30	3745	924 } 925 }	63	1349
Type-writing machine	J. C. Sinclair	510,653	Dec. 12	1384	339 } 340 }	65	1684
Type-writing machine	C. J. A. Sjöberg	492,544	Mar. 7	109	27	62	1379
Type-writing machine	L. H. Smith	496,370	Apr. 25	2951	737	63	596
Type-writing machine	J. D. Smith	502,147	July 25	2574	646	64	514

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Index.	Vol.	Page.
Type-writing machine	F. W. Stanley	506,345	Oct. 10	949	237	65	192
Type-writing machine	C. F. Taylor	511,374	Dec. 26	2652	644	65	1944
Type-writing machine	C. F. Taylor and H. P. Brown	511,373	Dec. 26	2644	643	65	1942
Type-writing machine	D. H. Taylor	499,263	June 13	851	204	63	1552
Type-writing machine	E. Terry	502,685	Aug. 1	750	180	64	704
Type-writing machine	J. A. Toomey	507,858	Oct. 31	3520	866	65	712
Type-writing machine	G. C. Towle	496,496	May 2	161	46	63	648
Type-writing machine	H. H. Unz	490,235	Jan. 17	1981	519 520	62	435
Type-writing machine	L. P. Valiquet	510,214	Dec. 5	628	148	65	1528
Type-writing machine	V. and M. Van der Mynsbrugge	501,220	July 11	1093	278	64	215
Type-writing machine	H. L. Wagner	497,560	May 16	1899	479 480	63	991
Type-writing machine	G. B. Webb	489,514	Jan. 10	836	219	62	190
Type-writing machine	G. B. Webb	489,701	Jan. 10	1094	284	62	243
Type-writing machine	G. B. Webb	490,329	Jan. 24	2153	562	62	481
Type-writing machine	G. B. Webb	490,330	Jan. 24	2157	562 563	62	482
Type-writing machine	G. B. Webb	492,599	Feb. 28	2459	611 612	62	1288
Type-writing machine	G. B. Webb	501,977	July 25	2301	575	64	463
Type-writing machine	G. B. Webb	504,897	Sept. 12	966	249	64	1466
Type-writing machine	G. B. Webb	506,352	Oct. 10	960	239	65	194
Type-writing machine	P. P. Wenz	491,730	Feb. 14	1084	274 275 482	62	981
Type-writing machine	J. N. Williams	501,753	July 18	1948	483 484	64	384
Type-writing machine	J. E. Wilson	510,222	Dec. 5	644	151 152	65	1532
Type-writing machine	G. W. N. Yost	506,965	Oct. 17	1974	489	65	399
Type-writing machine	J. A. Young	509,461	Nov. 28	2502	604 605	65	1272
Type-writing machine and card-holder therefor	G. B. Webb	496,984	May 9	962	252	63	810
Type-writing machine and duplicator. Combined	J. T. Davis	494,060	Mar. 21	2089	533 534	62	1794
Type-writing-machine attachment	F. C. Bieg and E. Theiss	489,920	Jan. 17	1448	379	62	330
Type-writing-machine attachment	F. M. Carthy	491,767	Feb. 14	1146	287	62	993
Type-writing-machine attachment	E. W. Eaton	509,121	Nov. 21	1875	459	65	1142
Type-writing-machine attachment	A. E. Walkup	494,356	Mar. 28	2593	652	62	1903
Type-writing-machine cleaner	A. B. Reid	494,304	Mar. 28	2500	631	62	1886
Type-writing-machine cleaning attachment	W. W. Runyon	490,310	Jan. 24	2128	554	62	476
Type-writing-machine eraser-guard	A. F. Stevens	499,894	June 20	1927	468	63	1755
Type-writing-machine guide-shield	R. E. Hooper	493,503	Mar. 14	1157	295	62	1598
Type-writing-machine joint	E. S. Higgins and H. C. Jenkins	502,190	July 25	2645	667	64	539
Type-writing-machine key	D. P. Wolhaupter	497,483	May 16	1777	447	63	969
Type-writing-machine key-cushion	R. S. Graham and W. B. Savell	504,065	Aug. 29	2996	748	64	1178
Type-writing-machine ribbon attachment	L. D. Boyce and J. C. Thompson	506,581	Oct. 10	1345	338	65	270
Type-writing-machine ribbon attachment	A. E. Walkup	494,357	Mar. 28	2594	652	62	1903
Type-writing-machine ribbon-guide	G. F. Stillman	499,051	June 6	538	127	63	1485
Type-writing-machine ribbon mechanism	A. T. Brown	503,736	Aug. 22	2490	619 620 702	64	1065
Type-writing machine. Stenographic	E. L. Craigmiles	496,297	Apr. 25	2804	703 704	63	568
Type-writing-machine type-cleaner	A. G. MacGregor	508,904	Nov. 14	1506	368	65	1052
Type-writing machines. Scriptoscope for	E. K. Failor	490,189	Jan. 17	1905	496	62	420
Type-writing machines. Type-leveling contrivance for	G. B. Webb	496,985	May 9	964	252 253	63	811
Types for printing and stamping and type made by such process. Manufacturing	H. Dunning	495,667	Apr. 18	1845	462	63	375
Ultramarine-furnace	G. A. Prochazka and W. Scharringhausen.	495,515	Apr. 18	1598	402	63	333
Umbrella	P. R. Wylie	496,504	May 2	172	48	63	650
Umbrella-case	J. Rose	504,945	Sept. 12	1048	269	64	1482
Umbrella-cover	L. Lake	506,405	Oct. 10	1058	263	65	214
Umbrella-cover	A. Nicholas and L. Tachan	505,476	Sept. 26	1914	493	64	1670
Umbrella-cover. Detachable	M. C. S. Brown	501,819	July 18	2054	506	64	402
Umbrella-cover. Detachable	A. J. Robinson	502,761	Aug. 8	883	216	64	743
Umbrella-covers. Metallic fastening for	F. S. Uchermann	490,999	Jan. 31	3244	825	62	709
Umbrella. Folding	F. G. Grove and D. P. Lillard	507,809	Oct. 31	3436	844	65	697
Umbrella. Folding	T. Hillabold	500,330	June 27	2647	648	63	1893
Umbrella. Folding	F. M. Hunt	508,717	Nov. 14	1194	296	65	995
Umbrella. Folding	R. E. Johnston	497,578	May 16	1928	485	63	90
Umbrella. Folding	A. Krieghoff	496,833	May 2	705	187	63	7
Umbrella. Folding	L. Lincke	491,805	Feb. 14	1208	302	62	10
Umbrella. Folding	J. K. Loree	507,588	Oct. 31	3075	752	65	62
Umbrella. Folding	E. C. Phillips	492,048	Feb. 21	1577	392 393	62	1000
Umbrella-frame	A. R. Peppin	508,436	Nov. 14	747	184	65	911
Umbrella-holder	T. B. Comins	494,123	Mar. 28	2217	564	62	1833
Umbrella-holder	A. G. Middleton and C. S. Minchin	491,058	Jan. 31	3347	854	62	731
Umbrella notch and rib	H. L. Heck and W. S. Kellogg	495,331	Apr. 11	1303	327	63	260
Umbrella-ribs. Machine for forming and securing the eyes on	D. M. Redmond	509,682	Nov. 28	2848	688	65	1338
Umbrella-runner	H. Lichtenstein	501,089	July 11	880	227	64	176
Umbrella-runner	B. F. Porter	492,586	Feb. 28	2434	606	62	1283
Umbrella-runner	H. C. Swan	508,189	Nov. 7	339	84	65	820
Umbrella-runner retainer	J. B. Riehl	509,684	Nov. 28	2851	689	65	1339
Umbrella-runner retainer	J. B. Riehl	509,685	Nov. 28	2853	689	65	1339
Umbrella. Self-opening	J. T. and F. S. Liley	498,665	May 30	3698	913	63	1342
Umbrella-stand	B. Bronner	499,449	June 13	1193	224	63	1613
Umbrella-stand	J. Daner	508,602	Nov. 14	1027	253	65	965
Umbrella-stand	H. C. Merker	492,359	Feb. 21	2061	514	62	1193

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Umbrella-stand	H. S. Park	490,305	Jan. 24	2120	551	62	475
Umbrella-stand	H. Tideman	502,331	Aug. 1	135	31	64	590
Umbrella-stick	F. H. Howe	498,850	June 6	176	44	63	1424
Umbrella-stick. Tubular	J. Rose	504,944	Sept. 12	1047	269	64	1481
Umbrella-support	N. D. Brooks	507,481	Oct. 24	2856	701	65	575
Umbrella-support	W. Fancboner	504,717	Sept. 12	663	168	64	1407
Umbrella-support	M. Light	504,843	Sept. 12	888	228	64	1451
Umbrella-support	A. M. Woods	503,338	Aug. 15	1845	457	64	931
Umbrella-tie	J. H. Doty	501,772	July 18	1987	491	64	391
Umbrellas, canes, &c. Holder for	H. Egberts	499,974	June 20	2040	494	63	1775
Undergarment	J. A. Bennett	503,520	Aug. 15	2116	531	64	980
Undergarment	J. A. Scriven	492,055	Feb. 21	1585	394	62	1095
Undergarment. Combination	A. Frey	496,302	Apr. 25	2820	705	63	571
Undergarment. Combination	W. F. Kneip. (Reissue)	11,325	Apr. 18	2285	575	63	455
Undershirt	C. E. Drew	495,316	Apr. 11	1278	320	63	255
Underskirt	M. Cohn	490,102	Jan. 17	1765	460	62	393
Underwaist	A. J. Miller	494,300	Mar. 28	2495	630	62	1385
Underwaist	E. M. Mosher	495,053	Apr. 11	818	207	63	171
Underwaist	E. W. Philbrook	503,436	Aug. 15	1987	493	64	957
Unicycle	L. W. Harper	511,139	Dec. 19	2245	551	65	1855
Union-joint	A. Weber	494,801	Apr. 4	443	109	63	86
Universal joint	C. M. Stone	509,404	Nov. 28	2383	577	65	1247
Unloading and stacking apparatus	J. J. Schrag	510,937	Dec. 19	1911	468	65	1792
Unloading-platform	E. J. Coler	493,980	Mar. 21	1966	502	62	1770
Upholstering device	H. B. Pitner	511,649	Dec. 26	3098	756	65	2024
Upholstery ball, tassel, &c.	G. F. Hensel	509,661	Nov. 28	2822	681	65	1333
Uppers. Machine for setting up Congress	L. Joncas	491,709	Feb. 14	1054	267	62	976
Upright boiler	E. U. Gibbs	501,711	July 18	1880	468	64	372
Urinal	A. O'Brien	503,491	Aug. 15	2075	518	64	973
Urinal bowl	P. J. Madden	493,278	Mar. 14	797	206	62	1532
Urinary apparatus	M. D. L. Sherman	501,372	July 11	1354	338	64	260
Urn or like vessel. Coffee	F. E. Browne	491,834	Feb. 14	1244	311	62	1013
Uterine dilator	A. J. Beavis	507,060	Oct. 17	2129	528	65	427
Vacuum apparatus	M. Swenson	504,374	Sept. 5	101	25, 26	64	1289
Vacuum-engine	H. Denney	495,243	Apr. 11	1169	292 293	63	235
Vacuum-gage	W. A. Rockliff	503,330	Aug. 15	1835	455	64	929
Vacuum-pan	J. H. Duncan	499,721	June 20	1620	392	63	1702
Vacuum-pan	J. M. Duncan	496,111	Apr. 25	2528	639	63	516
Vacuum-pan	J. H. Duncan	503,312	Aug. 15	1803	448	64	923
Vacuum-pan	E. Passburg	509,045	Nov. 21	1735	429 430	65	1115
Vacuum-pan	C. L. Schaltz	493,085	May 23	2727	682	63	1155
Vacuum-pan	B. E. Sperry	509,962	Dec. 5	192	45	65	1446
Vacuum-pan	W. Walter	499,486	June 13	1248	297	63	1623
Valve	W. G. Adams and J. S. Forbes	495,213	Apr. 11	1112	277 278	63	224
Valve	J. J. Boyne and W. Caldwell	510,883	Dec. 19	1819	450	65	1775
Valve	J. R. Branden	508,464	Nov. 14	793	196	65	919
Valve	J. W. Cabot	490,945	Jan. 31	3161	810	62	693
Valve	T. S. Evans	508,377	Nov. 7	651	159	65	879
Valve	E. G. Felthousen	506,846	Oct. 17	1780	448	65	363
Valve	F. J. Ferrell	490,227	Jan. 17	1972	517	62	433
Valve	F. J. Ferrell	501,497	July 18	1531	384 385	64	309
Valve	F. Fichter	509,211	Nov. 21	2017	489	65	1169
Valve	T. P. Ford	489,799	Jan. 10	1250	327	62	274
Valve	T. P. Ford	503,843	Aug. 22	2637	660	64	1094
Valve	E. H. Gold	491,166	Feb. 7	173	44	62	781
Valve	S. F. Gold	501,713	July 18	1882	468	64	373
Valve	T. W. Heermans	510,860	Dec. 12	1775	436	65	1754
Valve	E. C. Henn	505,792	Sept. 26	2490	628	64	1778
Valve	J. Jeannotte	504,838	Sept. 12	880	226	64	1450
Valve	L. H. Jenks	495,415	Apr. 11	1430	360	63	282
Valve	D. Kennedy	495,739	Apr. 18	1962	495	63	395
Valve	E. H. Lunken	498,439	May 30	3314	825	63	1275
Valve	C. D. Lynch	491,899	Feb. 14	1352	335	62	1034
Valve	H. E. Marchand	490,878	Jan. 31	3040	781	62	671
Valve	W. G. Nelson	499,030	June 6	505	118	63	1479
Valve	G. H. F. Schrader	495,064	Apr. 11	836	213	63	175
Valve	G. H. F. Schrader	505,486	Sept. 26	1927	497	64	1673
Valve. Air	D. R. Berry	499,956	June 20	2011	488	63	1769
Valve. Air	G. M. Davis	507,650	Oct. 31	3188	780	65	650
Valve. Air	A. T. Neilson	507,380	Oct. 24	2704	664	65	546
Valve. Air	F. K. Way	492,597	Feb. 28	2453	610	62	1266
Valve. Air	F. K. Way and F. M. Waters	507,770	Oct. 31	3367	824	65	683
Valve. Air-brake	H. M. Lofton	503,244	Aug. 15	1682	413 414	64	903
Valve. Ammonia-expansion	J. G. Forstburg and P. Burkland	506,991	Oct. 17	2013	498	65	407
Valve and faucet	R. Marsh	495,636	Apr. 18	1792	450	63	366
Valve and valve-seat for oil-cans. Outlet	A. H. Walker	509,411	Nov. 28	2393	580	65	1249
Valve attachment. Electro-steam	J. H. Crosby	489,464	Jan. 10	753	199	62	174
Valve. Automatic	G. W. Young	509,344	Nov. 21	2254	545	65	1213
Valve. Automatic air	C. Jenkins	498,275	May 30	3042	757	63	1226
Valve. Automatic drip	E. F. Roberts	506,260	Oct. 10	800	198	65	164
Valve. Automatic relief	W. F. West	500,645	July 4	174	45	64	34
Valve. Automatic stop	H. W. Forslund	505,514	Sept. 26	1998	512	64	1685
Valve. Automatic three-way	W. Craig	509,118	Nov. 21	1869	458	65	1141
Valve. Balanced slide	C. O. Heggem	489,867	Jan. 10	1339	350	62	293
Valve. Balanced slide	C. O. Heggem	491,940	Feb. 14	1413	353	62	1046
Valve. Balanced slide	D. Kiley	496,740	May 2	557	150	63	720
Valve. Balanced slide	J. P. Lightbody	489,128	Jan. 3	224	60	62	52
Valve. Balanced slide	J. P. Lightbody	489,129	Jan. 3	225	61	62	52
Valve. Balanced slide	C. R. McGahey	508,964	Nov. 21	1612	396	65	1091

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Valve. Balanced slide.	G. S. Neeley	502,132	July 25	2549	639	64	510
Valve. Balanced slide.	F. M. Rites	501,663	July 18	1799	448	64	359
Valve. Beer-tank	A. Schneider	507,636	Oct. 31	3161	774	65	645
Valve. Boiler check.	W. Wright	495,082	Apr. 11	864	221	63	180
Valve. Check.	W. S. Welsh	491,957	Feb. 14	1437	358	62	1510
Valve-chest for steam-engines	W. H. Myers	506,061	Oct. 3	404	106	65	79
Valve-closing device.	H. Kleppe and A. Neuhaus	509,172	Nov. 21	1953	477	65	1157
Valve. Compound-engine reversing.	G. E. Wright	510,665	Dec. 12	1405	646	65	1687
Valve-controlling mechanism	E. W. Harden	505,764	Sept. 26	2149	616 617	64	1769
Valve-controlling mechanism	W. P. Ogden	498,751	May 30	3862	952	63	1370
Valve-controlling mechanism for motors	H. Eichbaum	495,970	June 6	394	93	63	1461
Valve. Cylinder drain.	E. Bergin	502,602	Aug. 1	596	142	64	675
Valve device.	J. Kelly	505,272	Sept. 19	1579	412	64	1594
Valve device.	J. T. Stewart	499,896	June 20	1930	468	63	1755
Valve. Direct-acting-engine	F. A. Burnham	492,188	Feb. 21	1795	448	62	1139
Valve. Direct-acting-engine	M. T. Davidson	497,442	May 16	1713	433	63	959
Valve. Engine.	H. R. Fay	494,194	Mar. 28	2325	588 590	62	1854
Valve. Engine.	F. Phillips	500,271	June 27	2543	622	63	1875
Valve. Engineer's	W. C. Whitacre	494,502	Mar. 28	2618	706 707	62	1944
Valve. Engineer's brake.	W. T. Bothwell	508,365	Nov. 7	630	155	65	875
Valve. Engineer's brake.	F. L. Clark	496,638	May 2	391	105 106 107	63	690
Valve. Engineer's brake.	F. L. Clark. (Reissue)	11,368	Sept. 26	2516	635 636 637	64	1782
Valve. Engineer's brake.	H. H. Vaughan and M. E. McKee	504,290	Aug. 29	3366	841 842	64	1249
Valve. Engineer's graduating.	W. O. Pelham	503,551	Aug. 15	2173	543	64	991
Valve-escapement for reservoirs, tanks, &c	G. F. Brown and H. Van Duzee	508,162	Nov. 7	301	75	65	814
Valve. Faucet.	F. Schneider and J. Foley	504,755	Sept. 12	735	183	64	1422
Valve. Fermenting-tub	S. S. Johnson	489,868	Jan. 10	1340	350	62	293
Valve. Float.	W. Scott	509,401	Nov. 28	2377	576	65	1247
Valve. Fluid-pressure.	H. G. Manning	492,372	Feb. 21	2078	519	62	1196
Valve for air and liquids. Combined.	J. T. Langford	507,661	Oct. 31	3205	784	65	653
Valve for air-brakes. Automatic	J. D. P. Schenck	492,841	Mar. 7	104	25, 26	62	1378
Valve for air-brakes. Quick-release	H. R. Mason	493,436	Mar. 14	1041	268 269	62	1579
Valve for air-brakes. Triple	H. L. Howe	507,132	Oct. 24	2266	557 558	65	465
Valve for air-brakes. Triple	H. L. Howe	507,133	Oct. 24	2271	558 559	65	466
Valve for air-brakes. Triple	H. L. Howe	507,498	Oct. 24	2690	711 712	65	581
Valve for air-compressors. Suction.	F. Neukirch	511,248	Dec. 19	2421	590	65	1887
Valve for blowing-engines. Discharge.	T. James	490,146	Jan. 17	1841	480 481	62	408
Valve for brake systems. Triple	A. P. Massey	503,095	Aug. 8	1429	352	64	843
Valve for closet-tanks. Supply.	P. Harvey	501,507	July 18	1550	390	64	313
Valve for compound engines. Starting.	S. M. Vanclain	499,066	June 6	559	133	63	1438
Valve for digesters. Inlet.	J. E. Rettig	502,635	Aug. 1	644	154 155	64	685
Valve for engines. Oscillating	J. Cheek	496,552	May 2	253	68	63	665
Valve for fluid-pressure brakes. Triple	H. L. Howe	507,134	Oct. 24	2276	559 560	65	467
Valve for fluid-pressure brakes. Triple	P. Synnestvedt	505,685	Sept. 26	2316	588	64	1745
Valve for garbage-cars. Outlet.	J. E. Rettig	502,584	Aug. 1	562	134	64	669
Valve for gas or air compressors	J. E. Rrist	507,901	Oct. 31	3583	884	65	723
Valve for hot-water radiators. Automatic air.	E. S. Hoyt	508,017	Nov. 7	59	17	65	768
Valve for hydrants and water-pipes. Cut-off.	S. C. McNeill	496,580	May 2	294	79	63	673
Valve for hydraulic elevators, &c	C. I. Hall	509,847	Nov. 28	3116	752	65	1389
Valve for hydraulic or steam machinery.	C. A. Jones	501,791	July 18	2016	497 498 499	64	396
Valve for hydrocarbon-engines.	B. Drysdale	500,477	June 27	2856	703 704	63	1930
Valve for kitchen-boilers. Safety.	T. B. Clatworthy	491,238	Feb. 7	288	72	62	803
Valve for petroleum or other motors. Mixing.	F. A. Lehmann	500,401	June 27	2753	678	63	1912
Valve for reversible steam-engines.	L. Schutte	501,965	July 25	2286	572	64	460
Valve for steam-pipes. Relief.	T. W. Moran	500,505	June 27	2900	713	63	1937
Valve for suction or blast pipes. Relief.	H. L. Day	503,126	Aug. 15	1492	367	64	868
Valve for tanks. Automatic supply.	P. White	491,694	Feb. 14	1031	261	62	972
Valve for triple-valve mechanisms. Graduating.	J. T. Hayden	493,715	Mar. 21	1511	386	62	1684
Valve for water-gages. Safety.	J. Fishburn	490,955	Jan. 31	3176	813	62	696
Valve for water-tanks. Anti-freezing automatic cut-off.	J. B. Vail, S. E. Jackson, and W. C. Smith.	495,074	Apr. 11	854	218	63	178
Valve. Gage stop.	W. A. Johnston	506,115	Oct. 3	488	126	65	96
Valve. Gas and air.	J. F. Whittaker, E. P. Whitaker, and W. C. Whitman.	496,805	May 2	665	176	63	737
Valve. Gas-furnace	P. R. Dillon	510,008	Dec. 5	291	65	65	1465
Valve-gates. Making	F. H. Richards	496,136	Apr. 25	2563	645	63	523
Valve-gear	A. Collmann	502,615	Aug. 1	612	146 147 110	64	678
Valve-gear	J. Garrard and W. W. Lewis	510,128	Dec. 5	484	111	65	1501
Valve-gear	W. E. Good and G. B. Petsche	498,783	June 6	50	11	63	1397
Valve-gear	P. J. Langlais	511,085	Dec. 19	2156	531	65	1838
Valve-gear	D. F. Lepley	492,302	Feb. 21	1968	490 491	62	1175
Valve-gear	C. F. Littlejohn	490,853	Jan. 31	2995	767	62	661
Valve-gear	P. Meer	506,438	Oct. 10	1120	279	65	226

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Valve-gear.....	G. P. Schneider.....	507,597	Oct. 31	3092	755	65	631
Valve-gear.....	O. Stephens.....	489,836	Jan. 10	1306	341	62	287
Valve-gear.....	F. M. Walker.....	490,693	Jan. 31	2752	708	62	613
Valve-gear.....	W. B. Waterman.....	508,588	Nov. 14	1003	246 247	65	960
Valve-gear.....	F. C. Weir and E. W. Harden.....	490,331	Jan. 24	2159	563 564	62	483
Valve-gear. Direct-acting-engine.....	W. Craig.....	506,359	Oct. 10	971	241	65	196
Valve-gear. Engine.....	D. Joy.....	506,509	Oct. 10	1246	310	65	250
Valve-gear for compound engines.....	D. A. Barnes.....	501,986	July 25	2317	579	64	466
Valve-gear for gas or petroleum motor engines.....	H. Schumm.....	495,376	Apr. 11	1371	342	63	271
Valve-gear. Hydraulic.....	E. S. Matthews.....	503,975	Aug. 29	2855	717	64	1153
Valve-gear. Reversing.....	J. W. Phillips.....	510,988	Dec. 19	2006	495	65	1809
Valve-gear. Steam-engine.....	E. N. Dickerson.....	502,878	Aug. 8	1072	264 265	64	778
Valve-gear. Steam-engine.....	A. F. Dumke.....	497,171	May 9	1249	317	63	861
Valve-gear. Steam-engine.....	E. Hill.....	510,685	Dec. 12	1438	355	65	1694
Valve-gear. Steam-engine.....	A. K. Mansfield.....	510,279	Dec. 5	732	178	65	1548
Valve-gear. Steam-engine.....	B. V. Nordberg.....	497,285	May 9	1443	364 365	63	894
Valve-gear. Steam-engine.....	T. M. Pusey.....	490,986	Jan. 31	3225	824	62	705
Valve. Globe.....	J. Wilkes.....	498,496	May 30	3412	847	63	1292
Valve. Hose.....	J. W. Grant.....	509,371	Nov. 23	2307	558	65	1234
Valve. Hot-blast.....	J. W. Wailes.....	501,750	July 18	1945	481	64	344
Valve. Hot-water.....	F. C. Goff.....	510,430	Dec. 12	956	230	65	1606
Valve. Hydrant.....	S. L. Cohoon.....	509,843	Nov. 28	3110	751	65	1387
Valve. Hydrant.....	S. W. Lewis. (Reissue).....	11,360	Aug. 15	1203	550	64	997
Valve. Hydraulic automatic safety.....	W. H. Wood.....	509,992	Dec. 5	253	59	65	1457
Valve. Hydraulic-pressure.....	G. B. Lamb.....	490,290	Jan. 24	2090	545	62	468
Valve-lock.....	G. M. Tower.....	492,313	Feb. 21	1987	495	62	1179
Valve mechanism. Air-brake.....	T. H. Haberkorn.....	508,702	Nov. 14	1170	289	65	993
Valve mechanism. Air-brake.....	J. T. Hayden.....	495,488	Apr. 18	1559	392 393	63	326
Valve mechanism. Engine.....	C. E. Vaughn.....	491,670	Feb. 14	993	250	62	963
Valve mechanism for air-brakes.....	J. T. Hayden.....	496,651	May 2	415	112	63	694
Valve mechanism for fluid-pressure brakes.....	P. Grabler.....	501,615	July 18	1719	429	64	346
Valve mechanism for gas-engines.....	H. Warden.....	499,865	June 20	1876	456	63	1745
Valve mechanism. Siphon-tank.....	W. H. Edmondson.....	506,217	Oct. 10	718	180	65	147
Valve mechanism. Triple.....	P. Synnestvedt.....	504,139	Aug. 29	3118	780	64	1201
Valve-motion. Compound-engine.....	J. Player.....	499,585	June 13	1412	337	63	1651
Valve-motion for tandem compound engines.....	J. Player.....	499,586	June 13	1413	337	63	1651
Valve-operating device. Engine.....	D. Joy.....	490,599	Jan. 24	2568	661 662 663	62	563
Valve-operating device for gas-heaters.....	A. T. Welch.....	500,643	July 4	171	44	64	34
Valve-operating device for wash-basins, bath-tubs, &c. Discharge.....	J. H. Stevens.....	508,585	Nov. 14	1000	245 246	65	960
Valve-operating mechanism.....	F. J. Parish and H. H. B. Meyer.....	498,690	May 30	3743	924	63	1349
Valve-operating mechanism.....	C. L. Rowland. (Reissue).....	11,328	May 2	713	189	63	747
Valve-operating mechanism. Lazy-tongs.....	J. R. Floyd.....	497,871	May 23	2402	599	63	1098
Valve or stop-valve mechanism. Stop.....	H. Bann.....	493,806	Mar. 21	1679	428	62	1717
Valve. Packingless.....	F. Storar.....	493,567	Mar. 14	1273	325	62	1621
Valve. Piston.....	H. D. Dunbar.....	504,153	Aug. 29	3141	785	64	1206
Valve. Piston.....	S. O. Jones.....	509,037	Nov. 21	1721	425 426	65	1112
Valve. Pressure-reducing.....	H. D. W. Gibson.....	502,434	Aug. 1	310	74	64	622
Valve. Pressure-reducing.....	A. Horne.....	491,178	Feb. 7	194	50	62	785
Valve. Pressure-regulating.....	A. Heithecker.....	496,735	May 2	549	147	63	718
Valve. Pressure-regulating.....	J. Nageldinger.....	498,482	May 30	3377	842	63	1286
Valve. Quick-acting triple.....	H. H. Westinghouse.....	489,441	Jan. 3	706	189	62	151
Valve. Quick-acting triple.....	H. H. Westinghouse.....	506,612	Oct. 10	1386	348	65	278
Valve. Quick-action triple.....	A. P. Massey.....	511,206	Dec. 19	2354	575	65	1875
Valve. Radiator air.....	G. E. Dixon.....	504,972	Sept. 12	1095	280	64	1491
Valve. Radiator air.....	A. Hubbard.....	491,112	Feb. 7	77	32	62	764
Valve. Reducing-pressure.....	E. J. Wood.....	489,515	Jan. 10	840	219	62	191
Valve. Reducing starting.....	J. Player.....	499,588	June 13	1415	338	63	1652
Valve. Regulating.....	N. C. Locke.....	497,985	May 23	2579	645	63	1129
Valve. Regulating.....	N. C. Locke.....	509,923	Dec. 5	127	29, 30	65	1434
Valve. Relief.....	A. L. Harrison.....	500,891	July 4	565	147	64	103
Valve. Relief.....	W. P. Phillips.....	492,168	Feb. 21	1765	441	62	1133
Valve-reseating machine.....	C. L. Morse.....	504,606	Sept. 5	477	122 123	64	1359
Valve-rod adjuster.....	B. D. Northrup.....	497,681	May 16	2087	521	63	1025
Valve. Rotary.....	F. W. Bruce.....	492,267	Feb. 21	1921	479	62	1165
Valve. Safety.....	C. H. Cameron.....	506,624	Oct. 10	1405	353	65	282
Valve. Safety.....	A. Lohbiller.....	496,058	Apr. 25	2451	619	63	501
Valve. Safety.....	A. Lohbiller.....	498,802	June 6	81	20	63	1403
Valve. Safety.....	E. H. Lunken.....	498,803	June 6	82	21	63	1403
Valve. Safety.....	A. C. Meady.....	499,843	June 20	1838	447	63	1738
Valve. Safety.....	C. Prüssmann.....	511,650	Dec. 26	3099	757	65	2024
Valve-seating machine.....	F. H. Richards.....	500,216	June 27	2464	601 602	63	1861
Valve-seating tool.....	F. H. Richards.....	500,215	June 27	2462	600 601	63	1860
Valve seats. Grinding globe.....	W. C. Parsells.....	502,932	Aug. 8	1175	290	64	797
Valve. Self-closing.....	C. H. Dinsmore.....	496,045	Apr. 25	2431	613	63	498
Valve-spindle.....	F. C. Rockwell.....	507,594	Oct. 31	3059	754	65	630
Valve. Steam.....	W. Franks.....	496,733	May 2	543	146	63	717
Valve. Steam.....	H. Grossmann.....	500,492	June 27	2883	709	63	1934
Valve. Steam.....	J. N. Murphy.....	508,486	Nov. 14	833	207	65	928
Valve. Steam-actuated.....	A. R. Boluss.....	491,506	Feb. 7	726	183 184	62	888
Valve. Steam-actuated.....	R. L. Frost.....	497,470	May 16	1755	442	63	966
Valve. Steam actuated.....	E. A. Menking.....	500,407	June 27	2760	680	63	1913

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Valve. Steam-actuated.	G. J. Roberts.	501,579	July 18	1660	415	64	335
Valve. Steam-actuated engine.	H. Breitenstein.	509,291	Nov. 21	2165	521	65	1196
Valve. Steam-cylinder relief.	W. H. Bailey.	502,593	Nov. 14	1010	248	65	962
Valve. Steam-engine.	C. A. Carlson.	510,116	Dec. 5	464	104	65	1497
Valve. Steam-engine.	J. Dow.	498,635	May 30	3645	902	63	1332
Valve. Steam-engine.	H. W. Lounsbery.	502,497	Aug. 1	420	99	64	644
Valve. Steam-engine.	J. B. Munslow.	502,374	Aug. 1	209	100	64	604
Valve. Steam-engine.	A. Rocho.	503,001	Aug. 8	1287	315	64	817
Valve. Steam-engine.	C. Vogel.	495,282	Apr. 11	1232	308	63	245
Valve. Steam-engine.	H. H. Ward.	506,141	Oct. 3	539	139	65	104
Valve. Steam or other.	F. Hedley.	510,425	Dec. 12	962	230	65	1606
Valve. Steam-radiator air.	J. H. Lindsay.	499,463	June 13	1214	290	63	1617
Valve stem shield.	D. A. Reagan.	509,681	Nov. 28	2847	688	65	1338
Valve. Stop and waste.	J. W. Hill.	502,563	Aug. 1	526	126	64	663
Valve. Straightway.	J. M. Coale.	511,510	Dec. 26	2874	697	65	1983
Valve. Straightway.	E. H. Lunken.	494,579	Apr. 4	81	20	63	17
Valve. Straightway.	E. H. Lunken.	494,580	Apr. 4	82	20	63	17
Valve. Straightway.	E. H. Lunken.	494,581	Apr. 4	84	20	63	18
Valve. Straightway.	E. H. Lunken.	491,582	Apr. 4	85	21	63	18
Valve. Suction.	W. H. Brenner, Sr.	493,968	Mar. 21	1946	496	62	1767
Valve. Throttle.	A. J. Pitkin.	493,836	Mar. 21	1715	437	62	1724
Valve. Throttle.	J. E. Stannard.	509,334	Nov. 21	2240	542	65	1210
Valve. Throttle.	B. F. and G. H. Van Matre.	502,939	Aug. 8	1189	293	64	799
Valve. Tube.	F. R. McMillan.	509,670	Nov. 28	2835	625	65	1336
Valve with governor attachment. Brake.	W. F. De Forest.	497,405	May 16	1651	417	63	948
Valves. Cut-off for slide.	M. Wilkes.	501,394	July 11	1388	347	64	266
Valves of steam-engines. Means for operating throttle.	F. E. Kinsman.	492,403	Feb. 28	2133	533	62	1220
Valves. Pressure-relief regulator for slide.	W. F. Garrison.	497,020	May 9	1018	261	63	820
Valves. Seating.	F. H. Richards.	500,214	June 27	2461	600	63	1860
Vamp throating and marking machine.	G. E. Stewart and A. G. Brewer.	499,050	June 6	535	126	63	1484
Vanilloyl-carbonic acid and vanillin. Making.	G. de Laire.	497,546	May 16	1879	63	988	
Vapor-burner.	C. Bruce.	502,029	July 25	2388	600	64	479
Vapor-burner.	J. A. Chandler.	497,862	May 23	2390	597	63	1093
Vapor-burner.	J. A. Chandler.	505,508	Sept. 26	1981	508	64	1681
Vapor-burner.	I. Culver.	499,969	June 20	2032	492	63	1773
Vapor-burner.	A. Gateau.	493,079	Mar. 7	476	119	62	1453
Vapor-burner.	J. A. Lannert and W. R. Jeavons.	504,129	Aug. 29	3103	776	64	1199
Vapor-burner.	W. J. D. Mast.	506,243	Oct. 10	777	192	65	159
Vapor-burner.	H. F. Smith.	506,560	Oct. 10	1317	329	65	264
Vapor-burner. Illuminating.	A. Prior.	493,293	Mar. 14	824	211	62	1536
Vapor-generating burner.	G. Littlefield.	493,171	Mar. 7	622	156	62	1481
Vaporizer.	J. F. Chase.	492,979	Mar. 7	328	82	62	1424
Vaporizer.	F. C. Hawkes.	496,481	May 2	138	38	63	644
Vaporizer.	A. R. Miranda.	491,902	Feb. 14	1355	337	62	1035
Vaporizer and burner. Hydrocarbon.	J. H. Matthews.	496,523	May 2	206	55	63	656
Vaporizer. Disinfectant.	L. G. Woolley.	498,146	May 23	2816	704	63	1171
Vaporizer. Steam.	C. H. Cushman.	499,190	June 6	749	178	63	1521
Vaporizing burner. Hydrocarbon.	A. J. English.	503,531	Aug. 15	2137	536	64	984
Vaporizing oil. Apparatus for.	R. H. Laird.	498,518	May 30	3443	854	63	1297
Varnish and apparatus therefor. Manufacturing.	H. Pfanne.	501,578	July 18	1659	415	64	335
Varnish. Making.	G. H. Smith.	496,451	May 2	99	63	637	
Varnish. Manufacture of.	W. D. Field.	504,064	Aug. 29	2995	64	1178	
Varnishing-machine.	H. Haefer.	495,484	Apr. 18	1552	390	63	325
Varnishing. Ornamental.	B. B. Goldsmith.	506,394	Oct. 10	1033	65	209	
Vat.							
See Milk-vat.							
Vault-cover. Ventilating.	C. H. Ross.	497,388	May 16	1624	410	63	943
Vault for ceilings, bridges, &c.	J. Melan.	505,054	Sept. 12	1226	316	64	1515
Vault or floor light.	J. C. French.	504,872	Sept. 12	928	239	64	1459
Vault or skylight cover.	J. Jenkinson.	501,720	July 18	1892	470	64	375
Vegetable-chopper.	C. B. Trumble.	500,695	July 4	261	71	64	49
Vegetable-cutter.	J. G. Baker.	509,642	Nov. 28	2785	670	65	1326
Vegetable-cutter.	M. J. Cunningham.	494,416	Mar. 28	2684	673	62	1920
Vegetable-cutter.	J. F. Heintlein.	503,599	Aug. 22	2274	568	64	1023
Vegetable-cutter.	J. S. Patten.	492,967	Mar. 7	309	79	62	1420
Vegetable-cutter.	C. Raible.	510,289	Dec. 5	751	182	65	1551
Vegetable-cutter.	J. Roslosnik.	508,185	Nov. 7	330	82	65	819
Vegetable-cutter.	D. N. Weathers.	491,622	Feb. 14	925	232	62	949
Vegetable-cutter.	F. K. Zehe.	509,564	Nov. 28	2666	645	65	1303
Vegetable or meat cutter.	O. Avery.	510,310	Dec. 5	782	189	65	1558
Vegetable or meat cutter.	N. R. Streeter.	496,755	May 2	579	155	63	723
Vegetable or meat cutter.	N. R. Streeter.	496,756	May 2	580	155	63	723
Vegetable-peeling machine.	J. B. Foote.	501,613	July 18	1716	428	64	345
Vegetable-reducer.	J. G. Hemesath.	498,262	May 30	3020	752	63	1222
Vegetable-slicing machine.	C. M. Fairbanks.	501,928	July 25	2236	558	64	451
Vegetable-washing machine.	F. K. Zehe.	508,197	Nov. 7	361	89	65	825
Vegetation-exterminator.	A. A. Sharp.	492,635	Feb. 28	2517	633	62	1299
Vehicle.	T. R. Capwell and W. C. Fuller.	493,614	Mar. 14	1357	344	62	1638
Vehicle.	S. Garwood.	491,544	Feb. 14	787	201	62	920
Vehicle.	J. Krauss.	502,303	Aug. 1	78	18	64	580
Vehicle.	L. Landreth.	494,008	Mar. 21	2015	514	62	1781
Vehicle.	C. C. Leivenich.	495,743	Apr. 18	1967	496	63	397
Vehicle.	G. Schumacher.	506,946	Oct. 17	1946	482	65	394
Vehicle.	H. S. Van Patten.	505,563	Sept. 26	2104	534	64	1706
Vehicle.	H. S. Van Patten.	509,975	Dec. 5	217	50	65	1451

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Vehicle	T. H. Wilcox	510,624	Dec. 12	1333	{ 325 326 327	{ 65	1674
Vehicle attachment	O. W. Mason	509,542	Nov. 28	2630	636	65	1296
Vehicle automatic recording apparatus	J. Baade	506,579	Oct. 10	1343	337	65	270
Vehicle-bolster	T. H. Glancy	493,702	Mar. 21	1493	382	62	1681
Vehicle bolster-plate	O. L. Dunfee	496,249	Apr. 25	2739	685	63	555
Vehicle-brake	S. I. Allen	510,667	Dec. 12	1411	{ 347 348	{ 65	1688
Vehicle-brake	J. F. Appell	506,458	Oct. 10	1153	286	65	233
Vehicle-brake	H. J. Barnes	489,189	Jan. 3	318	87, 88	62	72
Vehicle-brake	J. A. Bickford	510,766	Dec. 12	1571	392	65	1719
Vehicle-brake	M. J. Bobo	493,676	Mar. 21	1455	371	62	1673
Vehicle-brake	W. J. Botts	503,897	Aug. 22	2717	682	64	1110
Vehicle-brake	N. E. Bradford	498,841	June 6	161	39	63	1420
Vehicle-brake	C. K. Brandenburg	507,480	Oct. 24	2855	701	65	575
Vehicle-brake	A. Bruegger	500,188	June 27	2418	589	63	1852
Vehicle-brake	E. W. Cleveland	508,283	Nov. 7	500	121	65	851
Vehicle-brake	C. Goelz	504,343	Sept. 5	48	13	64	1280
Vehicle-brake	J. H. Grayson	495,882	Apr. 18	2186	549	63	436
Vehicle-brake	P. J. Hanley	508,612	Nov. 14	1037	256	65	967
Vehicle-brake	A. B. McNeil	505,903	Oct. 3	163	42	65	32
Vehicle-brake	D. Miller	497,805	May 23	2283	574	63	1077
Vehicle-brake	J. M. Miller	489,024	Jan. 3	67	19	62	17
Vehicle-brake	M. B. Monroe	510,699	Dec. 12	1456	360	65	1697
Vehicle-brake	C. E. Newman	502,576	Aug. 1	546	130	64	666
Vehicle-brake	S. E. Odell	508,832	Nov. 14	1360	336	65	1029
Vehicle-brake	J. F. Sinkler	490,368	Jan. 24	2217	578	62	495
Vehicle-brake	J. B. Sweet	489,997	Jan. 17	1584	414	62	356
Vehicle-brake	A. Talbot	496,071	Apr. 25	2468	623	63	505
Vehicle-brake	G. H. Zeigler	498,347	May 30	3178	791	63	1249
Vehicle brake and starter	S. A. de Normanville	507,033	Oct. 17	2079	514	65	419
Vehicle-brake. Automatic	J. N. Schwalen	496,540	May 2	236	62	63	662
Vehicle-brake. Automatic	E. Swartz and D. S. Beemer	501,545	July 18	1603	{ 403 404	{ 64	323
Vehicle brake-lever	G. Butler	489,456	Jan. 10	739	197	62	171
Vehicle brake mechanism	J. B. Upton	489,839	Jan. 10	1309	342	62	287
Vehicle brake. Road	T. G. Barlow-Massicks	509,645	Nov. 28	2789	671	65	1327
Vehicle canopy-top	J. U. Tabor	505,544	Sept. 26	2053	524	64	1695
Vehicle center plate	F. P. Davidson	506,419	Oct. 10	1086	{ 269 270	{ 65	219
Vehicle-clip	H. H. Young	489,777	Jan. 10	1221	320	62	268
Vehicle-coupling	E. Matthews	489,437	Jan. 3	702	188	62	151
Vehicle-cover	R. N. Warren and W. H. Wike	495,859	Apr. 18	2148	539	63	429
Vehicle curtain-raising device	E. Rusing, I. R. Donecho, and H. E. Rusing	491,665	Feb. 14	985	248	62	961
Vehicle draft-spring	J. S. Wine	490,527	Jan. 24	2468	636	62	543
Vehicle. Electric road	J. W. Moakler	500,022	June 20	2121	513	63	1788
Vehicle equalizing device	H. B. Cross	497,309	May 16	1504	379	63	921
Vehicle equalizing device	H. B. Cross	510,676	Dec. 12	1423	351	65	1691
Vehicle-gear	A. J. Cook	495,544	Apr. 18	1644	414	63	341
Vehicle-gear	C. Hansen	502,905	Aug. 8	1121	276	64	788
Vehicle-gear	M. Harcourt	494,332	Mar. 28	2549	642	62	1895
Vehicle gravity-brake	W. H. Morgan	496,429	May 2	61	18	63	629
Vehicle-bound	E. Turney	497,223	May 9	1323	337	63	875
Vehicle-bound brace	J. Zoulek	489,778	Jan. 10	1222	320	62	268
Vehicle. Locomotive	C. Lührig	502,443	Aug. 1	329	78, 79	64	626
Vehicle-motor	W. T. Harris	495,733	Apr. 18	1952	{ 491 492	{ 63	394
Vehicle. Motor	W. Maybach	494,641	Apr. 4	179	45	63	37
Vehicle. Passenger-rail	J. De Witt	508,414	Nov. 14	717	{ 176 177	{ 65	905
Vehicle propelled by hand or foot	M. D. Drake	510,332	Dec. 5	808	{ 195 196	{ 65	1563
Vehicle reach-coupling	C. C. Bradley	498,421	May 30	3279	{ 817 818	{ 63	1269
Vehicle reach-coupling	C. C. Bradley	499,959	June 20	2015	489	63	1770
Vehicle running-gear	W. Bonnar	503,032	Aug. 8	1333	328	64	826
Vehicle running-gear	J. S. Cleland	494,095	Mar. 21	2151	549	62	1806
Vehicle running-gear	H. M. and J. M. Crippen	494,628	Apr. 4	163	38, 39	63	33
Vehicle running-gear	A. Dratt	506,814	Oct. 17	1730	435	65	354
Vehicle running-gear	L. J. Ewell	499,288	June 13	896	217	63	1560
Vehicle running-gear	A. Fay	492,762	Feb. 28	2715	{ 674 675	{ 62	1338
Vehicle running-gear	J. Q. A. Haney	498,112	May 23	2771	694	63	1163
Vehicle running-gear	J. M. Holler	501,072	July 11	846	219	64	170
Vehicle running-gear	C. E. Holley	505,548	Sept. 26	2061	526	64	1697
Vehicle running-gear	W. R. Maxwell	508,894	Nov. 14	1455	361	65	1046
Vehicle running-gear	W. B. Phillips	489,688	Jan. 10	1077	280	62	239
Vehicle running-gear	L. M. Smith	492,845	Mar. 7	111	27, 28	62	1379
Vehicle running-gear	G. B. St. John	499,806	June 20	1774	430	63	1728
Vehicle running-gear	J. Urbanek	500,980	July 4	705	185	64	128
Vehicle running-gear	G. S. Wixson	507,702	Oct. 31	3261	798	65	663
Vehicle sand-band	R. J. Darby	510,629	Dec. 12	1340	329	65	1675
Vehicle sand-band	F. Sweetland and J. Faulks	489,838	Jan. 10	1308	341	62	287
Vehicle-seat	A. Delotter	497,311	May 16	1509	379	63	922
Vehicle-seat	W. S. O'Brien	490,919	Jan. 31	3117	799	62	685
Vehicle-seat	J. Ruch	489,569	Jan. 10	912	238	62	206
Vehicle-seat back	W. A. Nason	500,240	June 27	2499	611	63	1867
Vehicle-seat back	G. White	496,467	May 2	122	33	63	641
Vehicle-seat lock	M. L. Senderling	505,854	Oct. 3	76	19	65	17
Vehicle-seat shifting-rail	H. C. Swan	503,881	Aug. 22	2690	674	64	1104
Vehicle-seat spring-back	H. E. Herrick	503,319	Aug. 15	1815	450	64	925

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Vehicle. Self-loading.	G. F. Fischer	499,102	June 6	606	146	63	1496
Vehicle. Self-propelling.	T. J. Thorp	495,531	Apr. 18	1624	408	63	338
Vehicle shifting seat.	J. B. Armstrong, R. Parker, and C. W. Vernon.	499,369	June 13	1045	254	63	1588
Vehicle shifting seat.	F. G. Davis	511,515	Dec. 26	2881	701	65	1985
Vehicle side guard.	F. O. Blackwell	493,327	Mar. 14	885	226	62	1546
Vehicle. Side-hill.	C. Koenig	507,370	Oct. 24	2692	662	65	543
Vehicle. Side-spring.	J. J. Gilbert	489,673	Jan. 10	1050	273 274	62	234
Vehicle. Side-spring.	H. A. Muckle	490,299	Jan. 24	2102	548	62	471
Vehicle-spindle.	R. M. McBride	504,499	Sept. 5	317	80	64	1329
Vehicle-spring.	C. L. Bellamy	497,487	May 16	1788	450	63	971
Vehicle-spring.	E. H. Booth	502,605	Aug. 1	602	143	64	676
Vehicle-spring.	G. C. Burch	509,069	Nov. 21	1776	437	65	1122
Vehicle-spring.	G. T. Chapman	503,761	Aug. 22	2531	629	64	1073
Vehicle-spring.	J. N. Eastwood	492,788	Mar. 7	26	7	62	1364
Vehicle-spring.	D. T. Ensign	497,372	May 16	1604	405	63	940
Vehicle-spring.	J. Henrie	495,489	Apr. 18	1563	393	63	327
Vehicle-spring.	J. K. Hipple and V. L. Wolf.	507,129	Oct. 24	2260	556	65	464
Vehicle-spring.	J. M. Holler	498,270	May 30	3036	755	63	1225
Vehicle-spring.	J. A. Luke	504,043	Aug. 29	2967	742	64	1173
Vehicle-spring.	E. F. Morse	505,248	Sept. 19	1539	401	64	1586
Vehicle-spring.	W. G. Mowry	489,321	Jan. 3	516	141	62	112
Vehicle-spring.	W. G. Mowry	506,523	Oct. 10	1265	316	65	254
Vehicle-spring.	C. E. Pearl	490,677	Jan. 31	2733	704	62	609
Vehicle-spring.	H. H. Peiper	502,318	Aug. 1	111	26	64	586
Vehicle-spring.	L. Pentz	500,154	June 27	2359	570	63	1842
Vehicle-spring.	M. E. Robb	506,546	Oct. 10	1296	324	65	260
Vehicle-spring.	R. J. Skiles	490,794	Jan. 31	2914	749	62	644
Vehicle-spring.	E. B. Smith	500,515	June 27	2927	719	63	1943
Vehicle. Spring.	C. C. Bradley	502,027	July 25	2386	599 600	64	478
Vehicle. Spring.	H. A. Moyer	497,548	May 16	1881	474	63	988
Vehicle spring connection.	S. R. Bailey	499,086	June 6	590	141	63	1493
Vehicle-spring equalizing device.	D. C. Willett	497,396	May 16	1637	414	63	946
Vehicle spring-gear.	W. Bonnar	493,677	Mar. 21	1456	371	62	1674
Vehicle spring-gear.	H. W. Hamell	493,708	Mar. 21	1500	384	62	1682
Vehicle. Spring-propelled.	C. E. Newman	502,577	Aug. 1	547	130 131	64	667
Vehicle. Spring-propelled.	D. M. Pfautz	490,983	Jan. 31	3220	823	62	704
Vehicle spring-seat.	J. A. Alexander	500,789	July 4	409	107	64	76
Vehicle. Steam.	J. M. Richmond	495,709	Apr. 18	1915	482	63	386
Vehicle steering device.	F. E. Degenhardt.	493,354	Mar. 14	917	235	62	1553
Vehicle-step.	J. A. Alexander	493,373	Mar. 14	954	245	62	1561
Vehicle-top.	J. C. Griffis	494,858	Apr. 4	535	136	63	104
Vehicle-top.	E. A. Southworth and W. H. Blodgett.	506,562	Oct. 10	1319	330	65	265
Vehicle-top-operating device.	E. G. and G. Rauch and W. J. Kelly.	489,756	Jan. 10	1190	312	62	262
Vehicle. Tramway.	C. Lührig	502,442	Aug. 1	327	77, 78	64	626
Vehicle. Two-seated.	C. C. Bradley	503,308	Aug. 15	1787	441	64	921
Vehicle. Two-wheeled.	J. A. Bilz	494,752	Apr. 4	358	91	63	71
Vehicle. Two-wheeled.	W. S. Bull	495,014	Apr. 11	760	193	63	161
Vehicle. Two-wheeled.	B. A. Davis	507,789	Oct. 31	3401	834	65	690
Vehicle. Two-wheeled.	D. S. Gallatin.	493,764	Mar. 21	1606	408	62	1703
Vehicle. Two-wheeled.	J. F. Ketter	492,984	Mar. 7	336	84	62	1426
Vehicle. Two-wheeled.	E. McPhee	491,125	Feb. 7	95	26	62	767
Vehicle. Two-wheeled.	E. F. Morse	492,223	Feb. 21	1856	464	62	1151
Vehicle. Two-wheeled.	E. F. Morse	492,224	Feb. 21	1859	464 465	62	1151
Vehicle-wheel.	F. H. Bolte	500,368	June 27	2705	664	63	1903
Vehicle-wheel.	J. Buchanan	499,514	June 13	1305	307	63	1632
Vehicle-wheel.	M. Burgess	500,703	July 4	272	73	64	51
Vehicle-wheel.	D. Crowther	501,992	July 25	2324	580	64	467
Vehicle-wheel.	J. Dean	505,701	Sept. 26	2348	594	64	1751
Vehicle-wheel.	J. D. Everett	509,883	Dec. 5	64	16	65	1492
Vehicle-wheel.	R. C. Fay	492,578	Feb. 28	2424	604	62	1281
Vehicle-wheel.	A. S. Flint	498,255	May 30	3006	749	63	1219
Vehicle-wheel.	J. E. Frist	504,340	Sept. 5	44	13	64	1279
Vehicle-wheel.	J. E. Frist	504,573	Sept. 5	432	110	64	1350
Vehicle-wheel.	P. Gendron	510,783	Dec. 12	1597	398	65	1724
Vehicle-wheel.	A. F. Gillet	489,300	Jan. 3	485	134	62	106
Vehicle-wheel.	A. W. Grant	497,784	May 23	2259	567	63	1073
Vehicle-wheel.	J. H. Hendrick	490,438	Jan. 24	2317	601	62	512
Vehicle-wheel.	J. O. Hiner	501,420	July 11	1423	357	64	273
Vehicle-wheel.	C. J. Holman	509,809	Nov. 28	3059	738	65	1378
Vehicle-wheel.	L. C. Jaques and G. F. Kester.	506,508	Oct. 10	1245	309 310	65	250
Vehicle-wheel.	G. T. Jobson	496,226	Apr. 25	2699	677	63	548
Vehicle-wheel.	M. W. Lowinsky	495,817	Apr. 18	2081	524 525	63	417
Vehicle-wheel.	J. P. Manton	494,584	Apr. 4	88	21	63	18
Vehicle-wheel.	M. F. Meisch	498,479	May 30	3374	841	63	1286
Vehicle-wheel.	A. L. H. Messmer	502,006	July 25	2344	587	64	471
Vehicle-wheel.	H. Moore	504,440	Sept. 5	208	54, 55	64	1309
Vehicle-wheel.	J. H. Morris	501,525	July 18	1578	397	64	318
Vehicle-wheel.	J. Opdale	492,735	Feb. 28	2664	660	62	1328
Vehicle-wheel.	E. J. L. Persil	500,293	June 27	2575	629	63	1880
Vehicle-wheel.	J. Pool	495,755	Apr. 18	1983	501	63	400
Vehicle-wheel.	C. W. Robinson	494,168	Mar. 28	2285	579	62	1844
Vehicle-wheel.	J. G. Roseboom	503,554	Aug. 15	2180	545	64	992
Vehicle-wheel.	N. Smith and J. Haydock	510,203	Dec. 5	706	142	65	1524
Vehicle-wheel.	C. L. Wiedrich	499,813	June 20	1786	433	63	1730
Vehicle-wheel.	G. R. Williams	498,373	May 30	3216	800	63	1256
Vehicle-wheel.	M. R. Wolcott	493,419	Mar. 14	1010	260	62	1573

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Vehicle. Wheel.	T. Hill.	490,562	Jan. 24	2514	647	62	552
Vehicle-wheel. Pneumatic	J. P. Kelly.	504,273	Aug. 29	3344	836	64	1244
Vehicle-wheels. Runner attachment for	W. E. Mitchell.	505,668	Sept. 26	2282	579	64	1740
Vehicle. Wheeled	E. Steel.	504,685	Sept. 5	610	156	64	1385
Vehicle-wrench	D. H. Faust.	496,355	Apr. 25	2925	730	63	592
Vehicle-wrench	W. J. Walker and A. L. Bedford.	499,863	June 20	1872	455	63	1744
Vehicles. Combined toe-rail and carpet-holder for	P. B. Stone.	496,016	Apr. 25	2378	602	63	488
Vehicles. Controlling-switch for electrically-propelled	H. P. Davis.	503,279	Aug. 15	1737	429	64	913
Vehicles. Driving mechanism for road-	A. C. Ames.	500,544	July 4	1	1	64	3
Vehicles. Shipping-wrapper for	C. Ehlen.	494,713	Apr. 4	294	74	63	59
Veil-clasp	C. M. Day.	500,864	July 4	525	136	64	95
Veil-fastener	W. H. Harrison.	506,494	Oct. 10	1221	304	65	245
Veils. Board for winding.	S. Oppenheimer.	491,808	Feb. 14	1210	303	62	1006
Veiling fabric. Continuous.	S. Oppenheimer.	491,809	Feb. 14	1211	303	62	1006
Velocipede.	J. W. Adams.	496,388	May 2	1	1	63	619
Velocipede.	A. Au.	509,787	Nov. 28	3019	729	65	1370
Velocipede.	J. Bertoux.	495,293	Apr. 11	1248	311	63	249
Velocipede.	T. Broadbent.	507,412	Oct. 24	2752	676	65	555
Velocipede.	F. P. Crosby.	501,493	July 18	1526	383	64	308
Velocipede.	O. Cullmann.	504,079	Aug. 29	3012	753	64	1182
Velocipede.	O. Dalisch.	488,988	Jan. 3	20	5	62	7
Velocipede.	W. R. and E. G. Diehl.	511,290	Dec. 19	2499	609	65	1901
Velocipede.	T. B. Estep.	499,724	June 20	1628	393	63	1703
Velocipede.	T. Fane and C. F. Lavender.	507,114	Oct. 24	2226	549	65	458
Velocipede.	W. H. Fauber.	492,959	Mar. 7	295	75	62	1417
Velocipede.	J. E. A. Gibbs.	501,712	July 18	1880	468	64	373
Velocipede.	S. A. Grant.	509,079	Nov. 21	1800	443	65	1127
Velocipede.	A. L. Hahl.	502,717	Aug. 8	818	198	64	731
Velocipede.	A. L. Hahl.	503,080	Aug. 8	1398	346	64	838
Velocipede.	G. Langer.	494,870	Apr. 4	555	140	63	108
Velocipede.	A. Levin.	495,942	Apr. 18	2268	571	63	452
Velocipede.	C. E. Lipe and A. T. Brown.	510,606	Dec. 12	1302	316	65	1668
Velocipede.	F. P. McHardy.	490,587	Jan. 24	2546	655	62	558
Velocipede.	C. F. Pease.	492,988	Mar. 7	343	86	62	1427
Velocipede.	J. Ragoucy.	506,727	Oct. 17	1583	399	65	326
Velocipede.	A. Sanford.	505,373	Sept. 19	1745	452	64	1624
Velocipede.	J. G. Stamp.	496,800	May 2	653	174	63	735
Velocipede.	A. F. Vorkeller.	489,840	Jan. 10	1311	342	62	287
Velocipede.	S. Waterman and C. H. Luther, Jr.	492,754	Feb. 23	2695	669	62	1334
Velocipede.	J. F. Whitaker.	489,645	Jan. 10	1015	264	62	227
Velocipede attachment.	G. E. Pfeiffer.	495,511	Apr. 18	1593	400	63	333
Velocipede-brake	G. Hancock.	503,112	Aug. 8	1461	359	64	849
Velocipede brake mechanism	E. G. Selden and G. D. Chamberlain.	499,044	June 6	528	124	63	1483
Velocipede canopy attachment	T. W. Doyle.	494,556	Apr. 4	32	7	63	8
Velocipede-car.	D. W. Brunton.	508,500	Nov. 14	854	211	65	932
Velocipede chain-gear. Cover or case for	C. W., E. A., and F. H. Bluemel.	507,670	Oct. 31	3215	786	65	655
Velocipede crank-and-sprocket fastening	F. P. Crosby.	506,673	Oct. 17	1488	373	65	309
Velocipede drive-wheel	P. Gendron.	509,801	Nov. 28	3047	736	65	1376
Velocipede driving-gear.	J. Keen, T. R. Marriott, and F. Cooper.	491,429	Feb. 7	600	151	62	863
Velocipede-frame.	J. Ragoucy.	511,359	Dec. 26	2622	637	65	1938
Velocipede. Ice.	W. G. Bouse.	504,265	Aug. 29	3328	832	64	1241
Velocipede. Ice.	E. E. Gould.	508,011	Nov. 7	51	15	65	767
Velocipede. Ice.	G. B. Haines.	510,133	Dec. 5	492	112	65	1502
Velocipede. Ice.	A. Karlson.	500,583	July 4	70	21	64	14
Velocipede. Ice.	L. Noelcke.	510,813	Dec. 12	1646	409	65	1733
Velocipede. Ice.	J. Schmid.	501,625	Sept. 5	502	129	64	1364
Velocipede. Ice.	D. Smith.	500,623	July 4	138	37	64	27
Velocipede luggage-carrier	S. M. Bates.	499,903	June 20	1940	471	63	1757
Velocipede mud-guard	A. Govan.	500,384	June 27	2728	670	63	1907
Velocipede mud-guard	R. M. Woodhead.	502,802	Aug. 8	952	232	64	756
Velocipede or bicycle	C. Kromer.	498,800	June 6	73	19, 20	63	1402
Velocipede-pedal.	T. Broadbent.	508,562	Nov. 14	958	235	65	952
Velocipede-pedal.	C. F. Pease.	492,990	Mar. 7	345	87	62	1427
Velocipede-pedal.	E. L. Shultz.	506,276	Oct. 10	837	206	65	170
Velocipede-pump attachment.	J. Lowth.	510,036	Dec. 5	332	74	65	1472
Velocipede-saddle.	T. Broadbent.	507,413	Oct. 24	2757	676	65	556
Velocipede-saddle.	H. Cutler.	499,718	June 20	1616	391	63	1701
Velocipede-saddle.	W. J. Edwards.	491,162	Feb. 7	163	42	62	779
Velocipede-saddle.	L. W. Harper.	501,782	July 18	1999	494	64	393
Velocipede-saddle.	J. H. Hendrick and J. P. Kelly.	499,675	June 13	1544	372	63	1674
Velocipede-saddle.	J. H. Hunt.	489,308	Jan. 3	498	138	62	108
Velocipede-saddle.	T. B. Jeffery.	496,880	May 11	803	211	63	782
Velocipede-saddle.	G. S. Karr.	506,510	Oct. 10	1247	210	65	250
Velocipede-saddle.	E. Petriani.	493,338	Mar. 14	897	331	62	1549
Velocipede-saddle.	W. G. Rich and J. H. Sager.	489,501	Jan. 10	818	214	62	187
Velocipede-saddle.	J. H. Sager.	511,363	Dec. 26	2628	639	65	1939
Velocipede-saddle.	E. L. Shultz.	502,681	Aug. 1	743	179	64	702
Velocipede-saddle.	E. Warwick.	507,514	Oct. 24	2928	719	65	587
Velocipede speed-gear	C. Vogel.	503,919	Aug. 22	2750	689	64	1116
Velocipede speed-gearing	C. Sullivan.	510,101	Dec. 5	438	97	65	1492
Velocipede sprocket-wheel	J. P. Kelly.	497,279	May 9	1426	362	63	891
Velocipede sprocket-wheel fastening	F. P. Crosby.	510,242	Dec. 5	674	161	65	1538
Velocipede-support	S. Elliott.	491,475	Feb. 7	681	171	62	879
Velocipede-wheel	A. C. Hide.	496,937	May 9	899	236	63	800
Velocipede-wheel	J. M. McMahan.	509,549	Nov. 28	2641	638	65	1298

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Velocipede-wheel	E. Michelin	495,982	Apr. 25	2330	589	63	479
Velocipede-wheels. Rim-spreader for	J. A. Du Bois	499,824	June 20	1809	440	63	1733
Velveteens or other pile fabrics. Transit-frame for	A. Bancroft	499,774	June 20	1722	414	63	1718
Vending and fortune-telling machine	J. Schofield	503,686	Aug. 22	2402	599	64	1048
Vending apparatus	J. J. Busenbenz	489,432	Jan. 3	627	185	62	148
Vending apparatus	H. E. Hawk and A. J. Hazlett	490,019	Jan. 17	1632	425	62	365
Vending apparatus	G. A. Welch, H. R. Travers, and C. Petersen.	495,536	Apr. 18	1632	410	63	339
Vending apparatus. Coin-controlled	H. L. Hook	503,139	Aug. 15	1512	372	64	872
Vending apparatus. Coin-controlled	C. A. Howe	502,722	Aug. 8	825	200	64	732
Vending apparatus. Coin-controlled	A. F. Peacock	502,754	Aug. 8	867	211	64	740
Vending apparatus. Coin-controlled liquid-	H. R. Bothwell	497,011	May 9	1004	253	63	817
Vending apparatus. Coin-controlled liquid-	C. E. Westlake and A. Waggoner	497,107	May 9	1150	294	63	844
Vending-cabinet. Street	E. Miller	496,663	May 2	435	116	63	698
Vending device	J. C. Ayer	493,805	Mar. 21	1675	427	62	1716
Vending liquids. Coin-controlled apparatus for	H. W. Gores	502,561	Aug. 1	524	135	64	663
Vending-machine	J. W. Crite	493,617	Mar. 14	1360	345	62	1639
Vending-machine	J. M. Henry	505,793	Sept. 26	2491	628	64	1778
Vending-machine	H. D. Hinckley	496,656	May 2	426	629	63	696
Vending-machine	J. A. Poff	489,830	Jan. 10	1289	114	62	283
Vending-machine	H. D. Pursell	496,281	Apr. 25	2785	337	63	565
Vending-machine	G. L. Slater	491,323	Feb. 7	436	338	62	831
Vending-machine	S. H. Smith	494,653	Apr. 4	196	49	63	40
Vending-machine	J. A. Williams	498,532	June 6	144	35	63	1418
Vending-machine	O. H. Woodfill	502,598	Aug. 1	584	140	64	673
Vending-machine. Automatic	C. A. Braun	495,241	Apr. 11	1162	291	63	233
Vending-machine. Coin-actuated	F. Foote	496,730	May 2	539	292	63	716
Vending-machine. Coin-controlled	W. Bennett	492,756	Feb. 28	2698	143	62	1335
Vending-machine. Coin-controlled	B. S. Dodge	511,291	Dec. 19	2501	670	65	1902
Vending-machine. Coin-controlled	H. Hoischen	502,817	Aug. 8	981	610	64	762
Vending-machine. Coin-operated	H. Byron	493,973	Mar. 21	1956	239	62	1768
Vending-machine. Liquid-	J. R. Graves	506,687	Oct. 17	1510	499	63	313
Veneer-cutting knife	H. J. Mark	507,713	Oct. 31	3279	379	65	667
Veneer-cutting machine	J. J. Hayes	497,958	May 23	2535	802	63	1120
Veneer-machine	W. H. Williams	501,395	July 11	1389	633	64	266
Veneer-package blanks. Machine for cutting and printing	J. R. Allgire	506,837	Oct. 17	1767	348	65	360
Veneers. Finishing wood	J. R. McCargar	506,601	Oct. 10	1373	444	65	275
Veneers. Press for shaping plates from	C. W. Colony	506,417	Oct. 10	1083	269	65	219
Vent for oil-cans. Air	G. W. Wear	502,334	Aug. 1	139	32	64	591
Vent-pipe	J. Heidenreiter	501,835	July 18	2071	511	64	406
Ventilating apparatus	W. A. Burnham	507,993	Nov. 7	23	7	65	763
Ventilating apparatus	F. C. Chadborn	502,090	July 25	2486	625	64	497
Ventilating. Induction apparatus for	M. R. Ruble	595,321	Sept. 19	1511	394	64	1581
Ventilating mechanism	J. M. Seymour, Jr.	494,264	Mar. 23	2439	614	62	1874
Ventilating-pipes. Roof connection for	B. B. Bignall	501,643	July 18	1765	615	64	353
Ventilating-wheel	M. R. Ruble	497,413	May 16	1663	439	63	951
Ventilation and heating system	J. Scherffius	495,568	Apr. 18	1680	420	63	348
Ventilation of closed rooms, &c. Apparatus for the ventilator:	H. G. Siegert	509,141	Nov. 21	1907	466	65	1147
See Apartment-ventila- tor. Electrically-controlled ventilator.							
Basement-ventilator. Grain-ventilator.							
Car-ventilator. Pneumatic ventilator.							
Car window-ventila- tor. Refrigerator-ventilator.							
Sanitary ventilator.							
Centrifugal ventila- tor. Window-ventilator.							
Ventilator	J. F. Almy	495,288	Apr. 11	1242	310	63	248
Ventilator	S. J. Brown	509,593	Nov. 28	2708	655	65	1312
Ventilator	W. H. A. Davidson	489,466	Jan. 10	756	200	62	174
Ventilator	J. B. Hyzer	496,784	May 2	625	167	63	731
Ventilator	H. W. Libbey	500,336	June 27	2656	651	63	1894
Ventilator	C. W. Lochman	490,027	Jan. 17	1647	428	62	368
Ventilator	J. G. Lucas	493,407	Mar. 14	995	257	62	1570
Ventilator	W. McFarlane	493,873	Mar. 21	1771	452	62	1735
Ventilator	C. H. Norton	495,141	Apr. 11	1000	230	63	203
Ventilator	J. H. Reynolds	509,947	Dec. 5	166	39	65	1441
Ventilator	L. Robinson	493,295	Mar. 14	827	211	62	1537
Ventilator	J. B. Weiss	493,321	Mar. 14	878	224	62	1545
Ventilator and combined ventilator and refrigerator-car.	E. T. Earl. (Reissue)	11,324	Apr. 18	2282	575	63	455
Vertical boiler	H. H. Lindemuth	490,669	Jan. 31	2717	699	62	606
Vertical boiler	G. Y. Smith	498,450	May 30	3335	830	63	1279
Vessel	A. McDougall	498,681	May 30	3728	921	63	1347
Vessel. Collapsible or knockdown	G. P. Frothingham	509,155	Nov. 21	1925	471	65	1151
Vessel for shallow-water navigation	C. G. Kellogg	497,325	May 16	1530	355	63	926
Vessel-handle	C. D. Milne	499,341	June 13	985	239	63	1576
Vessel-handle	A. R. Pritchard	494,386	Mar. 28	2644	662	62	1912
Vessel-handle	A. R. Pritchard	494,387	Mar. 28	2644	662	62	1912
Vessel hull. Steam	E. W. Babcock	510,877	Dec. 19	1810	447	65	1773
Vessel. Marine	J. B. Davids	509,463	Nov. 28	2507	605	65	1273
Vessel or boat. Roller	E. Bazin	507,099	Oct. 24	2203	544	65	453
Vessel. Sailing	N. C. Jessup	492,022	Feb. 21	1541	384	62	1086

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Vessel. Transportation, storage, and discharging	F. H. Briggs	506,840	Oct. 17	1770	{ 445 446 }	65	361
Vessel-unloading device	S. B. Nilsen	492,827	Mar. 7	85	20, 21	62	1374
Vessel. War	A. McDougall	498,682	May 30	3730	922	63	1347
Vessels. Apparatus for lessening the rolling of	J. I. Thornycroft	507,944	Oct. 31	3649	{ 903 904 905 }	65	736
Vessels. Apparatus for raising sunken	E. Niehoff	497,249	May 9	1367	347	63	883
Vessels. Copper-coating the hulls of	T. S. Crane	498,707	May 30	3775	{ 931 932 933 }	63	1355
Vessels. Floating signal for locating sunken	J. Larsson	504,225	Aug. 29	3264	815	64	1229
Vessels. Means for raising sunken	J. T. Kelly and A. McIntyre	491,725	Feb. 14	1078	272	62	980
Vessels. Raising sunken	J. T. Kelly	495,494	Apr. 18	1568	394	63	328
Vessel's spar	L. N. Toans	499,608	June 20	1777	431	63	1729
Vessels. Stopping device for marine	P. Samohod	496,700	May 2	488	131	63	708
Veterinary appliance	W. Bryden	492,268	Feb. 21	1923	479	62	1165
Veterinary ecraseur	A. Fête	495,668	Apr. 18	1847	462	63	375
Veterinary forceps	D. M. Scheffer	502,386	Aug. 1	231	55	64	608
Veterinary obstetrical forceps	D. M. Jones	497,720	May 16	2151	533	63	1038
Veterinary operating-table	W. J. Magee	500,588	July 4	76	22	64	15
Veterinary operating-table	J. C. Milnes	492,819	Mar. 7	74	18	62	1372
Veterinary surgical instrument	F. J. Hegart	492,288	Feb. 21	1946	486	62	1170
Veterinary tooth-cutter	G. W. Teufel	503,298	Aug. 15	1772	438	64	918
Vial-holder	F. A. Reichardt	501,162	July 11	1013	257	64	198
Vine-cutter	J. H. Wheeler	493,322	Mar. 14	880	325	62	1545
Vinegar. Apparatus for the manufacture of	R. M. Hughes	502,819	Aug. 8	984	{ 239 240 }	64	762
Violin	J. B. Clopton	496,397	May 2	15	4	63	621
Violin	P. Donnelly	508,508	Nov. 14	864	213	65	934
Violin	C. C. Kropp	494,276	Mar. 28	2457	619	62	1877
Violin-bow	J. W. Noble and F. Street	508,741	Nov. 14	1225	305	65	1004
Violin chin-rest	G. H. Eames	493,020	Mar. 7	396	99	62	1436
Violin-rest	F. H. Isaacs	503,603	Aug. 22	2282	569	64	1025
Violin-support	J. F. Boyer	492,884	Mar. 7	179	43	62	1394
Violin-supporter	G. Narberti	491,372	Feb. 7	519	133	62	847
Violins, guitars, mandolins, banjos, and kindred instruments. Finger-board for	W. H. Zorger	494,698	Apr. 4	268	68	63	54
Viscosity. Apparatus for determining	H. C. Bowen	494,974	Apr. 4	698	179	63	134
Vise	C. H. Ayars	499,494	June 13	1262	300	63	1625
Vise	W. Gerhardt	490,432	Jan. 24	2309	599	62	511
Vise	J. B. Gury	499,291	June 13	899	218	63	1561
Vise	M. T. Henson	493,625	Mar. 14	1374	348	62	1641
Vise	W. Rathbone	489,327	Jan. 3	524	142	62	1113
Vise	J. E. Sherman	500,039	June 20	2141	519	63	1792
Vise	W. J. Walker	496,498	May 2	165	47	63	649
Vise and bench-hook	E. G. Bailey	504,652	Sept. 5	541	138	64	1372
Vise and winch. Combined	M. J. Doherty	502,177	July 25	2627	662	64	525
Vise. Bench	A. S. Hubbell	511,429	Dec. 26	2755	665	65	1961
Vise. Bench	T. B. Jackson	504,586	Sept. 5	449	114	64	1354
Vise. Bench	M. G. Lewis	493,564	Mar. 14	941	241	62	1559
Vise. Bench	A. Lurie	502,127	July 25	2541	637	64	502
Vise. Bench	J. E. Mulford	498,288	May 30	3058	761	63	1228
Vise. Carpenter's	J. Aichner	504,856	Sept. 12	904	234	64	1455
Vise. Combination	L. N. Borem	494,802	Apr. 4	441	110	63	86
Vise for anvils. Foot	W. O. Berry	507,061	Oct. 17	2130	529	65	427
Vise for milling-machines or planers	V. W. Mason, Jr.	508,732	Nov. 14	1211	301	65	1001
Vise. Jewel-setter's	S. Heberling	509,310	Nov. 21	2191	527	65	1202
Vise. Jeweler's	J. F. Emmert	510,124	Dec. 5	479	109	65	1500
Vise. Machine	W. G. Richards	510,293	Dec. 5	755	183	65	1552
Vise. Milling-machine	F. Mossberg	503,327	Aug. 15	1828	453	64	922
Vise. Parallel	H. Port	496,168	Apr. 25	2609	657	63	532
Vise. Parallel	F. T. Schmidt	490,603	Jan. 24	2576	664	62	564
Vise. Parallel	J. Schwendemann	491,817	Feb. 14	1221	305	62	1008
Vise. Portable	J. Guenther	490,112	Jan. 17	1780	463	62	396
Vise. Quick-action	J. R. Denison	503,075	Aug. 8	1392	344	64	837
Vise. Smith's	G. W. Deafenbaugh	495,787	Apr. 18	2037	516	63	409
Visible signal	F. W. Dunbar	501,185	July 11	1044	264	64	205
Visible signal	F. S. Perrin	506,883	Oct. 17	1846	461	65	375
Vitreous substances for making metallic connections thereto. Treating	H. Doulton and J. Slater	507,890	Oct. 31	3562	.....	65	720
Vitreous wares. Ornamenting	F. Schmalz	493,449	Mar. 14	1068	.....	62	1583
Vitrification-furnace	P. K. Sommer	509,257	Nov. 21	2106	507	65	1186
Volt and ampère meter	J. O. Heinze, Jr.	496,309	Apr. 25	2835	708	63	574
Voltaic cell	E. Weston	494,827	Apr. 4	485	122	63	93
Voltmeter	A. H. Armen	496,678	May 2	458	123	63	702
Voltmeter and ampère-meter	E. Gengenbach	495,066	Apr. 11	870	223	63	181
Voltmeter. Recording	W. H. Bristol	505,243	Sept. 19	1531	399	64	1584
Voltmeter. Recording	E. Weston	494,829	Apr. 4	489	123	63	94
Voltmeter. Static	A. E. Kennelly	500,236	June 27	2493	{ 609 610 }	63	1866
Volute coils. Construction of metallic	J. Aitchison and T. Bradley	501,815	July 18	2048	504	64	401
Vote-counting apparatus	E. G. Richards	500,948	July 4	636	168	64	117
Vote-recording machine	J. McTammany	502,744	Aug. 8	853	208	64	738
Voting-booth	J. W. Hine	510,427	Dec. 12	962	231	65	1607
Voting-booth	P. Zuckriegel	504,016	Aug. 29	2994	732	64	1165
Voting booth or stall	J. W. and G. A. Shrague	502,778	Aug. 8	912	222	64	748
Voting-machine	J. McTammany	502,745	Aug. 8	857	{ 208 209 }	64	738
Voting-machine	J. H. Myers	494,588	Apr. 4	93	23, 24	63	20
Voting-machine	C. F. Roper	501,443	July 11	1450	364	64	279
Vulcanizer gas-regulator	G. B. Snow	511,256	Dec. 19	2433	505	65	1889
Vulcanizers. Gas-regulating apparatus for	G. B. Snow	506,742	Oct. 17	1610	405	65	331
Vulcanizing apparatus	A. D. Barrett	507,980	Nov. 7	5	2	65	759

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Vulcanizing apparatus.....	J. W. Lyon.....	511,629	Dec. 26	3073	751	65	2019
Waffle-iron.....	A. B. George.....	491,681	Feb. 14	1010	255	62	967
Waffle-iron.....	D. Shields.....	502,086	July 25	2481	623 624	64	496
Wagon.....	D. W. Cotes.....	510,241	Dec. 5	673	161	65	1538
Wagon.....	T. Geisel.....	505,100	Sept. 19	1312	338	64	1545
Wagon.....	F. E. Havens.....	507,123	Oct. 24	2242	554	65	461
Wagon.....	A. Jennings.....	498,553	May 30	3513	869	63	1309
Wagon.....	M. W. Montgomery.....	499,793	June 20	1748	423	63	1723
Wagon.....	C. W. Robinson.....	501,165	July 11	1016	258	64	199
Wagon attachment.....	J. S. Piper.....	492,049	Feb. 21	1579	393	62	1094
Wagon-bed hoisting attachment.....	E. H. Baugh and C. W. Selvidge.....	496,471	May 2	127	34	63	642
Wagon-bed raiser.....	A. W. Jackson.....	506,507	Oct. 10	1244	309	65	450
Wagon. Beer.....	A. Timpte.....	495,441	Apr. 11	1476	371	63	290
Wagon-body.....	M. M. Baker.....	491,461	Feb. 7	662	166	62	875
Wagon-body.....	A. Ewing.....	494,133	Mar. 28	2228	567	62	1835
Wagon-body.....	J. Hessong.....	505,464	Sept. 26	1897	489	64	1667
Wagon-body.....	W. K. Long and C. H. Henry.....	492,090	Feb. 21	1639	408	62	1106
Wagon-body.....	J. H. and W. H. Waggener and W. K. Cardwell.....	496,459	May 2	114	31	63	639
Wagon-body lifter.....	J. W. Chambers.....	498,235	May 30	2971	741	63	1212
Wagon body or rack.....	W. P. Dunlap.....	507,262	Oct. 24	2500	615 616	65	506
Wagon-bolster spring.....	J. H. Smale.....	506,887	Oct. 17	1854	462	65	376
Wagon-bolster standard.....	H. C. Buckingham.....	502,346	Aug. 1	162	38	64	596
Wagon bolster-standard.....	J. A. Critzer.....	489,895	Jan. 10	1386	360	62	301
Wagon bolster-standard.....	A. Miller.....	489,824	Jan. 10	1283	336	62	282
Wagon-bolsters. Standard for.....	J. B. Ripson.....	500,429	June 27	2796	688	63	1919
Wagon-box fastener.....	M. A. Johnson.....	497,577	May 16	1927	484	63	996
Wagon-box strap.....	G. W. Bauder.....	493,055	Mar. 7	441	111	62	1446
Wagon-brake.....	J. W. Allan.....	489,175	Jan. 3	291	81	62	67
Wagon-brake.....	S. Griffin.....	495,247	Apr. 11	1179	295	63	236
Wagon-brake.....	J. Krieg.....	505,048	Sept. 12	1217	313	64	1513
Wagon-brake.....	L. E. Lane.....	498,958	June 6	368	88	63	1457
Wagon-brake.....	A. T. Newell.....	494,645	Apr. 4	183	46	63	38
Wagon-brake.....	J. H. Ozley.....	507,158	Oct. 24	2321	570	65	474
Wagon-brake.....	C. C. Reynolds.....	498,188	May 23	2887	720	63	1183
Wagon-brake.....	H. H. and B. L. Reynolds.....	489,036	Jan. 3	86	24	62	22
Wagon-brake.....	N. E. Thompson.....	490,217	Jan. 17	1958	513	62	430
Wagon-brake.....	J. Vanderveer.....	504,639	Sept. 5	521	134	64	1368
Wagon-brake.....	A. Woodward and F. M. Johnston.....	498,145	May 23	2815	704	63	1171
Wagon-brake. Automatic.....	C. A. Brost.....	492,490	Feb. 28	2256	568	62	1250
Wagon-brake. Automatic.....	J. M. McConnell and M. L. Carlisle.....	495,993	Apr. 25	2344	593	63	482
Wagon-brake. Automatic.....	A. J. Smith and J. V. Landes.....	505,680	Sept. 26	2309	526	64	1743
Wagon-brake. Automatic.....	J. Wennberg and O. Lindstrom.....	509,063	Nov. 21	1758	434	65	1119
Wagon. Coal-dumping.....	L. R. Behlert.....	510,670	Dec. 12	1414	348 349	65	1689
Wagon. Delivery.....	S. D. Reynolds.....	500,212	June 27	2457	599 600	63	1860
Wagon. Dump.....	C. B. Deyo.....	502,249	July 25	2755	696	64	548
Wagon. Dump.....	M. L. Senderling.....	492,562	Feb. 28	2399	596	62	1276
Wagon. Dump.....	M. L. Senderling.....	509,105	Nov. 21	1850	453	65	1137
Wagon dump and elevator.....	J. S. Kidd. (Reissue).....	11,340	May 23	2943	732 733	63	1192
Wagon dump and elevator.....	C. A. Nelson.....	490,674	Jan. 31	2725	701 702	62	608
Wagon. Dumping.....	J. R. Ayers.....	495,388	Apr. 11	1391	347 348	63	275
Wagon. Dumping.....	O. R. Becker.....	493,350	Mar. 14	913	234	62	1552
Wagon. Dumping.....	J. Blum.....	498,504	May 30	3424	850	63	1294
Wagon. Dumping.....	F. Bouker.....	502,698	Aug. 8	768	166	64	722
Wagon. Dumping.....	W. U. Bosch.....	509,350	Nov. 21	2261	547	65	1214
Wagon. Dumping.....	C. E. Butler.....	502,278	Aug. 1	24	5	64	570
Wagon. Dumping.....	J. Cameron.....	496,853	May 9	739	196	63	770
Wagon. Dumping.....	D. F. Donegan.....	492,623	Feb. 28	2499	619	62	1295
Wagon. Dumping.....	J. N. Ericsson.....	496,048	Apr. 25	2435	614	63	498
Wagon. Dumping.....	J. Fieger.....	501,998	July 25	2333	584	64	469
Wagon. Dumping.....	R. Fitz-Roy.....	491,343	Feb. 7	470	121	62	837
Wagon. Dumping.....	E. Gabel.....	496,932	May 9	889	233	63	798
Wagon. Dumping.....	G. W. Harrington.....	507,122	Oct. 24	2241	553	65	461
Wagon. Dumping.....	L. Heiges and G. C. Coover.....	499,830	June 20	1820	442 443	63	1735
Wagon. Dumping.....	L. C. Hicks.....	504,304	Aug. 29	3390	848	64	1253
Wagon. Dumping.....	F. S. Higbee.....	510,426	Dec. 12	962	231	65	1607
Wagon. Dumping.....	W. H. Kauffman.....	492,686	Feb. 28	2592	641	62	1313
Wagon. Dumping.....	J. A. Klees.....	490,661	Jan. 31	2703	695	62	603
Wagon. Dumping.....	S. Lebach.....	496,163	Apr. 25	2601	654 655	63	530
Wagon. Dumping.....	J. B. Lewis.....	495,096	Apr. 11	904	222	63	189
Wagon. Dumping.....	M. Mauch.....	494,377	Mar. 28	2626	659	62	1909
Wagon. Dumping.....	M. W. Montgomery.....	498,480	May 30	3375	841	63	1286
Wagon. Dumping.....	J. T. Richardson.....	495,708	Apr. 18	1911	481 482	63	386
Wagon. Dumping.....	J. M. Romans.....	489,987	Jan. 17	1572	411	62	353
Wagon. Dumping.....	J. Sabold.....	509,184	Nov. 21	1971	480	65	1161
Wagon. Dumping.....	M. L. Senderling.....	505,236	Sept. 19	1518	397	64	1582
Wagon. Dumping.....	F. Weber.....	501,390	July 11	1382	346	64	265
Wagon dumping-bed.....	W. H. Kauffman.....	511,528	Dec. 26	2900	706	65	1989
Wagon-dumping device.....	C. H. Peardon.....	509,245	Nov. 21	2088	503	65	1182
Wagon-frame. Metallic.....	W. P. Bettendorf.....	508,200	Nov. 7	365	90	65	826
Wagon-jack.....	L. M. Alleston and G. B. Chapman.....	511,182	Dec. 19	2316	567	65	1868
Wagon-jack.....	J. A. Corey.....	492,389	Feb. 28	2113	527	62	1216
Wagon-jack.....	C. H. Dwelly.....	501,410	July 11	1413	354	64	271
Wagon-jack.....	C. Emons.....	502,397	Aug. 1	246	59	64	611

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Wagon-jack.....	N. Evans and W. A. Henry.....	489,157	Jan. 3	265	73	62	61
Wagon-jack.....	A. J. Galindo.....	490,017	Jan. 17	1630	424	62	365
Wagon-jack.....	W. H. Jones and T. C. Greene.....	494,957	Apr. 4	674	174	63	129
Wagon-jack.....	S. S. Joy.....	493,031	Mar. 7	409	102	62	1439
Wagon-jack.....	J. F. McDaniel.....	510,701	Dec. 12	1459	360	65	1697
Wagon-jack.....	Z. L. Palmer.....	500,940	July 4	627	165	64	115
Wagon-jack and wrench. Combined.....	C. R. Mayne.....	496,692	May 2	478	128	63	706
Wagon. Lumber.....	J. M. Blake.....	495,194	Apr. 11	1088	{ 270 271 }	63	220
Wagon. Lumber.....	P. Girnan.....	505,519	Sept. 26	2004	513	64	1686
Wagon. Lunch.....	T. H. Buckley.....	489,893	Jan. 10	1379	359	62	300
Wagon. Lunch.....	C. H. Palmer.....	497,598	May 16	1963	492	63	1002
Wagon or cart.....	W. C. Read and B. Hager.....	500,612	July 4	124	33	64	24
Wagon platform-gear.....	J. H. Baker.....	495,468	Apr. 18	1529	383	63	321
Wagon. Postal.....	B. Arnold.....	499,084	June 6	588	{ 140 141 }	63	1493
Wagon-raiser.....	C. C. Hallman.....	490,787	Jan. 31	2902	745	62	642
Wagon rake attachment.....	G. F. Fischer.....	497,172	May 9	1251	318	63	862
Wagon-reach.....	F. A. Lemarz.....	502,419	Aug. 1	283	67	64	616
Wagon-reach coupling.....	E. S. Weddle.....	510,056	Dec. 5	366	81	65	1478
Wagon. Road.....	C. Gillett.....	493,082	Mar. 7	480	{ 120 121 }	62	1454
Wagon running-gear.....	J. H. Baker.....	509,354	Nov. 28	2280	553	65	1229
Wagon running-gear.....	H. J. Brace.....	502,609	Aug. 1	605	144	64	677
Wagon running-gear.....	L. S. Crittenden.....	502,282	Aug. 1	29	7	64	572
Wagon running-gear.....	W. A. Duse.....	490,803	Jan. 31	2926	751	62	647
Wagon running-gear.....	E. E. Henderson.....	508,420	Nov. 14	725	179	65	906
Wagon running-gear.....	W. and D. McKee.....	495,903	Apr. 18	2213	558	63	441
Wagon running-gear.....	W. H. Smith.....	507,563	Oct. 31	3019	742	65	618
Wagon running-gear.....	T. F. Updegrove.....	491,230	Feb. 7	277	69, 70	62	801
Wagon-seat.....	C. C. Field.....	503,411	Aug. 15	1946	484	64	950
Wagon-seat.....	C. Goeller.....	493,863	Mar. 21	1760	448	62	1732
Wagon-seat spring.....	J. O. Ingle, Jr.....	510,024	Dec. 5	314	70	65	1469
Wagon shoveling-board.....	J. E. Garside.....	489,528	Jan. 10	858	224	62	195
Wagon-spring.....	G. T. Chapman.....	500,532	June 27	2949	724	63	1947
Wagon-spring.....	G. T. Chapman.....	509,876	Dec. 5	44	10	65	1419
Wagon-stake.....	L. Decker and B. M. Long.....	510,679	Dec. 12	1430	353	65	1692
Wagon-top.....	R. L. Davis.....	510,330	Dec. 5	805	195	65	1563
Wagon-top. Collapsible.....	G. W. Stowe.....	506,952	Oct. 17	1955	484	65	395
Wagon. Tower.....	C. A. Davis.....	497,952	May 23	2527	631	63	1119
Wagon. Tower.....	J. S. Hill.....	499,189	June 6	748	177	63	1520
Wagon. Vending.....	M. Brazeau.....	498,231	May 30	2967	740	63	1211
Wagons. Chute mechanism for dumping.....	W. G. Stewart.....	510,100	Dec. 5	433	97	65	1492
Waist and suspenders. Combined.....	M. J. Post.....	495,057	Apr. 11	824	209	63	173
Waist-garment.....	C. Uebel.....	499,861	June 20	1870	454	63	1744
Waist or blouse.....	C. A. Scriven.....	490,686	Jan. 31	2744	707	62	611
Waist. Skeleton.....	L. G. Stitt.....	503,916	Aug. 22	2747	688	64	1116
Waistband-fastener.....	R. S. Wiesenfeld.....	509,709	Nov. 28	2889	699	65	1345
Waiter's stand.....	J. Hansen.....	494,704	Apr. 4	276	70	63	55
Wall. Concrete.....	J. W. Beaumont.....	504,194	Aug. 29	3219	801	64	1220
Wall-covering. Wood.....	H. Silver.....	495,465	Apr. 11	1522	380	63	301
Wall-facing.....	M. Ams.....	489,914	Jan. 17	1434	377	62	326
Wall-facing.....	D. F. Saum.....	501,029	July 4	777	{ 203 204 }	64	142
Wall. Fireproof.....	H. M. Newington.....	508,968	Nov. 21	1622	398	65	1093
Wall. Fireproof building.....	P. A. Deslauriers.....	504,415	Sept. 5	167	44	64	1301
Wall for circular structures.....	C. H. Foote.....	489,415	Jan. 3	652	{ 176 177 }	62	140
Wall or ceiling covering.....	E. Jansen.....	501,278	July 11	1184	300	64	230
Wall-paper trimmer.....	J. Reading.....	497,528	May 16	1855	468	63	984
Wall-paper. Apparatus for printing and bronzing.....	G. K. Birge.....	491,303	Feb. 7	403	{ 103 104 }	62	824
Wall-paper-trimming-machine attachment.....	H. B. Tiffany.....	489,345	Jan. 3	557	151	62	120
Wall-protector.....	C. Gunzburg.....	492,673	Feb. 28	2576	637	62	1310
Wall-table.....	E. H. Hamilton.....	508,938	Nov. 21	1574	386	65	1083
Wall. Tile building.....	J. Stewart, Jr.....	510,720	Dec. 12	1490	369	65	1704
Walls of buildings. Securing sheet-metal fronts to the.....	P. A. Deslauriers.....	489,467	Jan. 10	757	200	62	174
Walls of frame houses. Stop for.....	E. F. Montgillion.....	498,563	May 30	3525	872	63	1311
War-boat.....	A. McDougall.....	498,679	May 30	3724	920	63	1346
Wardrobe-fixture.....	J. J. Bisel.....	508,596	Nov. 14	1017	250	65	963
Wardrobe. Folding.....	E. F. Downer.....	497,975	May 23	2561	639	63	1125
Wardrobe. Folding.....	W. B. Manning.....	498,804	June 6	83	21	63	1404
Warehouse. Grain-storage.....	D. R. Bowker.....	508,561	Nov. 14	955	{ 234 235 }	65	951
Warmer. Body and bed.....	M. A. Murphy.....	495,427	Apr. 11	1451	366	63	287
Warming-bottle. Electric.....	T. Ahearn.....	490,891	Jan. 31	3061	786	62	675
Warming device.....	F. Lied.....	502,370	Aug. 1	201	48	64	602
Warp-threads. Harness-supporting and heddle-eye-selecting device for machines for drawing in.....	L. P. Sherman.....	500,965	July 4	679	{ 178 179 }	64	124
Warp-threads. Needle-operating and reed-dent-separating device for machines for drawing in.....	L. P. Sherman.....	500,964	July 4	677	178	64	124
Warp-threads. Thread-selecting device for machines for drawing in.....	L. P. Sherman.....	500,966	July 4	684	{ 179 180 }	64	124
Warps. Machine for balling cotton.....	G. A. Ayer.....	492,506	Feb. 28	2316	574	62	1257
Warping-machine.....	A. E. Rhoades.....	504,459	Sept. 5	235	62, 63	64	1314
Warping machine. Swift.....	W. P. Kirkpatrick.....	505,770	Sept. 26	2458	{ 619 620 }	64	1771
Warping-machines. Mechanism for handling beams of.....	A. E. Rhoades.....	504,457	Sept. 5	230	61, 62	64	1313
Warping-machines. Rise-roll mechanism for.....	A. E. Rhoades.....	500,541	June 27	2968	729	63	1951
Warping-mills. Lease-forming mechanism for.....	H. Davenport.....	500,097	June 20	2227	543	63	1207
Warping or beaming machine.....	R. Simon.....	504,791	Sept. 12	795	{ 201 202 }	64	1432

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. S.	Vol.	Page.
Washboard.....	C. Blake.....	497,112	May 9	1158	297	63	845
Washboard.....	H. J. Gilbert.....	504,028	Aug. 29	2942	736	64	1168
Washboard.....	J. H. and O. T. Lapham.....	491,181	Feb. 7	199	51	62	785
Washboard.....	G. W. Mickle.....	511,246	Dec. 19	2419	589	65	1887
Washboard.....	H. G. Olds.....	509,236	Nov. 21	2073	500	65	1179
Washboard.....	H. Purcell.....	497,342	May 16	1558	392	63	931
Washboard.....	J. T. Sargent.....	501,444	July 11	1455	364	64	280
Washboard.....	J. T. Sargent.....	508,346	Nov. 7	591	145	65	868
Washboiler.....	W. P. Burke.....	503,262	Aug. 15	1710	421	64	908
Washboiler.....	H. D. Jeffrey.....	498,658	May 30	3688	911	63	1340
Washboiler.....	S. A. Mackie.....	493,631	Mar. 21	1386	352	62	1660
Washboiler.....	J. A. Medley.....	490,575	Jan. 24	2530	651	62	555
Washboiler.....	B. F. Merzmann.....	491,436	Feb. 7	620	155	62	866
Washboiler.....	A. Miller.....	490,208	Jan. 17	1945	510	62	427
Washboiler.....	P. J. Shampay.....	501,448	July 11	1461	{ 366 367 }	64	281
Washer:							
See Axle-washer. Ore-washer.							
Barrel-washer. Phosphate-washer.							
Bottle-washer. Spoke-washer.							
Hose-washer. Tumbler-washer.							
Nut-lock washer. Wheel-washer.							
Washer.....	T. Gingras.....	501,207	July 11	1074	273	64	211
Washer and nut-lock. Combined.	C. H. Foote.....	505,454	Sept. 26	1883	485	64	1664
Washer-cutter and carriage-tool.	T. Thompson.....	492,640	Feb. 28	2525	625	62	1300
Washer-cutting machine.	A. Buchholz.....	507,210	Oct. 24	2426	598	65	492
Washer, drier, and separator.	G. H. Tench.....	497,415	May 16	1987	497	63	1007
Washer-fastener for hose-couplings, &c.	J. W. Fletcher.....	503,344	Aug. 15	1855	459	64	933
Washer-finishing machine.....	K. Frucht.....	504,830	Sept. 12	859	{ 220 221 222 223 }	64	1445
Washers. Making nut-lock.	A. W. Miles.....	506,923	Oct. 17	1917	474	65	388
Washing apparatus. Floor-	G. Tellefsen and H. Hughes.....	497,359	May 16	1523	400	63	936
Washing and sizing machine.....	E. G. and E. D. Hammond.....	489,738	Jan. 10	1160	{ 301 302 }	62	255
Washing compound.....	C. R. Ely.....	493,693	Mar. 21	1484		62	1679
Washing glasses. Apparatus for	W. B. Taylor.....	502,868	Aug. 8	1057	260	64	776
Washing-machine.....	A. G. Anderson.....	494,665	Apr. 4	217	54	63	45
Washing-machine.....	A. P. Anderson.....	500,546	July 4	9	3	64	4
Washing-machine.....	J. A. E. Anderson.....	495,651	Apr. 18	1823	456	63	371
Washing-machine.....	J. W. Ash.....	498,151	May 23	2822	706	63	1172
Washing-machine.....	G. E. Bartholomew.....	498,223	May 30	2955	736	63	1210
Washing-machine.....	J. B. Beam.....	511,321	Dec. 26	2549	{ 621 622 }	65	1924
Washing-machine.....	E. Blanchard.....	496,770	May 2	598	160	63	726
Washing-machine.....	J. Bouclard.....	491,520	Feb. 14	755	192	62	913
Washing-machine.....	D. W. Beeve.....	502,608	Aug. 1	605	{ 143 144 }	64	677
Washing-machine.....	S. B. Bowles.....	497,701	May 16	2124	550	63	1032
Washing-machine.....	J. S. Braden.....	511,040	Dec. 19	2076	514	65	1822
Washing-machine.....	A. C. Brandt.....	491,073	Feb. 7	18	5	62	752
Washing-machine.....	C. Bruley.....	501,268	July 11	1168	296	64	227
Washing-machine.....	M. E. Churchill.....	506,470	Oct. 10	1176	292	65	237
Washing-machine.....	F. J. and M. C. Coon.....	495,307	Apr. 11	1268	317	63	253
Washing-machine.....	J. H. Conner.....	493,685	Mar. 21	1471	375	62	1676
Washing-machine.....	W. M. Coventry.....	493,820	Mar. 21	1697	432	62	1720
Washing-machine.....	W. A. Crislip.....	506,476	Oct. 10	1195	297	65	240
Washing-machine.....	J. L. Davis.....	495,963	Apr. 25	2300	581	63	474
Washing-machine.....	J. Dilley, Jr.....	495,401	Apr. 11	1411	355	63	279
Washing-machine.....	P. Dixon and P. McLaughlin.....	502,851	Aug. 8	1033	253	64	771
Washing-machine.....	J. Farlow.....	507,532	Oct. 31	2967	727	65	608
Washing-machine.....	C. Flanders.....	493,919	Mar. 21	1851	471	62	1749
Washing-machine.....	J. A. Garrett.....	504,418	Sept. 5	178	46	64	1304
Washing-machine.....	E. W. Gerbacht.....	495,324	Apr. 11	1290	{ 324 325 }	63	257
Washing-machine.....	W. S. Gibbons and G. E. Bartholomew.....	495,168	Apr. 11	1047	261	63	212
Washing-machine.....	J. A. Glick, V. M. Heim, and A. E. Hafer.....	501,063	July 11	835	217	64	167
Washing-machine.....	J. Goeddeke.....	502,961	Aug. 8	1225	{ 301 302 }	64	805
Washing-machine.....	C. Grant.....	498,786	June 6	56	13	63	1399
Washing-machine.....	L. Grondahl.....	505,981	Oct. 3	281	74	65	55
Washing-machine.....	A. Halstenbach.....	489,475	Jan. 10	766	202	62	177
Washing-machine.....	W. R. Hamilton.....	492,674	Feb. 28	2577	638	62	1310
Washing-machine.....	B. F. Hartman.....	497,918	May 23	2476	618	63	1110
Washing-machine.....	W. H. Haydon.....	491,424	Feb. 7	593	149	62	861
Washing-machine.....	G. K. Heddorfer.....	489,806	Jan. 10	1261	330	62	276
Washing-machine.....	H. T. Henderson.....	491,063	Jan. 31	3352	855	62	732
Washing-machine.....	J. B. Herschock.....	496,936	May 9	897	235	63	800
Washing-machine.....	M. J. Herzler.....	498,115	May 23	2775	695	63	1164
Washing-machine.....	W. Hilton.....	498,652	May 30	3677	909	63	1338
Washing-machine.....	H. Q. Hood.....	506,505	Oct. 10	1237	307	65	249
Washing-machine.....	J. H. Jones.....	499,119	June 6	638	153	63	1502
Washing-machine.....	J. H. Kessler.....	495,811	Apr. 18	2071	523	63	415
Washing-machine.....	E. A. Kibbe.....	499,232	June 13	810	192	63	1545
Washing-machine.....	P. G. Kirsch.....	507,546	Oct. 31	2985	733	65	612
Washing-machine.....	L. Klima.....	498,798	June 6	76	18, 19	63	1402
Washing-machine.....	F. A. Lallemand.....	502,780	Aug. 8	835	202	64	734
Washing-machine.....	P. H. Lambach.....	493,335	Mar. 14	894	229	62	1543
Washing-machine.....	W. S. Laney.....	507,711	Oct. 31	3276	{ 800 801 }	65	666
Washing-machine.....	S. B. Letson.....	489,609	Jan. 10	972	253	62	217
Washing-machine.....	W. M. Lindsey.....	499,237	June 12	816	194	63	1546

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Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Washing-machine.....	M. A. Marks.....	506,055	Oct. 3	396	104	65	77
Washing-machine.....	W. H. McIntosh.....	492,823	Mar. 7	80	19	62	1373
Washing-machine.....	M. McKeever.....	502,314	Aug. 1	98	23	64	554
Washing-machine.....	G. M. Miller.....	499,136	June 6	660	159	63	1506
Washing-machine.....	E. G. Minnemeyer.....	504,989	Sept. 12	1128	289	64	1496
Washing-machine.....	E. G. Minnemeyer. (Reissue).....	11,320	Apr. 4	747	189	63	143
Washing-machine.....	R. F. Porch.....	511,545	Dec. 26	2929	713	65	1994
Washing-machine.....	M. J. Ralston.....	506,544	Oct. 10	1294	324	65	260
Washing-machine.....	J. Reed.....	508,736	Nov. 14	1247	311	65	1009
Washing-machine.....	W. B. Reed.....	492,430	Feb. 28	2172	543	62	1223
Washing-machine.....	E. D. Reeve.....	504,246	Aug. 29	3301	{ 824 825 }	64	1235
Washing-machine.....	J. Renson.....	499,937	June 20	1986	482	63	1765
Washing-machine.....	M. Roberts.....	489,760	Jan. 10	1196	313	62	263
Washing-machine.....	S. A. Seat.....	493,657	Mar. 21	1425	363	62	1667
Washing-machine.....	G. Seger.....	502,680	Aug. 1	740	178	64	702
Washing-machine.....	C. and Z. Seigny.....	494,282	Mar. 28	2472	623	62	1879
Washing-machine.....	J. Shaffer.....	504,946	Sept. 12	1049	269	64	1482
Washing-machine.....	C. Sharpe and W. D. Coldren.....	500,160	June 27	2373	575	63	1845
Washing-machine.....	D. Shaw and J. M. Miller.....	496,910	May 9	859	226	63	793
Washing-machine.....	H. C. Snider.....	494,447	Mar. 28	2729	684	62	1927
Washing-machine.....	F. S. Spangler.....	490,372	Jan. 24	2227	580	62	497
Washing-machine.....	J. R. Storie.....	505,907	Oct. 3	171	44	65	33
Washing-machine.....	L. D. Swaim.....	505,613	Sept. 26	2169	554	64	1722
Washing-machine.....	F. Sweet.....	499,897	June 20	1932	468	63	1755
Washing-machine.....	W. Sweet.....	498,324	May 30	3132	781	63	1242
Washing-machine.....	P. M. Thompson.....	510,726	Dec. 12	1498	370	65	1705
Washing-machine.....	J. Turner.....	495,854	Apr. 18	2143	538	63	428
Washing-machine.....	P. Vollmar.....	492,616	Feb. 28	2488	617	62	1293
Washing-machine.....	E. L. Wallace.....	504,763	Sept. 12	748	186	64	1425
Washing-machine.....	H. de Weerd.....	503,779	Aug. 22	2556	636	64	1078
Washing-machine.....	R. H. Wilson.....	496,763	May 2	589	157	63	725
Washing-machine.....	A. E. Worden.....	493,957	Mar. 21	1917	489	62	1762
Washing-machine and stand. Combined.....	E. D. Matthews.....	494,706	Apr. 4	283	71	63	57
Washing-machines. Means for operating.....	J. Schroeder.....	498,031	May 23	2651	{ 662 663 }	63	1141
Washstand.....	H. B. Brown.....	509,295	Nov. 21	2172	522	65	1197
Washstand.....	J. P. Hayes.....	491,211	Feb. 7	244	61	62	794
Washstand.....	W. F. Phinney and H. H. Whitney.....	507,448	Oct. 24	2811	688	65	567
Washstand and dressing-case. Combined.....	A. Wettervik.....	499,408	June 13	1120	269	63	1600
Washstand and table. Combined.....	C. M. Finch.....	492,530	Feb. 28	2347	582	62	1264
Washsub.....	J. G. Badia.....	492,343	Feb. 21	2034	506	62	1188
Washsub.....	O. Brueck.....	495,390	Apr. 11	1395	349	63	276
Washsub.....	J. De Groff.....	499,781	June 20	1731	418	63	1720
Washsub.....	E. Keith.....	504,495	Sept. 5	307	78	64	1327
Washsub.....	E. G. Minnemeyer.....	489,082	Jan. 3	150	42	62	36
Washsub.....	F. Rasner.....	503,913	Aug. 22	2743	688	64	1115
Waste-pipe.....	T. R. Treiber.....	498,093	May 23	2742	625	63	1158
Watch.....	H. A. Felt.....	494,919	Apr. 4	621	158	63	120
Watch-alarm.....	J. W. Nunamaker.....	492,611	Feb. 28	2478	616	62	1291
Watch-balance.....	G. H. Smith.....	510,202	Dec. 5	605	142	65	1524
Watch-balance. Non-magnetic.....	C. F. Carpenter.....	489,790	Jan. 10	1238	324	62	272
Watch balance-spring and collet. Combined.....	J. Logan.....	507,549	Oct. 31	2991	734	65	613
Watch balance-staff protector.....	G. N. Einsele.....	490,708	Jan. 31	2776	713	62	618
Watch-balances and hair-springs. Mechanism for testing.....	G. E. Hunter.....	490,202	Jan. 17	1927	{ 501 502 503 504 505 }	62	425
Watch-balances and hair-springs. Testing.....	G. E. Hunter.....	490,203	Jan. 17	1932	{ 506 507 }	62	426
Watch-bow fastener.....	W. F. Bingham.....	493,814	Mar. 21	1690	431	62	1719
Watch-bow fastener.....	R. M. Hunter.....	496,830	May 2	699	184	63	744
Watch-bow fastener.....	F. Mink.....	496,943	May 9	905	237	63	801
Watch-bow fastener.....	F. Mink.....	501,210	July 11	1079	274	64	212
Watch-bow fastener.....	L. Platnauer.....	500,817	July 4	451	118	64	83
Watch cannon-pinion.....	W. B. Learned.....	496,162	Apr. 25	2600	654	63	530
Watchcase.....	F. Mink.....	492,629	Feb. 28	2503	621	62	1297
Watchcase.....	F. Mink.....	511,055	Dec. 19	2099	519	65	1826
Watchcase.....	G. Schlesicky.....	499,691	June 30	1924	467	63	1754
Watchcase.....	L. E. Sweetser.....	494,725	Apr. 4	313	79	63	62
Watchcase-backs. Die for.....	F. Ecaubert.....	498,540	May 30	3487	863	63	1305
Watchcase-die.....	A. W. Hofmann.....	503,600	Aug. 22	2275	568	64	1024
Watchcase-pendant.....	O. O. Aune.....	502,268	Aug. 1	5	2	64	567
Watchcase-pendant.....	O. W. Buerger.....	503,714	Aug. 22	2455	611	64	1058
Watchcase-pendant.....	F. Mink.....	505,474	Sept. 26	1911	492	64	1669
Watchcase-pendants. Apparatus for forming.....	C. W. Butts.....	492,739	Feb. 28	2670	{ 662 663 }	62	1329
Watchcase-spring.....	N. J. Felix.....	493,260	Mar. 14	764	195	62	1526
Watchcase-spring.....	N. J. Felix.....	495,628	Apr. 18	1779	447	63	364
Watchcase-spring.....	N. J. Felix.....	500,325	June 27	2641	646	63	1892
Watchcase-spring.....	J. H. Fleming.....	503,314	Aug. 15	1806	448	64	923
Watchcase-spring.....	F. E. Lange.....	511,150	Dec. 19	2265	555	65	1859
Watchcase-spring.....	V. Nivois.....	499,564	June 13	1380	329	63	1646
Watch-chain attachment.....	J. V. Hussey.....	498,654	May 30	3680	909	63	1339
Watch-demagnetizing device.....	F. M. La Boiteaux.....	507,912	Oct. 31	3601	888	65	726
Watch-dial fastening.....	S. Laporte.....	506,624	Oct. 17	1748	440	65	357
Watch-dials. Embossed plate for enameled.....	F. Hess.....	493,927	Mar. 21	1861	474	62	1751
Watch-guard.....	H. S. Hopper.....	503,480	Aug. 15	2063	515	64	970
Watch-guard or chain holder.....	H. M. Henning.....	505,657	Sept. 26	2269	575	64	1737
Watch hair-spring stud.....	H. E. Duncan.....	498,209	May 23	2928	729	63	1190
Watch-hand remover.....	M. W. Mallett.....	491,781	Feb. 14	1168	292	62	997
Watch-holder.....	R. Fuchs.....	494,273	Mar. 28	2454	618	62	1876

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Watch-jewels. Mechanism for setting	G. E. Hunter	503,483	Aug. 15	2066	515	64	971
Watch-key	W. F. Bingham	493,815	Mar. 21	1692	431	62	1719
Watch-key	I. Williams	502,060	July 25	2438	613	64	488
Watch-mainspring	J. B. Jobson	497,429	May 16	1692	427	63	955
Watchmaker's gage	J. D. Howell	503,238	Aug. 15	1671	411	64	901
Watchmaker's staking-tool	D. Mendelson	506,010	Oct. 3	326	86	65	64
Watchmaker's tool	G. W. Cameron	509,594	Nov. 28	2709	655	65	1312
Watchmaker's tool	W. G. Crook	510,897	Dec. 19	1840	454	65	1778
Watch-movement holder	H. E. Duncan	498,004	May 23	2610	652	63	1134
Watch-protector	H. and J. Rodier	508,184	Nov. 7	329	82	65	819
Watch-regulator	W. M. Matheson	493,508	Mar. 14	1163	297	62	1600
Watch safety-guard	I. C. Carmona	496,813	May 2	678	179	63	740
Watch safety-guard	I. C. Carmona	497,705	May 16	2130	532	63	1033
Watch. Stem-winding	D. Gruen	493,584	Mar. 14	1302	332	62	1628
Watch. Stem winding and setting	C. H. Bagley	503,516	Aug. 15	2111	529	64	980
Watch. Stem winding and setting	C. H. Bagley	503,517	Aug. 15	2113	530	64	980
Watch. Stem winding and setting	C. H. Bagley	508,600	Nov. 14	1309	326	65	1020
Watch. Stem winding and setting	C. P. Corliss	503,527	Aug. 15	2130	535	64	983
Watch. Stem winding and setting	L. Favre	491,242	Feb. 7	292	73	62	804
Watch. Stem winding and setting	E. H. Flint	503,533	Aug. 15	2139	537	64	985
Watch. Stem winding and setting	E. H. Flint	510,393	Dec. 5	913	219	65	1584
Watch. Stem winding and setting	E. H. Flint. (Reissue)	11,323	Apr. 11	1525	382	63	302
Watch. Stem winding and setting	G. E. Hunter	503,482	Aug. 15	2065	515	64	971
Watch. Stem winding and setting	J. W. Nunamaker	492,612	Feb. 28	2482	616	62	1292
Watch. Stem winding and setting	N. Silberberg	501,108	July 11	925	237	64	183
Watch. Stem winding and setting	J. Stark	503,502	Aug. 15	2092	522	64	976
Watch. Stem winding and setting	F. Terstegen	498,494	May 30	3404	845	63	1291
Watch. Stem winding and setting	W. F. Waggoner	510,740	Dec. 12	1524	378	65	1710
Watch stem winding and setting mechanism	J. W. Nunamaker	493,642	Mar. 21	1401	355	62	1663
Watch stem winding and setting mechanism	J. W. Nunamaker	493,643	Mar. 21	1404	356	62	1663
Watch-stem winding and setting mechanism	J. W. Rushton	499,754	June 20	1695	406	63	1713
Watch. Stop	A. G. Guerin	495,583	Apr. 18	1707	430	63	353
Watch. Stop	A. C. Gunn	503,416	Aug. 15	1956	485	64	952
Watch. Stop	H. Jacot-Burmman	489,255	Jan. 3	427	119	62	95
Watch. Stop	H. A. Lugin	505,052	Sept. 12	1223	315	64	1514
Watch. Stop	G. Nicolet	490,123	Jan. 17	1799	469	62	400
Watch winding device	I. Grasset and A. Meylan	502,884	Aug. 8	1080	266	64	780
Watches. Making bimetallic-balances for	D. H. Church. (Reissue)	11,372	Oct. 10	1450	364	65	290
Water. Apparatus for obtaining motive power from running	F. Purdon and H. E. Walters	506,725	Oct. 17	1580	396	65	326
Water, &c. Apparatus for purifying, sterilizing, and filtering drinking	S. L. West	491,828	Feb. 14	1234	309	62	1011
Water. Apparatus for sterilizing	D. Grove	500,763	July 4	371	95	64	69
Water as motive power. Means for utilizing tide	G. H. Carlson	509,997	Dec. 5	259	60	65	1458
Water by pneumatic pressure. System and device for elevating	C. H. Keeney	491,116	Feb. 7	83	23	62	765
Water-carrier	T. H. Ferguson	494,851	Apr. 4	526	132	63	102
Water-carrier. Highland	J. Northway and T. E. Hammond	500,936	July 4	623	164	64	114
Water-closet	C. A. Blessing	498,102	May 23	2754	688	63	1160
Water-closet	G. F. Brown	508,203	Nov. 7	369	91	65	821
Water-closet	R. Frame	509,519	Nov. 28	2593	627	65	1290
Water-closet	E. Hammann	510,598	Dec. 12	1284	313	65	1665
Water-closet	H. A. Jukes	507,273	Oct. 24	2521	621	65	509
Water-closet	S. W. Lewis	509,319	Nov. 21	2212	534	65	1205
Water-closet	C. H. Moore	496,426	May 2	51	14	63	628
Water-closet	E. and L. M. Norton	489,030	Jan. 3	74	41	62	18
Water-closet	W. Smith	492,947	Mar. 7	276	70	62	1473
Water-closet	W. Smith	510,997	Dec. 19	2022	499	65	1811
Water-closet	J. A. Umpleby	498,866	June 6	205	49	63	1429
Water-closet	F. A. Wells	502,452	Aug. 1	341	82	64	629
Water-closet bowl	F. Adee	499,194	June 13	760	181	63	1537
Water-closet cistern	J. Hankenhof	505,601	Sept. 26	2170	549	64	1719
Water-closet cistern	P. White	506,757	Oct. 17	1639	410	65	337
Water-closet connection	J. J. Ricketts	511,161	Dec. 19	2278	558	65	1861
Water-closet coupling	J. J. Ricketts	492,946	Mar. 7	275	70	62	1413
Water-closet demonstrator	W. H. Lloyd	497,584	May 16	1936	486	63	998
Water-closet flushing apparatus	J. E. Boyle. (Reissue)	11,351	July 18	2194	546	64	427
Water-closet flushing device	M. S. Bramble	496,394	May 2	11	3	63	621
Water-closet seat	L. Lipp	499,026	June 6	500	117	63	1478
Water-closet seat	J. P. Rundle	502,762	Aug. 8	884	217	64	743
Water-closet-seat support	H. T. Bush	497,230	May 9	1334	339	63	872
Water-closet seats. Protective covering for	P. G. H. Dop	498,159	May 23	2632	709	63	1174
Water-closet. Self-cleaning outside	T. J. O'Brien	490,710	Jan. 31	2793	717	62	622
Water-closet tanks. Discharge-valve for	D. D. Buick	502,611	Aug. 1	607	145	64	677
Water-closet tanks. Siphon-regulator for	A. A. Allan	509,855	Dec. 5	1	1	65	1411
Water-closets, &c. Flush-tank for	L. Morford, L. E. and C. F. Pike	511,540	Dec. 26	2921	711	65	1993
Water-closets, &c. Flushing system for	J. Holt	494,461	Mar. 28	2777	697	62	1936
Water-closets. Preservative cover for	E. L. Prins	496,536	May 2	232	61	63	661
Water-column. Safety	F. M. Ashley	491,238	Mar. 14	731	187	62	1519
Water-conductor to buildings. Device for attaching	O. Rosenquest	500,616	July 4	130	34	64	25
Water-cooler	E. T. Green	501,007	July 4	743	195	64	135
Water-cooler	J. Hymans	504,585	Sept. 5	449	114	64	1353
Water-cooler	A. J. McGehee	506,529	Oct. 10	1272	319	65	256
Water-cooler	A. W. Meyer	504,439	Sept. 5	207	54	64	1309
Water-cooler	E. D. Nichols	496,436	May 2	76	22	63	632
Water-cooler	L. B. Saddine	498,817	June 6	116	30	63	1412
Water-cooler and filter	O. H. Smith	494,901	Apr. 4	596	150	63	115
Water-crane	A. Scheid	498,818	June 6	117	30	63	1412
Water-cruet. Eucharistic	L. C. Beaudet	500,843	July 4	493	128	64	90

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Water. Device for storing and delivering filtered.	F. K. Way	504,007	Aug. 29	2912	{ 730 731	64	1163
Water-elevating bucket.	I. M. Dennis	508,290	Nov. 7	508	{ 123 874	65	852
Water-elevator.	W. H. H. Campbell	507,882	Oct. 31	3553	{ 875 647	65	718
Water-elevator. Steam vacuum.	P. Sattelkau and H. R. Winkelmann	507,335	Oct. 24	2630	{ 647 34	65	531
Water-elevator. Steam vacuum.	H. R. Winkelmann	489,064	Jan. 3	124	{ 62 649	62	31
Water-elevator. Steam vacuum.	H. R. Winkelmann	507,342	Oct. 24	2640	{ 649 649	65	534
Water-elevator. Steam vacuum.	H. R. Winkelmann and P. Sattelkau	507,340	Oct. 24	2637	{ 649 646	65	533
Water-elevator. Vacuum.	P. Sattelkau	507,334	Oct. 24	2628	{ 646 647	65	531
Water-elevator. Windlass	W. B. Parrish	493,180	Mar. 7	634	{ 100 161	62	1483
Water-elevators. Reserve-tank for.	H. R. Winkelmann	507,341	Oct. 24	2638	{ 649 174	65	533
Water-elevators. Steam or air connection for.	H. R. Winkelmann	499,179	June 6	734	{ 175 245	63	1518
Water for bathing, &c. Device for mixing hot and cold	J. H. Stevens	508,584	Nov. 14	999	{ 245 486	65	960
Water-fountain	F. P. Hinds	503,417	Aug. 15	1958	{ 486 487	64	952
Water from air in the process of freezing. Apparatus for purifying	T. Shaw	490,508	Jan. 24	2437	{ 628 329	62	537
Water-gage.	H. S. Graber	489,804	Jan. 10	1257	{ 617 2543	62	276
Water-gage.	F. H. Hausman	502,073	July 25	2457	{ 617 638	64	492
Water-gage.	C. B. Marshall	502,128	July 25	2543	{ 638 629	64	509
Water-gage.	T. W. Miller	504,694	Sept. 5	629	{ 160 2586	64	1388
Water-gage.	D. H. Roberts	500,298	June 27	2586	{ 633 407	63	1881
Water-gage.	F. J. Stulp	501,544	July 18	1602	{ 407 2818	64	323
Water-gage.	G. Vetter and H. Broeker	500,444	June 27	2818	{ 694 330	63	1923
Water-gage attachment.	F. J. Stulp	506,564	Oct. 10	1321	{ 330 405	65	265
Water-gage. Float.	A. E. Seinecke	495,523	Apr. 18	1608	{ 405 756	63	335
Water-gage protector.	G. H. Wall	490,818	Jan. 31	2945	{ 756 481	62	651
Water-gage safety attachment.	G. Beinke	497,564	May 16	1913	{ 481 682	63	924
Water-gate.	C. H. Watson	496,239	Apr. 25	2722	{ 682 114	63	552
Water-heater	F. Jakel	504,587	Sept. 5	450	{ 114 115	64	1354
Water-heater	G. Lloyd	496,728	May 2	633	{ 169 519	63	732
Water-heater	A. Long and C. McCumber	505,529	Sept. 26	2034	{ 519 751	64	1691
Water-heater	W. H. Marshall	511,630	Dec. 26	3074	{ 751 402	65	2019
Water-heater	J. H. Messier	489,971	Jan. 17	1538	{ 402 773	62	347
Water-heater	F. E. Peck	507,633	Oct. 31	3155	{ 773 617	65	644
Water-heater	H. Rundlett and F. A. Hoyt	492,615	Feb. 28	2487	{ 617 251	62	1293
Water-heater	G. D. B. Small	495,143	Apr. 11	1005	{ 251 121	63	204
Water-heater	C. B. Tompkins	496,673	May 2	452	{ 122 188	63	701
Water-heater	J. Winterlood	500,987	July 4	715	{ 188 861	64	130
Water heater and condenser.	J. E. Crawley	498,534	May 30	3475	{ 861 269	63	1303
Water-heater and shower-bath. Combined.	J. Fellow	489,660	Jan. 10	1032	{ 269 111	62	230
Water-heater. Electric.	W. Mitchell	491,320	Feb. 7	433	{ 111 29	62	830
Water-heater. Fireplace.	A. Berghold	500,554	July 4	29	{ 10 597	64	7
Water-heater for warming buildings.	J. T. Robbins	496,004	Apr. 25	2360	{ 597 397	63	485
Water-heater. Portable.	C. Galle	493,022	Mar. 7	397	{ 99 825	62	1437
Water-heater. Submerged.	R. S. Rutter	504,247	Aug. 29	3303	{ 825 434	64	1235
Water-heating and cooking apparatus.	E. Cardarelli	506,810	Oct. 17	1724	{ 434 504	65	352
Water heating and purifying device.	O. W. Ketchum	491,360	Feb. 7	504	{ 130 515	62	844
Water-heating apparatus.	W. S. Reed	501,846	July 18	3087	{ 515 483	64	408
Water-heating apparatus.	A. Schier	499,940	June 20	1990	{ 483 499	63	1766
Water-lift.	G. P. Glenn	506,996	Oct. 17	2020	{ 499 777	65	408
Water-meter	G. F. Chappell	490,871	Jan. 31	3021	{ 777 623	62	667
Water-meter. Diaphragm.	W. B. Bartram	509,508	Nov. 28	2578	{ 623 624	65	1287
Water-meter. Disk	G. B. Bassett	501,203	July 11	1068	{ 271 272	64	210
Water-meter. Disk	J. A. Tilden	489,208	Jan. 3	345	{ 97 284	62	79
Water-meter. Disk	H. F. Whittier	501,237	July 11	1118	{ 284 695	64	219
Water-meter. Rotary	G. F. Chappell	502,247	July 25	2751	{ 696 454	64	548
Water-meter. Rotary	G. Westinghouse, Jr., and E. Raud.	493,881	Mar. 21	1782	{ 455 475	62	1737
Water. Method of and apparatus for purifying.	H. Roeske	501,732	July 18	1909	{ 475 661	64	378
Water-motor	J. Bolgiano	496,182	Apr. 25	2627	{ 661 326	63	535
Water-motor	J. W. McCoy	497,195	May 9	1280	{ 326 282	63	867
Water-motor	R. M. Shaffer	498,905	June 6	282	{ 65 839	63	1442
Water-motor	S. D. Shepperd	504,283	Aug. 29	3356	{ 839 326	64	1247
Water-motor	J. Toohey	493,569	Mar. 14	1276	{ 327 629	62	1622
Water-motor	T. J. Vance	507,294	Oct. 24	2552	{ 629 416	65	515
Water-motor	R. C. Watkins	510,826	Dec. 12	1674	{ 416 206	65	1738
Water-motor	W. R. White	499,269	June 13	861	{ 206 254	63	1554
Water-pipes. Automatic trap for.	T. J. Brogan	496,994	May 9	979	{ 254 663	63	813
Water-power. Device for utilizing.	T. A. Macdonald	507,375	Oct. 24	2699	{ 663 698	65	545
Water. Process of and apparatus for purifying.	D. Hanna	502,252	July 25	2759	{ 698 786	64	550
Water. Process of and apparatus for purifying.	G. Oppermann	506,248	Oct. 10	786	{ 194 219	65	161
Waterproof fabrics. Manufacturing	G. C. Mandeleberg	500,664	July 4	219	{ 64 950	64	42
Waterproof fabrics. Producing ornamental india-rubber	G. C. Mandeleberg	490,978	May 9	950	{ 63 626	63	809
Waterproof suit.	O. Van Oostrum	492,643	Feb. 28	2528	{ 626 694	62	1301
Waterproof suit.	O. Van Oostrum	507,466	Oct. 24	2836	{ 694 331	65	572
Waterproofing and airproofing inflatable textile fabrics.	S. Curlin	508,818	Nov. 14	1338	{ 332 781	65	1025
Waterproofing fabrics.	J., Sr., and J. Miller, Jr.	511,707	Dec. 26	3188	{ 782 360	65	2040
Waterproofing oil-receptacles. Compound for.	G. Gumbel	491,284	Feb. 7	360	{ 1 488	62	817
Water-purifier	J. H. Archer	488,977	Jan. 3	2	{ 1 488	62	3

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Water purifier and cooler.....	W. Allderdice.....	497,743	May 16	2179	545	63	1043
Water. Purifying.....	A. Dervaux.....	495,313	Apr. 11	1275	319	63	254
Water-purifying apparatus.....	P. Ball.....	507,774	Oct. 31	3379	827	65	686
Water-purifying apparatus.....	J. J. Hoppes.....	503,140	Aug. 15	1514	372	64	872
Water. Sterilized and drinkable.....	C. Herscher.....	501,784	July 18	2003	494	64	394
Water-supply system.....	C. E. Emig.....	492,351	Feb. 21	2049	510 511	62	1191
Water. System and apparatus for raising.....	J. H. McGowan.....	506,927	Oct. 17	1921	476	65	389
Water-tank.....	A. Pennell and G. Sullivan.....	498,568	May 30	3530	873	63	1312
Water-tight lining.....	D. Furgeson.....	505,041	Sept. 12	1307	311	64	1512
Water to animals. Apparatus for supplying.....	J. Allis.....	492,568	Feb. 28	2407	600	62	1278
Water-tube boiler.....	W. Cowles.....	508,410	Nov. 14	713	175	65	904
Water-tube boiler.....	L. M. G. Delaunay-Belleville.....	506,165	Oct. 3	578	150	65	111
Water-tube boiler.....	H. H. Lindemuth.....	492,499	Feb. 28	2304	571 572	62	1254
Water-tube boiler.....	J. Pierpoint.....	490,923	Jan. 31	3121	801	62	686
Water-tube boiler.....	J. Pierpoint.....	492,556	Feb. 28	2392	594	62	1274
Water-tube boiler.....	J. Pierpoint.....	492,557	Feb. 28	2392	594	62	1274
Water-tube boiler.....	S. A. Pratt.....	495,682	Apr. 18	1866	468	63	378
Water-tube safety-boiler.....	H. W. Frackmann.....	503,130	Aug. 15	1501	369	64	870
Water-ways. Reversible gate for.....	G. W. Dorrance.....	489,557	Jan. 10	895	234	62	202
Water-wheel.....	E. N. Andrews.....	505,342	Sept. 19	1690	435	64	1614
Water-wheel.....	S. L. Berry.....	493,239	Mar. 14	732	188	62	1520
Water-wheel.....	F. M. Bookwalter.....	509,863	Dec. 5	20	4	65	1414
Water-wheel.....	F. M. Bookwalter and W. W. Tyler.....	493,964	Mar. 21	1938	494	62	1765
Water-wheel.....	C. A. Chase.....	492,862	Mar. 7	141	34	62	1386
Water-wheel.....	J. J. Decker.....	494,127	Mar. 28	2321	566	62	1834
Water-wheel.....	A. B. Frame.....	499,533	June 13	1330	315	63	1638
Water-wheel.....	A. F. Sparks.....	500,355	June 27	2688	659 660	63	1900
Water-wheel and elevator.....	J. B. Lockwood.....	495,816	Apr. 18	2080	524	63	417
Water-wheel bucket.....	F. von Leicht.....	499,127	June 6	650	156	63	1504
Water-wheel. Compound.....	L. Wertz.....	501,123	July 11	951	243	64	187
Water wheel or motor.....	J. W. Kales.....	499,121	June 6	642	154	63	1503
Water-wheel regulator. Electric.....	E. R. Holcomb.....	502,624	Aug. 1	628	151	64	682
Water-wheel. Turbino.....	J. H. Staples.....	511,716	Dec. 26	3307	786 787	65	2044
Water-wheels. Apparatus for regulating the speed of.....	C. Hagmaier.....	498,714	May 30	3792	935 936	63	1357
Watering-cart.....	H. E. Fairman.....	495,792	Apr. 18	2043	517	63	410
Watering device. Stock.....	A. Carey.....	493,478	Mar. 14	1116	286	62	1591
Watering live stock. Apparatus for.....	O. H. Flagg.....	507,534	Oct. 31	2969	728	65	609
Watering stock. Device for.....	W. A. Mundy.....	499,797	June 20	1759	426	63	1725
Watering trough. Automatic hog.....	H. E. Purdy.....	506,253	Oct. 10	793	196	65	162
Watering trough. Hog.....	D. Brigham.....	494,732	Apr. 4	326	83	63	64
Watering trough. Stock.....	H. Carroll.....	491,077	Feb. 7	27	7	62	753
Watering trough. Stock.....	G. A. Hess.....	511,142	Dec. 19	2253	553	65	1856
Wave-maker.....	S. Mackaye.....	490,484	Jan. 24	2395	619	62	528
Wave-motor.....	J. C. Walker.....	510,741	Dec. 12	1526	379	65	1711
Wax pad.....	L. L. Lucas.....	494,109	Mar. 21	2184	558	62	1813
Weaner. Calf.....	A. Glenn.....	508,216	Nov. 7	392	95	65	831
Weaner. Calf.....	S. E. Shaw.....	495,378	Apr. 11	1375	343	63	272
Wear-plate.....	J. Churchward.....	492,528	Feb. 28	2345	582	62	1263
Wear-plate.....	J. Churchward.....	508,086	Nov. 7	182	49	65	791
Weather-indicating device.....	H. I. Ireland.....	509,169	Nov. 21	1948	476	65	1156
Weather-strip.....	M. Bradford.....	500,559	July 4	36	11	64	8
Weather-strip.....	R. H. Cutler.....	508,504	Nov. 14	857	212	65	933
Weather-strip.....	E. C. Ellis.....	499,629	June 13	1480	355	63	1664
Weather-strip.....	H. C. Fuller.....	500,759	July 4	365	95	64	68
Weather-strip.....	A. T. Green and J. Wesselowski.....	500,885	July 4	557	144	64	101
Weather-strip.....	A. L. Hitchcock.....	496,876	May 9	796	210	63	781
Weather-strip.....	F. H. Mead.....	500,503	June 27	2898	712	63	1937
Weather-strip.....	J. C. Ohaver.....	507,922	Oct. 31	3619	894	65	730
Weather-strip.....	W. H. Plympton.....	491,952	Feb. 14	1431	356	62	1050
Weather-strip.....	W. T. Vallandigham.....	502,644	Aug. 1	661	161	64	628
Weather-strip. Pneumatic.....	G. L. Thomas.....	494,351	Mar. 28	2577	649	62	1900
Weather-strip. Self-operating.....	J. H. Graham.....	501,503	July 18	1540	388	64	311
Weather-strip. Window.....	W. H. Woodard.....	496,333	Apr. 25	2877	719	63	582
Weaving elastic fabrics.....	S. Brown.....	502,699	Aug. 8	770	187	64	732
Weaving machine. Circular.....	N. Lombard.....	494,107	Mar. 21	2179	557 558	62	1812
Weaving machine. Circular.....	N. Lombard.....	494,108	Mar. 21	2182	558	62	1812
Weaving two or more fabrics. Apparatus for simultaneously.....	E. Langjahr.....	509,476	Nov. 28	2530	610 611	65	1277
Webbs of fabric longitudinally and stitching the edges. Machine for doubling.....	E. T. and E. H. Marble and F. H. Greene.....	489,590	Jan. 10	944	245 246	62	211
Wedge-extractor.....	P. A. Dudley.....	510,246	Dec. 5	680	162	65	1539
Weed-cutter, &c.....	W. A. McCoy.....	500,932	July 4	618	163	64	113
Weed-cutter and land-leveler. Combined.....	A. N. Beebe.....	506,764	Oct. 17	1649	413	65	338
Weed-exterminator.....	J. S. Dunlap.....	500,538	Oct. 27	2964	728	63	1950
Weeder and cultivator.....	C. C. Platt.....	501,860	July 11	1330	333	64	255
Weeder. Hand garden.....	N. White.....	489,058	Jan. 3	119	32	62	29
Weeding-machine.....	L. Schnackenburg.....	498,311	May 30	3111	775	63	1237
Weigher. Automatic grain.....	H. M. Fulwider.....	490,957	Jan. 31	3179	813	62	696
Weigher. Automatic grain.....	J. C. King.....	505,769	Sept. 26	2456	619	64	1771
Weigher. Grain.....	W. K. Lacey.....	506,007	Oct. 3	321	84, 85	65	63
Weigher. Grain.....	C. J. Hartley.....	490,710	Jan. 31	2778	714	62	619
Weigher. Rotating grain.....	D. Drawbaugh.....	507,531	Oct. 31	2964	726 727	65	608
Weigher. Rotating grain.....	J. R. Johns.....	507,544	Oct. 31	2982	731 732	65	611
Weigher. Rotating grain.....	B. Simons.....	494,035	Mar. 21	2053	524 525	62	1788
Weighing and packing machine. Automatic.....	J. A. Ostenberg.....	492,485	Feb. 28	2270	565 566	62	1248

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Weighing apparatus. Meat.....	J. T. Tavenner.....	497,614	May 16	1984	497	63	1007
Weighing basket. Coal.....	T. C. du Pont.....	505,394	Sept. 19	1778	461	64	1631
Weighing basket. Coal.....	S. Jones, S. B. Bishop, and T. C. du Pont.	499,120	June 6	640	154	63	1502
Weighing-machine. Automatic.....	C. R. Gorringer.....	499,223	June 13	797	189	63	1543
Weighing-machine. Automatic.....	H. E. Smyser.....	493,795	Mar. 21	1650	421	62	1712
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Weighing-machine. Automatic.....	H. E. Smyser.....	493,796	Mar. 21	1658	423	62	1713
					424		
Weighing-machine. Automatic.....	H. E. Smyser.....	493,797	Mar. 21	1663	424	62	1714
Weighing-machine feeding device.....	H. E. Smyser.....	493,798	Mar. 21	1667	425	62	1715
Weighing-machine. Hydrostatic.....	J. Jackson.....	507,009	Oct. 17	2043	505	65	413
					506		
Weight-motor.....	J. G. Ball.....	493,053	Mar. 7	438	110	62	1446
Weight-motor.....	D. J. Freese.....	502,814	Aug. 8	977	238	64	760
Weight-motor.....	C. E. Rice, L. B. McDonald, and J. D. McDowell.	494,693	Apr. 4	262	66, 67	63	53
Welded. Clamp for holding articles while being.....	A. J. Moxham.....	508,037	Nov. 7	86	25	65	774
Welding.....	J. M. Gull.....	508,012	Nov. 7	52	16	65	767
Welding apparatus.....	A. J. Moxham.....	508,036	Nov. 7	85	24, 25	65	773
Welding apparatus.....	J. A. Pross and C. E. Lipe.....	495,947	Apr. 18	2274	573	63	453
					574		
Welding apparatus. Electric.....	J. H. Bassler.....	498,735	May 30	3838	946	63	1366
					947		
Welding apparatus. Electric.....	C. L. Coffin.....	495,393	Apr. 11	1399	350	63	276
					351		
Welding apparatus. Electric.....	H. Lemp.....	504,496	Sept. 5	308	78	64	1327
Welding apparatus. Pipe.....	J. Simpson.....	507,289	Oct. 24	2544	626	65	513
					627		
Welding cast-iron. Compound for.....	W. L. Gale.....	496,116	Apr. 25	2535		63	517
Welding-cylinder.....	A. Grieves and T. F. Frazier.....	509,526	Nov. 28	2608	630	65	1292
					631		
Welding die. Link.....	J. W. R. Johnson.....	499,229	June 13	806	191	63	1544
Welding flue-pipes. Means for.....	W. H. Miller and B. W. Lally.....	494,642	Apr. 4	180	45	63	37
Welding-furnace.....	S. H. Percy.....	509,046	Nov. 21	1737	430	65	1116
Welding machine. Automatic chain.....	E. Thomson and C. E. Harthan.....	501,546	July 18	1604	404	64	323
					405		
Welding machine. Electric.....	M. M. Suppes.....	500,973	July 4	695	182	64	126
					183		
Welding machine for headers or other tubes. End.....	C. P. Higgins.....	503,961	Aug. 29	2837	708	64	1149
					709		
Welding metal.....	A. J. Moxham.....	495,989	Apr. 25	2337	591	63	480
Welding metal.....	A. J. Moxham.....	496,890	May 9	820	217	63	785
Welding metals electrically.....	C. L. Coffin.....	492,713	Feb. 28	2635	653	62	1323
Welding metals. Electrically.....	C. L. Coffin.....	499,518	June 13	1310	308	63	1633
Welding metals. Machine for electrically.....	C. L. Coffin.....	495,394	Apr. 11	1400	351	63	276
Welding plow-irons. Machine for.....	A. M. Erickson.....	489,670	Jan. 10	1047	273	62	233
Welding sheet metal. Method of and apparatus for electrically.....	C. L. Coffin.....	499,657	June 13	1520	366	63	1670
Well. Artesian.....	R. J. Chipman.....	503,651	Aug. 22	2353	587	64	1038
Well-bailer.....	H. G. Smith.....	492,117	Feb. 21	1681	419	62	1114
Well boring and drilling machine.....	C. W. Walker.....	501,261	July 11	1158	293	64	225
					294		
Well-boring apparatus.....	F. Gardner.....	494,779	Apr. 4	403	99	63	79
					100		
Well-boring apparatus.....	R. S. Rickey and I. Feitel.....	504,619	Sept. 5	492	127	64	1362
Well-boring apparatus. Artesian.....	F. O. Brown.....	492,536	Feb. 28	2358	566	62	1266
Well cavities. Agitator for oil.....	T. H. Gallagher.....	498,164	May 23	2840	710	63	1176
Well-drilling apparatus.....	S. MacEachen.....	503,051	Aug. 8	1357	335	64	831
					336		
Well-drilling apparatus. Oil.....	J. Barrett.....	495,689	Apr. 18	1877	470	63	320
Well-drilling apparatus. Oil.....	D. J. Thayer.....	495,852	Apr. 18	2138	537	63	427
Well-drilling machine.....	J. Button.....	506,204	Oct. 10	694	174	65	142
					175		
Well-drilling machinery.....	A. C. Darragh.....	505,443	Sept. 26	1867	481	64	1661
Well-drilling machinery.....	J. G. Lee.....	500,142	June 27	2342	566	63	1839
Well-drilling machinery.....	W. Lewis.....	489,021	Jan. 3	64	19	62	16
Well or cistern cleaner and water-purifier.....	W. S. Barker.....	498,966	June 6	381	91	63	1459
Well packer. Artesian.....	G. Palm.....	509,394	Nov. 28	2360	573	65	1244
Well rig. Oil.....	S. R. Sheakley.....	499,045	June 6	529	124	63	1483
Well-strainer.....	J. J. Moser.....	501,655	July 18	1789	445	64	357
Well-tilting coupler.....	W. A. Sumner.....	491,956	Feb. 14	1436	358	62	1051
Well tool. Oil.....	G. Woodard.....	495,377	Sept. 19	1749	434	64	1625
Well-tubing. Machine for raising or lowering.....	E. A. Wanamaker.....	493,392	Mar. 14	977	252	62	1566
					376		
Well. Tubular.....	J. Burke.....	497,302	May 16	1495	377	63	920
Wells and connecting pipes. System of exhausting air from Artesian.....	J. T. Langford.....	495,812	Apr. 18	2072	523	63	15
Wells. Apparatus for preventing obstructions to the flow of oil in oil.....	F. Gardner.....	495,936	Apr. 18	2260	569	63	450
Wells. Bailer for oil or Artesian.....	W. Plotts.....	496,323	Apr. 25	2863	714	63	579
Wells. Device for drawing casings from deep.....	D. Bowen.....	505,262	Sept. 19	1557	406	64	1590
Wells. Enlarging under reamer for oil or Artesian.....	P. H. Mack.....	496,317	Apr. 25	2854	711	63	577
					712		
Wells. Means for handling drill-bits for oil or Artesian.....	W. Forker.....	491,164	Feb. 7	170	43, 44	62	780
Wells. Rod-adjuster and clamp for Artesian or oil.....	G. S. Gahagan.....	499,670	June 13	1539	370	63	1673
Wells. Special point for tubular.....	F. A. Barrett.....	492,181	Feb. 21	1786	446	62	1137
Wells. Stand-point for tubular.....	F. A. Barrett.....	492,182	Feb. 21	1788	446	62	1137
Well-attaching machine.....	H. C. Gros.....	501,831	July 18	2065	509	64	405
					510		
Well-making machine.....	Z. T. French and W. C. Meyer.....	505,598	Sept. 26	2166	548	64	1718
Wellting. Making.....	R. K. Johnstone.....	495,891	Apr. 18	2198	553	63	439

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Whalebone. Making artificial.	P. C. Dame and L. Prud'hon	501,222	July 11	1098	-----	64	216
Whalebone stays. Machine for scraping the ends of.	M. Sachs	508,987	Nov. 21	1647	405	65	1098
Wheat-scourer	G. V. Dixon	505,702	Sept. 26	2349	594	64	1751
Wheat-scourer	J. D. Sheaffer	502,915	Aug. 8	1136	280	64	791
Wheel:							
See Bicycle-wheel.	Pneumatic wheel.						
Boot or shoe scouring-wheel.	Pneumatic-tired wheel.						
Buffing-wheel.	Polishing-wheel.						
Buffing or polishing wheel.	Propeller-wheel.						
Burr-wheel.	Sandpaper-wheel.						
Car-wheel.	Sprocket-wheel.						
Caster-wheel.	Tracing-wheel.						
Current-wheel.	Traction-wheel.						
Cycle-wheel.	Trolley-wheel.						
Driving-wheel.	Type-wheel.						
Emery-wheel.	Vehicle-wheel.						
Fifth-wheel.	Velocipede-wheel.						
Fly-wheel.	Velocipede drive-wheel.						
Grinding or polishing wheel.	Velocipede sprocket-wheel.						
Metal wheel.	Ventilating-wheel.						
Observation-wheel.	Water-wheel.						
Paddle-wheel.	Wheelbarrow-wheel.						
	Wind-wheel.						
	Windmill-wheel.						
Wheel	W. L. Casaday	489,458	Jan. 10	743	197	62	172
Wheel	L. J. Crecelius. (Reissue)	11,342	May 30	3865	953	63	1371
Wheel	O. Cullmann	504,080	Aug. 29	3013	753	64	1182
Wheel	G. P. Fisher	492,280	Feb. 21	1938	484	62	1169
Wheel	W. S. Foster	496,405	May 2	25	7	63	623
Wheel	C. F. Harrington	506,430	Oct. 10	1108	274	65	223
Wheel	F. C. Hockensmith	500,578	July 4	63	18	64	13
Wheel	E. L. Howe	492,017	Feb. 21	1534	382	62	1085
Wheel	H. E. Kuhner	500,913	July 4	592	155	64	109
Wheel	H. W. Libbey	490,391	Jan. 24	2252	585	62	501
Wheel	T. R. McKnight	491,662	Feb. 14	981	247	62	960
Wheel	G. B. Out	502,447	Aug. 1	335	80	64	628
Wheel	J. H. Thomas and D. B. Hiser	489,880	Jan. 10	1360	354	62	297
Wheel	C. W. Smart	507,290	Oct. 24	2546	627	65	514
Wheel box. Vehicle-	C. H. Brown, H. W. Meyer, and H. Schiewetz.	492,384	Feb. 28	2106	525	62	1215
Wheel-center.	W. L. Messer	496,837	May 2	709	188	63	746
Wheel-driving mechanism	I. M. Bourke	510,882	Dec. 19	1817	449 } 450 }	65	1774
Wheel-fender	C. W. Howe	498,010	May 23	2618	654	63	1135
Wheel for single-track railways	J. J. Burt	496,293	Apr. 25	2801	701	63	568
Wheel guard. Vehicle-	H. F. Ganon	508,379	Nov. 7	657	161	65	879
Wheel-press	H. D. Gordon	504,030	Aug. 29	2945	736 } 737 }	64	1168
Wheel-press	H. D. Gordon	504,031	Aug. 29	2947	737	64	1169
Wheel-rim	C. S. Dikeman	509,021	Nov. 21	1698	420	65	1108
Wheel-rim	W. H. Ratcliff	510,189	Dec. 5	582	136	65	1520
Wheel-rim	W. W. Stall	509,258	Nov. 21	2107	507	65	1186
Wheel rim. Vehicle-	W. W. Stall	509,260	Nov. 21	2110	508	65	1186
Wheel-rims. Making hollow	E. Warwick	506,753	Oct. 17	1628	409	65	335
Wheel rims. Method of and apparatus for forming } compress-	L. M. Todd	503,360	Aug. 15	1882 } 466 }	467 }	64	938
Wheel support. Vehicle-	S. Elliott	507,068	Oct. 17	2139	531	65	428
Wheel-washer	F. A. Dieffenbach	510,680	Dec. 12	1431	353	65	1692
Wheels, &c. Fastening device for	H. C. Carver	491,469	Feb. 7	673	169	62	877
Wheels. Making	W. W. Speer	505,612	Sept. 26	2188	553	64	1722
Wheels. Manufacture of	A. A. Stevenson	494,903	Apr. 4	599	151	63	116
Wheels. Manufacture of car or other	J. Parkinson	508,180	Nov. 7	324	80, 81	65	818
Wheels. Spring-rim for	J. B. Sr., and J. B. Dunlop, Jr.	501,409	July 11	1411	353	64	271
Wheels to shafts. Means for attaching	S. H. Percy and D. S. Hitchcock	496,442	May 2	87	25	63	634
Wheelbarrow	P. F. Dearstyne	511,045	Dec. 19	2083	516	65	1824
Wheelbarrow-wheel	F. H. Ensign	490,277	Jan. 24	2069	541	62	464
Whiffletree	N. L. Holmes	496,608	May 2	337	92	63	681
Whiffletree	R. F. King	490,749	Jan. 31	2843	729	62	630
Whiffletree	J. A. Scarborough and C. Bardwell	492,560	Feb. 28	2397	596	62	1275
Whiffletree	E. J. Smith	508,444	Nov. 14	758	187	65	913
Whiffletree	C. S. Wells	504,822	Sept. 12	849	218	64	1443
Whiffletree attachment	W. Fitz Henry, W. P. Bolles, and A. McKee.	497,495	May 16	1813	455	63	975
Whiffletree-center	J. Edgar	499,217	June 13	790	187	63	1542
Whiffletree-clip	W. M. Myers	492,630	Feb. 28	2510	622	62	1297
Whiffletree-clip	E. H. Sawyers	490,683	Jan. 31	2740	706	62	610
Whiffletree-coupling	E. S. Gentry	490,071	Jan. 17	1715	447	62	382
Whiffletree-coupling	C. Wilcox	491,790	Feb. 14	1181	296	62	999
Whiffletree-guard	L. Dimock	493,761	Mar. 21	1601	407	62	1702
Whiffletree-hook	G. C. Edmunds	501,002	July 4	738	193	64	134
Whiffletree-hook	C. E. Jones	490,023	Jan. 17	1642	427	62	367
Whiffletree-hook	O. C. Joyce	504,925	Sept. 12	1017	262	64	1476
Whiffletree-hook	H. Lemm	497,328	May 16	1535	386	63	927
Whiffletree-hook	R. S. McBean and J. W. McBurnett.	507,665	Oct. 31	3210	785	65	654
Whiffletree-hook	J. McCradden	490,672	Jan. 31	2722	700	62	607
Whiffletree-hook	J. B. Sims	489,271	Jan. 3	449	124	62	99
Whiffletree-hook	J. F. Slack	511,553	Dec. 26	2937	716	65	1995
Whiffletree-hook	W. J. Stowe	504,686	Sept. 5	611	156	64	1385
Whiffletree-hook	J. Wood and W. W. Hare	493,420	Mar. 14	1011	261	62	1573
Whiffletrees. Antirattler for	T. F. McKenna	508,901	Nov. 14	1466	363	65	1048
Whim	A. Aker	497,291	May 9	1463	368	63	898
Whip	C. G. Becker	491,512	Feb. 14	748	190	62	912
Whip	H. J. Bush	492,606	Feb. 28	2471	614	62	1290

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Whip	W. O. Daniels	500,096	June 20	2226	542	63	1807
Whip	A. Sanders	509,452	Nov. 28	2480	598	65	1268
Whip	F. A. Sanford	503,332	Aug. 15	1838	455	64	930
Whip-hanger	F. Taylor	501,196	July 11	1061	268	64	208
Whip-hanger	H. Weed	498,999	June 6	451	106	63	1470
Whip-holder	A. Searls	511,165	Dec. 19	2285	559	65	1863
Whip-lock	S. P. Phillips	499,933	June 20	1980	481	63	1764
Whip-rack	A. H. Phinney	509,675	Nov. 28	2240	686	65	1337
Whip-socket	F. M. Beidler	503,340	Aug. 15	1847	457	64	932
Whip-socket	J. L. Bradley	490,861	Jan. 31	3005	771	62	664
Whip-socket	R. and J. Falkenrath	493,579	Mar. 14	1297	331	62	1627
Whips. Stalk-splitting machine for	D. D. Griffin	508,937	Nov. 21	1573	385	65	1082
Whips. Stalk-splitting machine for	T. W. Reed	495,430	Apr. 11	1457	368	63	228
Whisky. Making	W. E. Bradley	495,956	Apr. 25	2291	.....	63	472
Whisky-making	W. E. Bradley	499,316	June 13	939	.....	63	1568
Whistle	W. Ely	504,716	Sept. 12	661	168	64	1407
Whistle. Air-alarm	B. F. Campbell and J. H. McHugh	499,209	June 13	780	185	63	1540
Whistle. Bicycle	F. J. Hall	492,887	Mar. 7	182	44	62	1395
Whistle. Bicycle	J. F. Hylan and R. L. Sinley	508,318	Nov. 7	552	136	65	860
Whistle. Mouth	W. N. Beardsley and A. D. Moulton	497,759	May 23	2225	557	63	1067
Whistle. Steam	F. M. Ashley	511,490	Dec. 26	2846	688	65	1978
Whistle. Steam	H. R. Frisbie	493,920	Mar. 21	1852	472	62	1749
Whistle. Steam	E. H. Lunken	503,547	Aug. 15	2168	542	64	990
Whiting. Apparatus for manufacturing	H. C. Higginson	499,994	June 20	2073	502	63	1780
Whiting. Manufacturing	H. C. Higginson	499,995	June 20	2074	502	63	1780
Whiting. Manufacture of	H. C. Higginson	491,353	Feb. 7	494	127	62	842
Wick. Lamp	H. Pieper, Jr	504,501	Sept. 5	321	82	64	1329
Wick-raiser	H. E. Shaffer	494,171	Mar. 28	2289	580	62	1845
Wick-raiser	H. E. Shaffer	506,408	Oct. 10	1064	264	65	215
Wick-raiser	W. H. Wilder	511,572	Dec. 26	2974	724	65	2002
Wick-raising device for central-draft lamps	R. Brenner	510,378	Dec. 5	879	211	65	1577
Wick-raising device for central-draft lamps	R. Brenner	510,379	Dec. 5	881	212	65	1577
Wick-threader	H. Fairchild	510,014	Dec. 5	301	67	65	1467
Winch	E. H. Whitney	506,144	Oct. 3	543	140	65	105
Wind-engine	S. W. Martin	500,340	June 27	2660	652	63	1895
Wind-engine	G. A. Musseleman	502,860	Aug. 8	1043	256	64	773
Wind-engine	M. Schou	508,990	Nov. 21	1650	406	65	1099
Wind-instrument	J. L. Maher	504,396	Sept. 5	135	36	64	1296
Wind-instruments. Self-acting water-key for	J. Lindstrom	504,354	Sept. 5	60	16	64	1282
Wind-wheel	B. J. Sykes	493,533	Mar. 14	1209	309	62	1608
Wind-wheel	J. C. Walker	505,736	Sept. 26	2400	606	64	1759
Wind-wheel	M. B. Williams	489,885	Jan. 10	1368	355	62	298
Wind-wheel	J. H. Wolf	510,306	Dec. 5	777	188	65	1557
Winder. Quill	C. Jones	493,093	Mar. 7	498	124	62	1458
Winding devices. Regulator for thread	S. W. Wardwell, Jr	509,413	Nov. 28	2395	580	65	1250
Winding-drum rope-leader	N. H. Pine	499,934	June 20	1981	481	63	1764
Winding machine	A. A. Brigham	503,277	Aug. 15	1735	428	64	912
Winding machine	W. C. Pierce	492,613	Feb. 28	2484	616	62	1292
Winding machine. Cone	I. Walker	493,049	Mar. 7	432	109	62	1444
Winding machine. Cop	C. Friederich	493,356	Mar. 14	918	236	62	1554
Winding machine. Cop	S. W. Wardwell, Jr	506,959	Oct. 17	1963	486	65	397
Winding machine. Fabric	A. Levedahl and F. Yagermann	510,034	Dec. 5	328	73	65	1471
Winding machine. Fabric	E. H. Schofield	494,491	Mar. 28	2793	700	62	1939
Winding machine. Spool or quill	A. Insinger	499,634	June 13	1488	357	63	1665
Winding-machine twisting attachment	J. W. Foster	499,666	June 13	1533	369	63	1672
Winding machine. Yarn or thread	R. Broadbent	493,970	Mar. 21	1951	496	62	1768
Winding mechanism. Cop and bobbin	O. Lever and W. S. Grundy	503,325	Aug. 15	1824	451	64	927
Winding silk, &c. Apparatus for	E. Fougereol	495,479	Apr. 18	1544	388	63	324
Winding textiles. Machine for	G. S. Currie	507,528	Oct. 31	2958	725	65	607
Winding thread on plates. Machine for	J. C. and F. A. Spach	500,163	June 27	2377	576	63	1845
Winding thread on spools. Machine for	D. F. Hunt	503,086	Aug. 8	1410	348	64	840
Winding yarns or threads. Machinery or apparatus for	F. Rosskoth	494,723	Apr. 4	306	77	63	62
Windlass	G. F. Archer	496,967	May 9	937	246	63	806
Windlass-gear	E. B. Bryant and R. J. Victor	498,740	May 30	3847	948	63	1347
Windlass self-register. Ship's	S. S. Gerry	508,935	Nov. 21	1568	384	65	1082
Windmill	P. H. Adams	506,026	Oct. 3	346	92	65	68
Windmill	J. S. and A. S. Baker	494,238	Mar. 28	2400	606	62	1867
Windmill	L. W. Beard	510,497	Dec. 12	1083	261	65	1630
Windmill	C. R. Bowman	493,060	Mar. 7	447	113	62	1447
Windmill	A. Bradford	509,866	Dec. 5	24	5	65	1415
Windmill	C. W. Clarke	503,652	Aug. 22	2354	588	64	1038
Windmill	W. B. Collins	508,683	Nov. 14	1140	281	65	988
Windmill	E. L. Davies and J. N. White	504,301	Aug. 29	3385	846	64	1252
Windmill	L. B. Denton	492,916	Mar. 7	235	59	62	1405
Windmill	E. Everson	506,483	Oct. 10	1205	299	65	242
Windmill	H. A. French	500,483	June 27	2868	706	63	1932
Windmill	A. F. George	508,009	Nov. 7	45	14, 15	65	766
Windmill	G. Herzog	504,035	Aug. 29	2952	739	64	1170
Windmill	G. Kalles	510,029	Dec. 5	321	72	65	1470
Windmill	A. O. Koontz	489,080	Jan. 3	147	41	62	36
Windmill	W. Kouns	500,911	July 4	589	154	64	108
Windmill	C. J. Lanning	498,068	May 23	2703	676	63	1150
Windmill	T. H. McClean	490,359	Jan. 24	2206	575	62	492

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Windmill	H. B. McCoslin	492,097	Feb. 21	1647	410	62	1108
Windmill	A. H. Neller	504,994	Sept. 12	1134	291	64	1498
Windmill	T. O. Perry	492,104	Feb. 21	1659	413	62	1110
Windmill	T. O. Perry	495,510	Apr. 18	1591	400	63	332
Windmill	T. O. Perry	499,395	June 13	1089	264	63	1595
Windmill	T. O. Perry	502,528	Aug. 1	473	114	64	653
Windmill	C. and J. Pyle	491,663	Feb. 14	982	247 248	62	960
Windmill	J. F. Reul	496,098	Apr. 25	2512	635	63	513
Windmill	G. B. Snow	498,584	May 30	3550	881	63	1316
Windmill	G. B. Snow	508,852	Nov. 14	1393	346 347	65	1035
Windmill	J. Stimpson	502,785	Aug. 8	927	225 226	64	751
Windmill	R. Uren	502,479	Aug. 1	383	92	64	637
Windmill	J. Wallace	506,804	Oct. 17	1711	430 431	65	350
Windmill	E. Williams	504,185	Aug. 29	3202	798 799	64	1218
Windmill	M. B. Williams and W. H. Athey	503,635	Aug. 22	2333	581	64	1034
Windmill and pump regulator	P. A. Myers	495,992	Apr. 25	2342	592	63	481
Windmill-brake	J. H. Miller and W. H. Burnham	490,295	Jan. 24	2097	546	62	470
Windmill-derrick	G. H. Brown	495,662	Apr. 18	1838	460	63	314
Windmill-governor	O. A. Farley	509,074	Nov. 21	1787	440	65	1125
Windmill-governor	T. L. Regester	492,488	Feb. 28	2282	567	62	1250
Windmill governing mechanism	T. O. Perry	499,394	June 13	1085	263	63	1594
Windmill-lubricator	O. H. Orton	504,611	Sept. 5	484	124	64	1360
Windmill-regulator	H. Grosz	491,550	Feb. 14	892	203	62	923
Windmill-regulator	H. J. Hauff	493,163	Mar. 7	610	153	62	1478
Windmill-regulator	H. J. Hauff	499,992	June 20	2067	500 501	63	1779
Windmill-regulator	P. A. Myers	501,355	July 11	1319	330	64	263
Windmill-regulator	S. K. Porter	509,763	Nov. 28	2975	720	65	1361
Windmill-regulator. Automatic	T. J. Adams	510,627	Dec. 12	1336	328	65	1674
Windmill-tower	W. H. Burnham and J. H. Miller	490,267	Jan. 24	2052	537	62	460
Windmill-tower	C. C. Jacobs	503,048	Aug. 8	1354	335	64	830
Windmill-tower	M. R. Martin	492,690	Feb. 28	2598	643	62	1314
Windmill-tower	T. Snow	493,660	Mar. 21	1428	364	62	1667
Windmill-tower	O. J. Ziegler	494,615	Apr. 4	145	34	63	30
Windmill transmitting mechanism	J. H. Miller	508,144	Nov. 7	275	68	65	809
Windmill-vane	J. H. Miller	510,435	Dec. 12	981	234	65	1610
Windmill-wheel	F. B. Stearns	510,054	Dec. 5	362	81	65	1478
Window	F. C. Armbruster	503,189	Aug. 15	1595	392	64	888
Window	J. Brudon	499,008	June 6	472	110	63	1473
Window	J. W. Cameron	491,279	Feb. 7	347	87	62	815
Window	M. Classen	498,882	May 30	3227	802	63	1258
Window	H. H. Craigie	490,244	Jan. 17	2003	524	62	439
Window	B. F. Dettra	491,043	Jan. 31	3326	848	62	726
Window	J. Ehrcke	508,924	Nov. 21	1553	380	65	1079
Window	O. Frotscher	509,521	Nov. 28	2595	627	65	1290
Window	P. E. Glafcke	507,653	Oct. 31	3191	781 782	65	650
Window	C. Hibberd	504,806	Sept. 12	823	209	64	1438
Window	A. Hitt	491,310	Feb. 7	416	107	62	826
Window	E. C. Horton	498,119	May 23	2782	696	63	1165
Window	H. Koepf	491,653	Feb. 14	969	243	62	958
Window	J. Lewis	499,236	June 13	815	193	63	1546
Window	V. T. Pieper	511,544	Dec. 26	2928	713	65	1994
Window	A. Scherrer	508,347	Nov. 7	592	145	65	868
Window	P. Schmahl	508,348	Nov. 7	593	145 146	65	868
Window	G. Thiel	509,704	Nov. 28	2879	696 697	65	1344
Window	P. Vandernoth	494,047	Mar. 21	2069	529	62	1791
Window	W. Wallace	511,105	Dec. 19	2187	538	65	1844
Window-bead fastener	H. A. Green	504,920	Sept. 12	1006	260	64	1474
Window-bead fastener	E. W. Newkirk	505,122	Sept. 19	1348	347	64	1551
Window-bead fastener	A. P. Read	505,640	Sept. 26	2244	569	64	1732
Window-bead fastener	M. F. Woolfenden	494,726	Apr. 4	314	79	63	62
Window-bracket	D. H. Iseminger	495,810	Apr. 18	2070	522	63	415
Window-cap	N. Hatch	492,922	Mar. 7	243	61	62	1406
Window. Cellar	L. Tremmel	500,169	June 27	2390	580	63	1848
Window-chair	F. J. Keck	502,971	Aug. 8	1251	306	64	810
Window-chair	M. C. Rodgers	501,442	July 11	1448	364	64	279
Window-cleaner	M. J. Becker	492,899	Mar. 7	204	50	62	1399
Window-cleaner	G. Ferguson	490,431	Jan. 24	2308	599	62	511
Window-frame	H. Goese	490,108	Jan. 17	1774	462	62	395
Window-frame	H. Kuersten	506,240	Oct. 10	774	191	65	158
Window-frame	G. W. Stroud	505,889	Oct. 3	143	37	65	28
Window-frame	W. Young	491,034	Jan. 31	3312	845	62	723
Window frame and sash	S. H. Bass	492,655	Feb. 28	2552	632	62	1305
Window frame and sash	A. H. Cole	511,409	Dec. 26	2717	658	65	1954
Window frame and sash	F. A. Goelze	508,010	Nov. 7	50	15	65	767
Window frame and sash	D. P. Hopkins	509,377	Nov. 23	2319	561	65	1237
Window-frame marker	W. Grennan	503,045	Aug. 8	1351	334	64	830
Window-guard	J. C. Meyer	498,916	June 6	298	68	63	1445
Window-hanger	B. D. McEachren	495,750	Apr. 18	1976	499	63	398
Window-jack	M. Prendergast	503,217	Aug. 15	1644	403	64	896
Window-jack	D. A. Thurston	491,146	Feb. 7	131	35	62	774
Window-jams. Machine for cutting pockets in	F. E. Farwell	497,070	May 9	1095	281	63	834
Window or screen fastening. Storm	H. E. Willer	495,645	Apr. 18	1811	454	63	370
Window packing and antirattling device	S. R. Kirby	505,315	Sept. 19	1656	428	64	1608
Window-screen	C. Deplanty	509,844	Nov. 28	3111	751	65	1388
Window-screen	J. Dover	510,530	Dec. 12	1169	282	65	1644

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Window-screen	W. H. Felthousen	510,336	Dec. 5	813	197	65	1564
Window-screen	D. P. Guest	496,781	May 2	619	165 166	63	730
Window-screen	J. A. Haviland	507,363	Oct. 24	2679	658	65	540
Window-screen	F. M. Jay	507,011	Oct. 17	2048	506	65	413
Window-screen	Z. Loudenbeck	498,939	June 6	334	78	63	1451
Window-screen	T. C. Mays	503,766	Aug. 22	2537	631	64	1074
Window-screen	H. C. Park, O. M. Evans, C. E. Turner, and C. E. Morris.	497,891	May 23	2433	606	63	1104
Window-screen	J. Rich	507,844	Oct. 31	3502	861	65	708
Window-screen	C. W. Rodecker	507,755	Oct. 31	3334	817	65	677
Window-screen	C. E. Schofield	507,848	Oct. 31	3506	862 863	65	709
Window-screen	D. Stone	493,664	Mar. 21	1436	366	62	1669
Window-screen	C. C. Wheeler	511,106	Dec. 19	2189	538	65	1845
Window-screen attachment	J. Laurie	496,364	Apr. 25	2940	734	63	594
Window-screen. Automatic adjustable	P. H. Niles	490,752	Jan. 31	2846	730	62	631
Window-screen. Pocket	C. L. Wagandt	498,868	June 6	207	50	63	1429
Window-seat. Adjustable	W. Kruppenbacher	507,371	Oct. 24	2694	662	65	544
Window. Ventilating	W. B. Dunning	510,009	Dec. 5	292	65	65	1465
Window-ventilator	M. J. Burke	496,839	May 2	712	189	63	746
Window-ventilator	J. De Long	491,088	Feb. 7	40	10	62	756
Window-washing chair	A. Dormitzer	498,464	May 30	3354	836	63	1282
Windows. Means for the prevention of condensation on	F. Horne	507,731	Oct. 31	3301	807	65	671
Windows. Metallic setting for stained-glass	G. B. Lee	500,587	July 4	75	22	64	15
Windows. Preventing moisture on	B. D. Ayars, Jr.	509,715	Nov. 28	2899	701 702	65	1347
Wine-cooler	W. H. Fay	502,114	July 25	2523	632 633	64	504
Wine-cooler	E. A. Parker	511,209	Dec. 19	2359	576	65	1876
Wine-making apparatus	J. and A. B. C. Dowdell	494,982	Apr. 4	710	180	63	136
Wire and wire rods. Manufacture of	J. Needham	510,703	Dec. 12	1463	361	65	1698
Wire. Annealing	J. G. Mustin	489,194	Jan. 3	327	90	62	74
Wire. Apparatus for hardening and tempering steel	D. C. Bateman	503,398	Aug. 15	1933	480	64	948
Wire articles. Machine for forming	L. H. Porter	492,051	Feb. 21	1580	393	62	1094
Wire-attaching device	C. H. Taylor	508,997	Nov. 21	1661	409	65	1101
Wire bands or netting. Machine for weaving	J. A. Tatro	502,148	July 25	2578	647 648 649	64	514
Wire. Barbed	J. D. Curtis	494,325	Mar. 28	2530	637	62	1892
Wire. Barbed	J. D. Curtis	494,326	Mar. 28	2532	638	62	1892
Wire. Barbed	S. C. Funcheon	493,210	Mar. 7	677	173	62	1491
Wire. Barbed	S. F. Mouck	507,088	Oct. 17	2172	538	65	434
Wire-barbing machine	J. S. Reid	503,162	Aug. 15	1553	381 382 383	64	879
Wire-bending machine	V. Beauregard	496,472	May 2	128	34.35	63	642
Wire-bending machine	C. M. Suter	508,257	Nov. 7	462	112	65	843
Wire-cloth apron	F. G. and A. C. Sargent	510,559	Dec. 12	1215	295	65	1653
Wire-cloth holder	J. McManis	505,532	Sept. 26	2037	520	64	1692
Wire-cloth holder	O. P. Schriver	506,020	Oct. 3	337	90	65	66
Wire-cloth reel and cutter	O. P. Schriver	506,019	Oct. 3	336	89	65	66
Wire-coiling machine	L. C. Baldwin	507,979	Nov. 7	2	1	65	759
Wire-connector	W. S. Kisinger	492,811	Mar. 7	62	14	62	1370
Wire-connector	G. A. Trumbull	508,587	Nov. 14	1002	246	65	960
Wire-corrugating machine	C. Scholl	497,826	May 23	2319	586	63	1083
Wire-coupling	W. E. Bauta	503,712	Aug. 22	2450	609	64	1057
Wire-coupling	J. Bodine	499,090	June 6	594	143	63	1494
Wire-covering machine	J. A. Barrett	505,379	Sept. 19	1752	454 455	64	1626
Wire-covering machine	J. A. Barrett	505,380	Sept. 19	1757	455	64	1627
Wire-cutting machine	W. H. Boggs	507,101	Oct. 24	2207	545	65	454
Wire. Device for winding loose	N. Rule	498,307	May 30	3106	773	63	1236
Wire-drawing machine	G. B. Lamb	489,588	Jan. 10	941	244 245	62	211
Wire ends. Anchoring	J. H. Brown	496,636	May 2	389	105	63	690
Wire fabric	C. O. White	507,865	Oct. 31	3529	868	65	713
Wire-fabric machine	A. L. Kitselman	504,984	Sept. 12	1118	286 287 288	64	1494
Wire-fabric machine	J. C. Pope	505,607	Sept. 26	2181	552	64	1720
Wire-fabric machine	P. Tourasse	499,153	June 6	686	164 165	63	1510
Wire fabric. Machine for and method of weaving coiled	C. Kehr	511,435	Dec. 26	2761	667 668	65	1962
Wire-fastening	C. F. Erb	493,916	Mar. 21	1846	470	62	1748
Wire gate	C. B. Bird	499,279	June 13	881	213	63	1558
Wire-grip. Lineman's	C. A. Svensson	496,104	Apr. 25	2520	637	63	515
Wire. Guide-block for running	U. H. Alexander	504,190	Aug. 29	3213	800	64	1219
Wire handle	F. W. Hoefer	491,648	Feb. 14	961	242	62	957
Wire-hanger	A. J. Wylie	497,439	May 16	1709	431 432	63	958
Wire hook	G. Kingston	493,626	Mar. 14	1375	349	62	1642
Wire machine. Barb-	J. W. Govier	498,110	May 23	2764	691 692 693	63	1162
Wire. Machine for making bundling	H. D. Stone	508,256	Nov. 7	459	112	65	842
Wire. Machine for straightening steel	J. E. Walsh	495,384	Apr. 11	1387	345 346	63	274
Wire. Manufacture of barbed	J. D. Curtis	491,304	Feb. 7	405	104	62	824
Wire. Manufacturing copper	E. Viarengo	506,957	Oct. 17	1961	485	65	397
Wire mat	C. O. White	507,952	Oct. 31	3667	908	65	740
Wire-netting	B. J. Scarles	502,470	Aug. 1	370	89	64	634

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Wire-netting machine.....	J. G. Bower, Jr.....	500,052	June 20	2165	{ 525 526 463	63	1996
Wire-netting machine.....	J. Rady.....	503,356	Aug. 15	1872	{ 464 465	64	936
Wire-netting machine.....	G. F. Wright.....	490,009	Jan. 17	1600	{ 418 419 813 814 815 816	62	359
Wire-netting. Method of and apparatus for manu- facturing rectangular-meshed	A. N. Pearson and R. Penn.....	507,750	Oct. 31	3325	{ 815 816	65	676
Wire-netting. Method of and machine for making ..	W. C. Orr.....	502,084	July 25	2478	623	64	496
Wire or bicycle spoke straightener ..	W. G. Brown.....	497,116	May 9	1163	298	63	846
Wire. Process of and apparatus for tempering or hardening steel ..	H. E. Procunier.....	496,208	Apr. 25	2673	671	63	543
Wire-reel carrier ..	F. H. Carter.....	490,899	Jan. 31	3091	793	62	680
Wire-reel carrier ..	F. C. Klipstein.....	508,426	Nov. 14	732	181	65	908
Wire reeling and stretching machine ..	J. H. Rowlett and S. Robinson.....	489,877	Jan. 10	1354	353	62	296
Wire rings. Machine for making ..	F. F. Ellis.....	500,058	June 20	2173	{ 528 529 530	63	1798
Wire-rolling mill.....	H. A. Williams.....	500,108	June 20	2248	547	63	1810
Wire-rope drum-reel ..	A. D. Benham.....	503,227	Aug. 15	1658	407	64	898
Wire-rope fastener ..	L. J. Widmer.....	490,796	Jan. 31	2917	750	62	645
Wire-rope machine ..	T. Cookson.....	495,085	Apr. 11	863	222	63	181
Wire-rope-way grip ..	D. A. Byers.....	508,810	Nov. 14	1324	329	65	1023
Wire-shears ..	L. Townsend.....	506,568	Oct. 10	1327	332	65	266
Wire. Sheave for bunching ..	C. W. Vaughn.....	507,947	Oct. 31	3661	906	65	738
Wire-splicer ..	J. D. Thomas.....	504,638	Sept. 5	521	134	64	1368
Wire-splicing tool ..	J. B. Murdock.....	508,963	Nov. 21	1611	396	65	1091
Wire springs. Machine for making ..	S. Konz.....	504,390	Sept. 5	127	33	64	1293
Wire springs. Machine for making spiral ..	W. B. Jackson.....	502,968	Aug. 8	1236	{ 304 305	64	807
Wire-stretcher ..	R. C. Anderson.....	503,892	Aug. 22	2707	679	64	1107
Wire-stretcher ..	J. L. Crain.....	511,591	Dec. 26	3005	732	65	2008
Wire-stretcher ..	L. Cross.....	493,686	Mar. 21	1471	375	62	1676
Wire-stretcher ..	I. F. Ebert.....	504,127	Aug. 29	3097	775	64	1198
Wire-stretcher ..	E. J. Fox.....	502,813	Aug. 8	976	238	64	760
Wire-stretcher ..	J. H. Gillis.....	506,995	Oct. 17	2018	499	65	407
Wire-stretcher ..	T. C. Greene.....	502,515	Aug. 1	449	108	64	649
Wire-stretcher ..	S. W. Horst.....	494,568	Apr. 4	64	14	63	13
Wire-stretcher ..	A. Ide.....	504,353	Sept. 5	60	16	64	1282
Wire-stretcher ..	A. Kahl.....	490,566	Jan. 24	2519	648	62	553
Wire-stretcher ..	G. P. Kidd.....	493,432	Mar. 14	1036	267	62	1578
Wire-stretcher ..	P. A. Leonard.....	510,349	Dec. 5	834	201	65	1568
Wire-stretcher ..	F. Loudenberg.....	508,891	Nov. 14	1452	360	65	1046
Wire-stretcher ..	J. D. McKee.....	503,613	Aug. 22	2301	574	64	1023
Wire-stretcher ..	J. W. McKinney.....	499,307	June 13	925	224	63	1566
Wire-stretcher ..	C. D. Mock.....	496,577	May 2	291	78	63	672
Wire-stretcher ..	J. C. Palmer.....	502,498	Aug. 1	422	100	64	644
Wire-stretcher ..	W. Q. Prewitt.....	507,452	Oct. 24	2817	689	65	568
Wire-stretcher ..	L. A. Scarbrough.....	494,895	Apr. 4	587	147	63	114
Wire-stretcher ..	A. Schalk and A. Weinandy.....	504,368	Sept. 5	90	23	64	1287
Wire-stretcher ..	G. B. Steen.....	499,945	June 20	1995	484	63	1766
Wire-stretcher ..	T. Weese.....	492,078	Feb. 21	1619	402	62	1102
Wire stretcher and holder ..	J. R. Brabston.....	511,112	Dec. 19	2199	540	65	1847
Wire stretcher and holder ..	A. Westmeyer.....	496,713	May 2	507	135	63	711
Wire stretcher and splicer ..	L. H. Dowell.....	490,070	Jan. 17	1713	{ 446 447	62	381
Wire-stretcher. Sulky ..	W. S. Williams.....	496,762	May 2	588	157	63	725
Wire stretching and reeling device ..	E. S. Hoge.....	495,805	Apr. 18	2061	521	63	413
Wire stretching and twisting tool ..	E. T. Hoyt.....	491,111	Feb. 7	76	21	62	763
Wire-stretching device ..	S. Graham.....	510,477	Dec. 12	1052	252	65	1624
Wire-stretching device ..	H. C. Pratt.....	491,743	Feb. 14	1104	279	62	965
Wire stringer and stretcher ..	J. E. Brazee.....	511,232	Dec. 19	2394	583	65	1883
Wire-tightener ..	G. J. Cline.....	505,029	Sept. 12	1189	305	64	1509
Wire-tightener ..	S. H. Stupakoff.....	497,733	May 16	2166	542	63	1041
Wire twisting and cutting implement ..	W. Maney.....	494,429	Mar. 28	2702	678	62	1923
Wires. Clamp for interlocking ..	L. H. Foster.....	504,157	Aug. 29	3146	786	64	1207
Wood. Apparatus for charring and distilling ..	E. C. Inderlied.....	496,737	May 2	553	148	63	719
Wood-barking machine ..	W. W. D. Jeffers.....	510,795	Dec. 12	1618	403	65	1798
Wood-carving machine ..	J. Holmes and K. Peterson.....	507,007	Oct. 17	2036	504	65	411
Wood carving or engraving machinery ..	T. Ryland.....	511,712	Dec. 26	3196	783	65	2042
Wood carvings. Making ..	W. F. Deweese.....	498,158	May 23	2831	709	63	1174
Wood-chopper's platform ..	J. B. Brickley.....	500,527	May 27	2944	723	63	1947
Wood, &c. Compound for preserving ..	W. A. Gayle.....	497,471	May 16	1757	63	966	
Wood-cutting machine ..	W. F. Hutchinson.....	507,499	Oct. 24	2897	{ 712 713	65	582
Wood dishes. Machine for cutting ..	J. W. Turner.....	497,933	May 23	2499	623	63	1115
Wood dishes. Machine for pressing ..	C. H. Treat and A. B. Banghart.....	489,399	Jan. 3	634	172	62	136
Wood dishes. Method of and machine for cutting ..	L. W. Tinkham.....	497,932	May 23	2494	{ 622 623	63	1114
Wood-drying kiln ..	I. Ungar.....	494,045	Mar. 21	2067	528	62	1790
Wood-embossing machine ..	M. B. Crist.....	510,162	Dec. 5	538	134	65	1512
Wood-embossing machine ..	S. L. Davis.....	500,998	July 4	729	191	64	133
Wood, &c. Finishing the surface of ..	V. Victorson.....	507,512	Oct. 24	2923	65	587	
Wood-graining machine ..	A. Giacomini.....	508,696	Nov. 14	1162	287	65	992
Wood-graining machine ..	J. Shannon.....	501,668	July 18	1807	{ 449 450	64	360
Wood-joint ..	E. J. Fulghum and L. Roberts.....	497,915	May 23	2473	617	63	1110
Wood. Machine for embossing ..	G. Stabler and H. Abbey.....	500,300	June 27	2592	634	63	1882
Wood. Manufacturing artificial ..	J. Mellinger.....	504,988	Sept. 12	1127	64	1496	
Wood. Means for embossing ..	S. L. Davis.....	502,850	Aug. 8	1031	253	64	771

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Wood. Method of and apparatus for reproducing fac- simile carvings in	C. Hass.	511,696	Dec. 26	3173	{ 775 776 777 }	65	2038
Wood-molding machine	H. P. Anderson	500,790	July 4	410	108	64	76
Wood-polishing compound	W. E. Rohner	498,961	June 6	374	.....	63	1458
Wood-polishing machine	J. L. Perry	496,204	Apr. 25	2661	668	63	541
Wood. Preserving	F. Hall	506,493	Oct. 10	1220	.....	65	245
Wood-splitting machine	J. B. Ivey	508,020	Nov. 7	63	18	65	769
Wood surfaces. Finishing	M. D. Fernanço	508,675	Nov. 14	1434	.....	65	1043
Wood-trimmer	W. R. Fox	504,209	Aug. 29	3242	{ 808 809 }	64	1225
Wood. Vulcanizing and drying	C. Howard. (Reissue)	11,309	Feb. 21	2094	522	62	1199
Wood water-pipe	M. D. Arms	490,892	Jan. 31	3062	786	62	675
Wooden box	J. M. Baker	490,260	Jan. 24	2032	531	62	457
Wooden dishes. Machine for cutting concavo-convex	D. H. Brenner	501,404	July 11	1402	351	64	269
Wooden lists and pressed veneers. Machine for dec- orating	F. A. Bransil	510,377	Dec. 5	878	211	65	1577
Wooden pipe	C. W. Dwelle	494,996	Apr. 4	727	185	63	139
Wooden trays. Machine for manufacturing	E. J. Kershaw	501,079	July 11	856	{ 222 223 }	64	171
Wooden tubes. Machine for forming	M. E. Brigham	497,299	May 16	1486	{ 374 375 }	63	918
Woodwork. Process of and apparatus for producing ornamental	A. Guattari	491,283	Feb. 7	358	90	62	817
Woodworking-machine	H. M. Albee	505,805	Oct. 3	1	1	65	3
Woodworking-machine	S. Hurteau	511,618	Dec. 26	3054	744	65	2015
Woodworking-machine	W. Lyon	506,919	Oct. 17	1899	473	65	385
Woodworking-machine chip-breaker	C. F. Overhiser and C. D. Marsh	506,249	Oct. 10	788	194	65	161
Woodworking-machines. Adjustable roller for	C. O. Mook	504,932	Sept. 12	1026	264	64	1478
Woodworking-machines. Feed mechanism for	E. Judd	511,205	Dec. 19	2351	575	65	1874
Woodworking-machines. Feedwork for	H. Hackney	489,076	Jan. 3	141	40	62	35
Woodworking-tool	L. S. Crittenden	508,412	Nov. 14	715	176	65	904
Wool, &c. Apparatus for treating and scouring, &c.	G. L. P. Eyre and T. J. Hopkins	498,250	May 30	2997	747	63	1218
Wool. Cleansing	A. George	493,158	Mar. 7	602	151	62	1477
Wool-drying apparatus	J. E. Barney	507,304	Oct. 24	2579	634	65	592
Wool-grease. Production of neutral	J. C. Lahusen	511,051	Dec. 19	2091	518	65	1825
Wool or other fibers. Machine for opening and pre- paring	F. G. and A. C. Sargent	506,445	Oct. 10	1130	{ 281 282 283 }	65	228
Wool-washing machine	F. G. Sargent	507,333	Oct. 24	2625	{ 645 646 }	65	530
Wool-washing machine	F. G. and A. C. Sargent	498,308	May 30	3107	774	63	1237
Wool-washing machine	F. G. and A. C. Sargent	498,889	June 6	248	59	63	1436
Work-bench for saloons	C. E. Groves	511,048	Dec. 19	2087	517	65	1824
Work-box	W. N. Casson	510,563	Dec. 12	1220	296	65	1654
Work-box	E. T. Ramer	489,593	Jan. 10	949	247	62	212
Work-holder	L. E. Whiton	509,275	Nov. 21	2129	512	65	1189
Work-holding clamp	W. J. Avey	504,960	Sept. 12	1069	273	64	1486
Work-rest	J. Grant	511,201	Dec. 19	2346	574	65	1873
Work-table	S. A. Cornell	490,473	Jan. 24	2378	615	62	525
Work-table. Lady's	A. M. Idol	510,509	Dec. 12	1102	266	65	1633
Wort from Indian corn. Preparation of	C. Rach	500,294	June 27	2577	.....	63	1880
Wrapper. Bank-bill	G. A. Sutton	503,777	Aug. 22	2554	636	64	1078
Wrapping-machine	I. R. Hutchinson	490,608	Jan. 24	2586	{ 666 667 }	62	566
Wrapping-machine	C. R. Schilling	498,992	June 6	434	{ 101 102 }	63	1467
Wrecking apparatus	M. Brabaw	501,912	July 25	2212	{ 551 552 }	64	446
Wrench:							
See Adjustable wrench. Nut-wrench.							
Automatic wrench. Pipe-wrench.							
Can-wrench. Pipe or nut wrench.							
Carriage-wrench. Ratchet-wrench.							
Combination-wrench. Screw-wrench.							
Flange-wrench. Socket-wrench.							
Hand-wrench. Tap-wrench.							
Monkey-wrench. Vehicle-wrench.							
Wrench	W. A. Aberg	493,051	Mar. 7	435	110	62	1445
Wrench	A. Anderson	498,348	May 30	3179	792	63	1249
Wrench	A. Anderson	504,698	Sept. 12	639	163	64	1403
Wrench	W. E. Badger	502,670	Aug. 8	1059	260	64	776
Wrench	J. A. Barker	495,577	Apr. 18	1701	428	63	352
Wrench	A. L. Bedford	511,190	Dec. 19	2330	570	65	1870
Wrench	W. Bill	491,513	Feb. 14	748	190	62	912
Wrench	S. C. Bole	507,407	Oct. 24	2746	674	65	554
Wrench	G. Briger	489,429	Jan. 3	682	184	62	147
Wrench	W. E. Brooke	491,870	Feb. 14	1305	322	62	1025
Wrench	G. W. Bufford	489,454	Jan. 10	737	196	62	171
Wrench	H. Cooper	496,190	Apr. 25	2639	664	63	537
Wrench	G. W. East	498,157	May 23	2829	708	63	1174
Wrench	N. Eccles	510,414	Dec. 12	945	227	65	1604
Wrench	E. L. Essley	491,415	Feb. 7	584	147	62	860
Wrench	J. Foley	505,513	Sept. 26	1997	511	64	1654
Wrench	S. Gasser	489,605	Jan. 10	967	252	62	216
Wrench	H. V. Gormley	502,514	Aug. 1	448	108	64	649
Wrench	C. H. Hommel	491,888	Feb. 14	1332	330	62	1030
Wrench	A. A. Hull	501,462	July 11	1479	372	64	285
Wrench	E. P. Jones	510,263	Dec. 5	708	171	65	1544
Wrench	W. H. Kaltenbeck	492,401	Feb. 28	2127	532	62	1219
Wrench	H. H. Kendrick	508,519	Nov. 14	896	220	65	939
Wrench	S. E. Kern	504,041	Aug. 29	2963	741	64	1172
Wrench	W. H. T. King	496,941	May 9	903	237	63	801

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Wrench	C. H. F. Kraft	491,056	Jan. 31	3346	853	62	731
Wrench	W. C. Lawrence	504,305	Aug. 29	3391	848	61	1253
Wrench	P. Mandigo	493,829	Mar. 21	1708	435	62	1722
Wrench	G. W. Martin	489,822	Jan. 10	1282	335	62	281
Wrench	H. McDonald	498,137	May 23	2805	702	63	1169
Wrench	G. McKercher	504,232	Aug. 29	3277	819	64	1231
Wrench	W. A. Osteen	489,032	Jan. 3	79	22	62	20
Wrench	A. Pellet	491,222	Feb. 7	261	65	62	797
Wrench	W. L. Pike	510,441	Dec. 12	988	236	65	1611
Wrench	S. W. Putnam	503,677	Aug. 22	2389	596	64	1045
Wrench	H. J. Rosenberg	506,261	Oct. 10	802	198	65	164
Wrench	W. C. Riesberry	491,721	Feb. 14	1073	271	62	979
Wrench	A. B. Schofield	506,832	Oct. 17	1759	443	65	359
Wrench	F. S. Seymour	501,369	July 11	1350	336	64	259
Wrench	J. B. Shaffer	497,135	May 9	1197	305	63	852
Wrench	A. Shepard	509,252	Nov. 21	2098	505	65	1184
Wrench	E. L. Shultz	491,606	Feb. 14	902	226	62	944
Wrench	E. B. Smith	497,138	May 9	1200	306	63	852
Wrench	J. W. Steele	489,273	Jan. 3	451	124	62	99
Wrench	C. Stolze	498,321	May 30	3129	780	63	1241
Wrench	E. B. Wells	497,618	May 16	1991	498	63	1008
Wrench	M. Williams	499,814	June 20	1787	433	63	1730
Wrench and cutter	T. Fletcher	495,793	Apr. 18	2044	517	63	411
Wrench and rod-vise	J. W. Wulf	501,177	July 11	1034	261	64	203
Wrench and wheel-lifter combined	J. Robertson	500,950	July 4	642	168	64	117
Wrench-handles. Making	W. E. Brooke	504,518	Sept. 5	346	88	64	1334
Wrenches. Die for the manufacture of	W. S. Bemis	498,204	May 23	2919	727	63	1189
Wringer:							
<i>See</i> Clothes-wringer. Mop-wringer.							
Wringer roller	O. W. Walscheid	503,019	Aug. 8	1312	321	64	821
Wrist-pin turner	R. L. Levin	511,053	Dec. 19	2095	518	65	1826
Wrist-turning machine	J. B. Peloquin	496,094	Apr. 25	2507	633	63	512
Wristband	E. D. Smith	500,435	June 27	2806	691	63	1921
Writer's aligning-guide	D. F. Saum	490,086	Jan. 17	1733	453	62	387
Writing-guide	V. Wisker	494,697	Apr. 4	267	68	63	54
Writing-receiver	A. Heil	503,371	Aug. 15	1890	470	64	941
Yard-protector	J. Jacobs	511,700	Dec. 26	3178	778	65	2038
Yard-protector	J. Jacobs	511,701	Dec. 26	3179	778	65	2039
Yarn-clearer	M. M. Greeves	490,347	Jan. 24	2189	572	62	469
Yarn. Device for catching and removing bunches from	T. J. Sands	500,243	June 27	2503	612	63	1868
Yarn-drying machine	E. Tymeson and L. Ducros	500,634	July 4	155	40, 41	64	31
Yarn. Process of and apparatus for oxidizing	O. Duckworth	508,094	Nov. 7	191	51	65	794
Yeast. Producing pure cultivated pressed	C. A. Hansson	491,939	Feb. 14	1412	353	62	1046
Yoke. Carriage-clip	W. J. Kauffman	499,122	June 6	643	155	63	152
Yoke coupling. Neck	R. K. Smith	490,046	Jan. 17	1676	436	62	374
Yoke. Cow	W. S. Carrell	504,299	Aug. 29	3383	846	64	1251
Yoke. Neck	J. H. Bagnall	506,898	Oct. 17	1869	465	65	379
Yoke. Neck	W. H. Holt	493,269	Mar. 14	778	199	62	1529
Yoke. Neck	F. J. Lytle	503,150	Aug. 15	1531	376	64	875
Yoke. Neck	G. Pedersen and A. Melin	509,246	Nov. 21	2090	504	65	1182
Yoke. Neck	J. R. Wade	502,793	Aug. 8	940	228	64	754
Zinc-bearing sulphide ores. Concentrating	G. M. Gouyard	495,550	Apr. 18	1653		63	343
Zinc by electrolysis. Extracting	J. Pfefer	495,637	Apr. 18	1793		63	367
Zinc. Manufacturing oxide of	G. T. Lewis	501,189	July 11	1049		64	206
Zinc ores. Apparatus for and process of reducing	M. V. Smith	500,436	June 27	2807	691	63	1921
Zinc oxide from sulphite or sulphate of zinc. Producing	R. F. Nenninger	489,873	Jan. 10	1348		62	295
Zinc oxide. Manufacturing	G. T. Lewis	495,593	Apr. 18	1725		63	355
Zinc. Producing metallic	P. C. Choate	489,460	Jan. 10	745	198	62	172
Zinc. Producing metallic	P. C. Choate	489,461	Jan. 10	747	198	62	173
Zither	F. Schwarzer	502,767	Aug. 8	890	{ 218 219 }	64	744
Zither attachment	T. Meinhold	498,561	May 30	3523	871	63	1311
Zither. Pedal	G. Schömig	495,759	Apr. 18	1988	{ 502 503 }	63	401
Zither stand and stool	A. von Wascinski	504,071	Aug. 29	3003	750	64	1179

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Design.	Name.	No.	Date.	Official Gazette.	
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Advertising-statue	G. Fuchs	22,792	Sept. 19	64	1644
Alto-rilievo	E. C. Plant	22,145	Jan. 24	62	580
Atomizer-body	W. J. Evans	22,683	Aug. 8	64	852
Axle-box frame	W. S. Adams	22,467	May 23	63	1195
Axle-box frame	J. A. Brill	22,468	May 23	63	1195
Axle-box frame	J. A. Brill	22,490	May 30	63	1375
Axle-box frame	J. A. Brill	22,966	Dec. 12	65	1761
Axle, Sulky-	S. Elliott	22,691	Aug. 8	64	853
Axle, Sulky-	S. Elliott	22,815	Sept. 26	64	1766
Badge	J. Allan	22,109	Jan. 10	62	307
Badge	W. H. Bartlett	22,636	July 18	64	432
Badge	I. Bedichimer	22,108	Jan. 10	62	307
Badge	H. Bruner	22,716	Aug. 22	64	1122
Badge	L. Burger	22,317	Apr. 4	63	143
Badge	J. M. Caldwell	22,307	Mar. 28	62	1958
Badge	L. J. Chandler	22,528	June 13	63	1681
Badge	W. B. Conkey	22,984	Dec. 26	65	2056
Badge	A. P. Connolly	22,597	July 11	64	291
Badge	C. L. Edwards	22,637	July 18	64	432
Badge	T. Even	22,260	Mar. 7	62	1503
Badge	H. F. G. Fuchs	22,226	Feb. 21	62	1199
Badge	C. A. Gay	22,410	May 9	63	901
Badge	J. R. Lee	22,110	Jan. 10	62	307
Badge	C. E. Long	22,529	June 13	63	1681
Badge	A. A. Low	22,696	Aug. 15	64	999
Badge	F. A. Osborn	22,985	Dec. 26	65	2056
Badge	L. Oudesluis	22,239	Feb. 28	62	1342
Badge	F. I. Palmer	22,744	Aug. 29	64	1258
Badge	G. A. Schlechter	22,777	Sept. 12	64	1527
Badge	W. Shaw	22,745	Aug. 29	64	1258
Badge	G. B. Smith	22,259	Mar. 7	62	1503
Badge	C. G. Willson	22,659	Aug. 1	64	706
Badge	M. D. Wood	22,796	Sept. 26	64	1783
Badge, Arm-	F. S. Pinkham	22,261	Mar. 7	62	1503
Badge-pin	H. L. Norris	22,638	July 18	64	433
Badge, Souvenir	J. L. Sale	22,964	Dec. 12	65	1761
Bail-ear	W. C. Winfield	22,236	Feb. 21	62	1201
Bail-ear for vessels	A. R. Pritchard	22,426	May 9	63	903
Banneret	J. Best	22,983	Dec. 26	65	2056
Barometer-frame	H. L. Ayer	22,508	June 6	63	1524
Barrel-scrubbing-machine frame	U. Eberhardt	22,361	Apr. 18	63	457
Base or pedestal	J. Librowicz	22,165	Jan. 31	62	733
Bath-tub	E. L. Daves	22,809	Sept. 26	64	1785
Bath-tub foot	A. Pries	22,330	Apr. 4	63	145
Bath-tub foot	A. Pries	22,331	Apr. 4	63	145
Bed-pan	A. R. Gulick	22,967	Dec. 12	65	1762
Bed, Sofa	C. J. Conser	22,922	Nov. 28	65	1396
Bedstead	W. T. Mersereau	22,864	Oct. 31	65	747
Belt	A. C. Bull	22,552	June 27	63	1952
Bicycle-reach	S. Elliott	22,671	Aug. 1	64	708
Bicycle saddle-post	W. Hillman	22,714	Aug. 15	64	1001
Bicycle-wheel rim	R. Perkins	22,732	Aug. 22	64	1124
Bid-t	R. Gosden	22,729	Aug. 22	64	1123
Billiard-cue handle	J. A. Rieper	22,972	Dec. 19	65	1911
Billiard-cue handle	J. A. Rieper	22,973	Dec. 19	65	1911
Billiard-cue handle	J. A. Rieper	22,974	Dec. 19	65	1911
Billiard-cue handle	J. A. Rieper	22,975	Dec. 19	65	1912
Billiard-table	P. Augenbraum	22,594	July 4	64	150
Bookbinders' cloth	G. H. Winterbottom	22,182	Jan. 31	62	736
Bookbinders' cloth	G. H. Winterbottom	22,183	Jan. 31	62	736
Book-cover	O. L. Garretson	22,596	July 11	64	291
Book-holder, &c	W. G. Willi	22,869	Nov. 7	65	886
Book-mark	J. Best	22,775	Sept. 12	64	1527
Book-mark	W. F. Clowes	22,481	May 30	63	1374
Boot or shoe sole	H. C. Montgomery	22,326	Apr. 4	63	144
Bosom protector	M. Bendl	22,857	Oct. 31	65	747
Bottle	C. H. Beach	22,167	Jan. 31	62	733
Bottle	E. M. Cone	22,835	Oct. 17	65	436
Bottle	H. J. Heinz	22,304	Mar. 21	62	1815
Bottle	H. J. Heinz	22,312	Mar. 28	62	1959
Bottle	F. W. Hofmann and F. J. Dillman	22,423	May 9	63	903
Bottle	J. Librowicz	22,137	Jan. 17	62	445
Bottle	J. Librowicz	22,138	Jan. 17	62	445
Bottle	A. P. Moore	22,370	Apr. 25	63	605
Bottle	D. O'Reardon	22,380	May 2	63	749
Bottle	T. C. Wheaton	22,354	Apr. 18	63	456
Bottle	F. M. Winn	22,441	May 16	63	1052
Bottle or flask	P. Fabney	22,116	Jan. 10	62	308
Bottle-stopper	J. Cave	22,582	July 4	64	148
Bottle-stopper	J. Librowicz	22,324	Apr. 4	63	144
Bottle stopper or top	J. Librowicz	22,168	Jan. 31	62	733
Bowl	C. C. Wientge	22,752	Aug. 29	64	1258
Bowl	C. C. Wientge	22,798	Sept. 26	64	1783
Bowl, Sugar	H. Berry	22,530	June 13	63	1681

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Design.	Name.	No.	Date.	Official Gazette.	
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Box	S. W. Babbitt	22,986	Dec. 26	65	2057
Box	H. J. Burnworth	22,290	Mar. 14	62	1644
Box	G. W. McGill	22,701	Aug. 15	64	999
Box	O. D. Rogers	22,462	May 23	63	1194
Box	A. E. Seliger	22,113	Jan. 10	62	308
Box-cover	W. Q. Tolman	22,725	Aug. 22	64	1123
Box-cover	W. Q. Tolman	22,818	Oct. 3	65	129
Bracket	E. C. Hiscock	22,586	July 4	64	149
Braid	L. Kleinhans	22,268	Mar. 7	62	1504
Braid	J. W. Schloss	22,424	May 9	63	903
Braid	V. G. Schuck	22,614	July 18	64	428
Bread-loaf	C. C. Roes	22,882	Nov. 14	65	1057
Breastpin	E. De Rogy	22,628	July 18	64	431
Breastpin	H. B. Houston	22,258	Mar. 7	62	1503
Breastpin	J. H. Leyson	22,166	Jan. 31	62	733
Breastpin, &c.	M. A. Nye	22,150	Jan. 24	62	581
Bridge, Street-crossing ..	L. G. Dávalos	22,826	Oct. 3	65	130
Brougham-body	F. P. Stone	22,855	Oct. 24	65	594
Brush-back or similar article	C. Osborne	22,627	July 18	64	431
Brush back, Toilet	C. C. Wientge	22,355	Apr. 18	63	456
Brush-handle	F. L. Thompson	22,665	Aug. 1	64	707
Brush or hand-mirror back	J. Walter	22,704	Aug. 15	64	999
Brush or mirror back	H. Berry	22,174	Jan. 31	62	734
Brush or mirror back	H. Berry	22,175	Jan. 31	62	735
Brush or mirror back	H. Berry	22,176	Jan. 31	62	735
Brush or mirror back	H. Berry	22,177	Jan. 31	62	735
Brush or mirror back	A. F. Jackson	22,341	Apr. 11	63	304
Buckle	G. E. Adams	22,132	Jan. 17	62	444
Buckle	G. E. Adams	22,336	Apr. 11	63	303
Buckle	G. E. Adams	22,337	Apr. 11	63	303
Buckle	G. E. Adams	22,868	Nov. 7	65	886
Buckle	D. Harrison	22,111	Jan. 10	62	308
Buckle	C. L. Ziegler	22,504	June 6	63	1524
Buckle and snap-hook	G. L. Frederick	22,631	July 18	64	432
Buckle-front	C. R. Harris	22,225	Feb. 21	62	1199
Buckle, Suspender	T. J. Flagg	22,309	Mar. 28	62	1958
Button	M. R. Blumenberg	22,191	Feb. 7	62	891
Button	F. Lahm	22,381	May 2	63	749
Button or like article, Sleeve	P. H. Fraser	22,697	Aug. 15	64	999
Cabinet	M. J. Cantwell	22,588	July 4	64	149
Cabinet	W. Mowry	22,707	Aug. 15	64	1090
Cabinet	N. S. Wood	22,648	July 25	64	555
Cabinet, Grocer's	F. G. Shoudy	22,730	Aug. 22	64	1124
Cabinet, Grocer's	F. G. Shoudy	22,731	Aug. 22	64	1124
Cake-basket	S. H. Leavenworth	22,352	Apr. 18	63	456
Calendar-case	R. W. Brumby and S. Clarke	22,299	Mar. 14	62	1646
Camera-case	H. Casler	22,649	July 25	64	555
Can	M. J. Kinney	22,270	Mar. 7	62	1504
Can	W. C. Winfield	22,515	June 6	63	1525
Can	W. C. Winfield	22,516	June 6	63	1525
Can	W. C. Winfield	22,517	June 6	63	1526
Can-opener	A. T. Bishop	22,348	Apr. 11	63	305
Can-opener	A. F. and W. Meisselbach	22,810	Sept. 26	64	1785
Can-opener handle	F. E. Kohler	22,533	June 13	63	1682
Candle-cuff	H. Seher	22,368	Apr. 25	63	604
Cane	F. Kohnle	22,096	Jan. 3	62	154
Cane	W. S. O'Brien	22,451	May 22	63	1193
Cane-handle	H. B. Snyder	22,339	Apr. 11	63	304
Cane-handle	H. B. Snyder	22,340	Apr. 11	63	304
Cane or umbrella handle	C. W. Kennard	22,720	Aug. 22	64	1122
Cane or umbrella handle	C. W. Kennard	22,721	Aug. 22	64	1122
Cane or umbrella handle	C. W. Kennard	22,722	Aug. 22	64	1122
Canes, &c. Handle for	A. Krouse	22,750	Aug. 29	64	1258
Cap	J. Grunewald and P. Gauger	22,520	June 13	63	1680
Cape	L. H. Weil	22,521	June 13	63	1680
Car-body	J. De Witt	22,759	Aug. 29	64	1259
Car center plate	D. L. Barnes	22,130	Jan. 10	62	311
Card, Memorial	J. G. Henderson	22,477	May 30	63	1373
Card	P. G. Mohr	22,695	Aug. 15	64	998
Card, Playing	G. W. Lampman	22,640	July 18	64	433
Carpet	W. F. Brown	22,772	Sept. 12	64	1527
Carpet	W. M. Daintrey	22,235	Feb. 21	62	1201
Carpet	E. Fisher	22,475	May 30	63	1373
Carpet	H. Horan	22,332	Apr. 11	63	302
Carpet	W. L. Jacobs	22,473	May 30	63	1373
Carpet	A. Kaeslin	22,836	Oct. 17	65	437
Carpet	T. L. Lawton	22,436	May 16	63	1052
Carpet	J. Matthews	22,616	July 18	64	429
Carpet	E. G. Sauer	22,333	Apr. 11	63	302
Carpet	E. G. Sauer	22,694	Aug. 15	64	998
Carpet	C. W. Swapp	22,474	May 30	63	1373
Carpet button, Stair	D. Walker and R. H. Warren	22,425	May 9	63	903
Carpet button, Stair	R. H. Warren	22,382	May 2	63	749
Carpet grip, Stair	R. H. Warren	22,509	June 6	63	1524
Carriage-spring	C. Thomas	22,814	Sept. 26	64	1786
Ceiling-plate	W. S. Grafton, E. C. Ewing, and A. Glass	22,272	Mar. 7	62	1505
Ceiling-plate	W. S. Grafton, E. C. Ewing, and A. Glass	22,273	Mar. 7	62	1505
Ceiling-plate	W. S. Grafton, E. C. Ewing, and A. Glass	22,274	Mar. 7	62	1505
Ceiling-plate	W. S. Grafton, E. C. Ewing, and A. Glass	22,275	Mar. 7	62	1505
Ceiling-plate	L. L. Sagendorph	22,874	Nov. 7	65	887

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Ceiling plate or panel.....	W. R. Kinnear.....	22,968	Dec. 19	65	1910
Celluloid sheet.....	C. H. Fernald.....	22,788	Sept. 19	64	1644
Chain, Watch.....	R. H. Ingersoll.....	22,322	Apr. 4	63	144
Chair-back pattern.....	W. Marx.....	22,327	Apr. 4	63	145
Chair-back pattern.....	W. Marx.....	22,328	Apr. 4	63	145
Charm, Watch.....	E. O. Curtis.....	22,411	May 9	63	901
Charm, Watch.....	H. J. Heinz.....	22,321	Apr. 4	63	144
Charm, Watch.....	J. Jenkins.....	22,862	Oct. 31	65	747
Charm, Watch.....	A. Mulcahy.....	22,598	July 11	64	291
Chatelaine.....	M. C. Scherer.....	22,107	Jan. 10	62	307
Check-piece.....	H. L. Heald.....	22,205	Feb. 7	62	893
Chimney-cap.....	W. J. Kenniman and W. C. Carey.....	22,914	Nov. 21	65	1271
Cigar and match case.....	R. J. Panduro.....	22,488	May 30	63	1375
Cigar ash receptacle, &c.....	W. Bernard and L. Frank.....	22,872	Nov. 7	65	887
Cigar-case.....	C. H. Housman.....	22,418	May 9	63	902
Cigar-head former.....	C. Hvass.....	22,595	July 4	64	150
Cigars, Head-former for.....	C. Hvass.....	22,463	May 23	63	1194
Clasp.....	W. W. Hurd.....	22,338	Apr. 11	63	303
Clasp-loop.....	E. C. Tooker.....	22,677	Aug. 8	64	851
Clock-case.....	A. O. Jennings.....	22,125	Jan. 10	62	310
Clock-case.....	J. H. Zeilin.....	22,783	Sept. 12	64	1528
Coal-scuttle.....	D. Johnes.....	22,607	July 11	64	293
Coffee or tea pot.....	A. R. Pritchard.....	22,793	Sept. 19	64	1645
Coffin-handle.....	O. McCarthy.....	22,535	June 13	63	1682
Coffin-handle ear-plate.....	M. Bremer.....	22,548	June 20	63	1812
Coffin-handle socket-plate.....	O. McCarthy.....	22,129	Jan. 10	62	311
Coffin-plate.....	G. H. Ford.....	22,724	Aug. 22	64	1123
Coffin-plate.....	G. H. Ford.....	22,769	Sept. 5	64	1390
Coffin-plate.....	O. McCarthy.....	22,217	Feb. 14	62	1058
Coffin-plate.....	F. Ratcliff.....	22,506	June 6	63	1524
Coffin-plate.....	F. Ratcliff.....	22,507	June 6	63	1524
Coin-controlled apparatus, Casing for.....	F. W. Bishop.....	22,761	Aug. 29	64	1260
Coin-holder.....	J. Lines.....	22,216	Feb. 14	62	1058
Coin or medal holder.....	T. F. Gaynor.....	22,816	Oct. 3	65	129
Comb.....	P. Witteck.....	22,151	Jan. 24	62	581
Comb.....	P. Witteck.....	22,152	Jan. 24	62	581
Comb.....	P. Witteck.....	22,153	Jan. 24	62	582
Compass-card.....	J. J. Townsend.....	22,723	Aug. 22	64	1122
Condiment-holder.....	A. Steffin.....	22,781	Sept. 12	64	1528
Condiment-holder.....	W. Weimer.....	22,623	July 18	64	430
Conductor-hook.....	L. D. Berger.....	22,384	May 2	63	749
Cooking-pan, Covered.....	A. B. Conde.....	22,782	Sept. 12	64	1528
Cop.....	S. W. Wardwell, Jr.....	22,690	Aug. 8	64	853
Corset.....	W. W. Gould.....	22,883	Nov. 14	65	1057
Corset.....	D. H. Warner.....	22,673	Aug. 8	64	851
Corset.....	D. H. Warner.....	22,884	Nov. 14	65	1057
Counter, Bar-room.....	R. Ledig.....	22,399	May 2	63	751
Counter, Show-case.....	J. D. Warren.....	22,963	Dec. 12	65	1761
Counter wall-fixture.....	B. F. Cahn.....	22,589	July 4	64	149
Counter wall-fixture.....	B. F. Cahn.....	22,590	July 4	64	149
Counter wall-fixture.....	W. C. Huss.....	22,127	Jan. 10	62	310
Counter wall-fixture.....	W. C. Huss.....	22,591	July 4	64	149
Counter wall-fixture.....	D. Rothschild.....	22,162	Jan. 24	62	583
Counter wall-fixture.....	D. Rothschild.....	22,163	Jan. 24	62	583
Cracker.....	T. R. Mackey.....	22,990	Dec. 26	65	2057
Cup.....	W. A. Brown.....	22,580	July 4	64	148
Cup.....	C. E. Haviland.....	22,201	Feb. 7	62	893
Cup.....	C. E. Haviland.....	22,202	Feb. 7	62	893
Curtain.....	J. C. Earnshaw.....	22,120	Jan. 10	62	309
Curtain, &c.....	T. L. Lawton.....	22,435	May 16	63	1051
Curtain-pole.....	L. R. Harsha.....	22,185	Jan. 31	62	736
Curtain-pole.....	L. R. Harsha.....	22,186	Jan. 31	62	737
Curtain-pole.....	L. R. Harsha.....	22,187	Jan. 31	62	737
Curtain-pole.....	L. R. Harsha.....	22,250	Feb. 28	62	1344
Curtain-pole.....	B. H. Ruxton.....	22,271	Mar. 7	62	1504
Curtain-pole bracket.....	C. W. Smith.....	22,296	Mar. 14	62	1645
Curtain-ring.....	S. A. Clarke.....	22,347	Apr. 11	63	305
Cushion, Inflated.....	R. T. Varnum.....	22,121	Jan. 10	62	309
Cutlery-handle.....	F. H. Arnold.....	22,563	June 27	63	1953
Cutlery-handle.....	C. F. Mosman.....	22,484	May 30	63	1374
Cutlery-handle.....	C. F. Smith.....	22,483	May 30	63	1374
Cutlery-handle.....	C. F. Smith.....	22,503	June 6	63	1524
Deflector.....	R. Wood.....	22,630	July 18	64	432
Dental clasp.....	J. Kerr.....	22,668	Aug. 1	64	708
Depurator.....	J. F. Hartz.....	22,510	June 6	63	1524
Dish.....	S. W. Babbitt.....	22,799	Sept. 26	64	1783
Dish.....	C. E. Haviland.....	22,230	Feb. 21	62	1200
Dish.....	C. E. Haviland.....	22,619	July 18	64	429
Dish.....	T. Haviland.....	22,117	Jan. 10	62	309
Dish.....	T. Haviland.....	22,118	Jan. 10	62	309
Dish.....	T. Haviland.....	22,199	Feb. 7	62	892
Dish.....	T. Haviland.....	22,200	Feb. 7	62	892
Dish.....	T. Haviland.....	22,979	Dec. 19	65	1912
Dish.....	S. C. Howard.....	22,313	Mar. 28	62	1959
Dish.....	P. de La Bastide.....	22,154	Jan. 24	62	582
Dish.....	F. Ratcliff.....	22,172	Jan. 31	62	734
Dish.....	W. H. Tams.....	22,644	July 25	64	554
Dish, Confection.....	C. Cappel.....	22,601	July 11	64	292
Dish, Cover.....	C. E. Haviland.....	22,231	Feb. 21	62	1200
Dish, Cover.....	C. E. Haviland.....	22,620	July 18	64	429
Dish, Cover.....	C. E. Haviland.....	22,621	July 18	64	430
Dish, Cover.....	C. E. Haviland.....	22,622	July 18	64	430
Dish, Covered.....	H. Brunt.....	22,817	Oct. 3	65	129
Dish, Covered.....	W. Guérin.....	22,420	May 9	63	902

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Design.	Name.	No.	Date.	Official Gazette.	
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Dish. Covered.....	W. Guérin	22,421	May 9	63	902
Dish. Covered.....	D. F. Haynes	22,155	Jan. 24	62	582
Dish. Covered.....	R. L. Johnson	22,565	June 27	63	1953
Dish. Covered.....	M. Redon	22,379	May 2	63	749
Dish. Soap.....	J. C. Bugh	22,705	Aug. 15	64	999
Display-stand.....	C. B. Morrow	22,538	June 13	63	1682
Dividers. Fork for.....	H. Esser	22,295	Mar. 14	62	1645
Door-key securer.....	J. M. Regnold	22,386	May 2	63	750
Dough-cutting die.....	J. J. Pfenninger	22,532	June 13	63	1681
Dressing-case.....	H. C. Swain	22,687	Aug. 8	64	852
Drinking-glass.....	E. J. Rauchfuss	22,497	June 6	63	1523
Easel.....	V. Adler	22,587	July 4	64	149
Easel.....	A. J. Parlin	22,244	Feb. 28	62	1343
Electric-motor frame.....	A. W. Meston	22,277	Mar. 7	62	1505
Embroidery fabric.....	J. Frelöehr	22,553	June 27	63	1952
Escutcheon.....	H. E. Russell	22,756	Aug. 29	64	1259
Escutcheon-plate.....	W. B. Ditmars	22,218	Feb. 14	62	1058
Ewer.....	H. Brunt	22,303	Mar. 21	62	1815
Ewer or jug.....	D. F. Haynes	22,156	Jan. 24	62	582
Fabric.....	W. S. Friedlander	22,800	Sept. 26	64	1784
Fau.....	W. B. Williams	22,452	May 23	63	1193
Fastener.....	F. S. McKenney	22,978	Dec. 19	95	1912
Faucet.....	W. C. Winfield	22,570	June 27	63	1954
Feed-box.....	W. P. Kellogg	22,400	May 2	63	751
Fence-panel.....	J. W. Dwiggin	22,358	Apr. 18	63	457
Fence-panel.....	J. W. Dwiggin	22,359	Apr. 18	63	457
Fence-strand.....	E. F. Hathaway	22,350	Apr. 11	63	305
File-case.....	R. W. Emerson	22,397	May 2	63	751
Filter-press ring.....	E. E. Hendrick	22,918	Nov. 28	65	1395
Finger-ring.....	J. Bulova	22,224	Feb. 14	62	1059
Finger-ring.....	H. Lehr	22,192	Feb. 7	62	891
Finger-ring.....	E. C. and T. C. Mertz	22,913	Nov. 21	65	1271
Finger-ring.....	M. L. Powers	22,676	Aug. 8	64	851
Finger-ring.....	J. Rees	22,193	Feb. 7	62	892
Finger-ring gage.....	J. W. Ford	22,531	June 13	63	1681
Fire-board.....	J. T. Phillips	22,635	July 18	64	432
Fire-kindler.....	I. G. Hazzard	22,825	Oct. 3	65	130
Flag.....	W. Bradley	22,306	Mar. 28	62	1958
Flag.....	J. Terhune	22,496	June 6	63	1522
Flag-holder.....	H. V. Holmes	22,128	Jan. 10	62	311
Flower-bed support for graves.....	G. W. Burns	22,536	June 13	63	1682
Flush-tank casing.....	C. E. Yerge	22,360	Apr. 18	63	457
Flushing-tank.....	A. D. Sanders	22,209	Feb. 7	62	894
Fork, &c.....	S. Smith	22,680	Aug. 8	64	852
Fork, Pie.....	E. W. Baehl	22,992	Dec. 26	65	2057
Forks, &c. Handle for.....	J. T. Curran	22,829	Oct. 10	65	291
Fountain. Drinking.....	W. Tweeddale	22,141	Jan. 17	62	445
Frame, &c.....	R. Golde	22,657	Aug. 1	64	706
Fruit-jar.....	R. B. Calcutt	22,873	Nov. 7	65	887
Fur collars. Head for.....	B. Cohen	22,284	Mar. 14	62	1643
Furnace.....	T. Cascaden, Jr.	22,403	May 2	63	752
Furnace.....	J. R. Reed	22,519	June 6	63	1526
Furnace-front.....	T. I. Rankin	22,571	June 27	63	1954
Furnace-front.....	T. I. Rankin	22,572	June 27	63	1954
Furniture-case.....	P. Kurtz	22,100	Jan. 3	62	155
Furniture-handle.....	J. F. Wilmot	22,161	Jan. 24	62	583
Galvanic pile.....	N. P. Heslier	22,954	Dec. 5	65	1587
Game-board.....	G. W. Gardner	22,790	Sept. 19	64	1644
Game-board.....	J. E. Garside	22,686	Aug. 8	64	852
Game-board.....	H. McDaniel	22,976	Dec. 19	65	1912
Gas-burner.....	T. H. Schmitz	22,711	Aug. 15	64	1001
Gas-burner frame.....	L. Casemere	22,784	Sept. 12	64	1528
Gas trap. Sewer.....	W. E. Hinsdale	22,606	July 11	64	293
Gimp.....	C. E. Hertlein	22,279	Mar. 14	62	1643
Gimp.....	C. E. Hertlein	22,280	Mar. 14	62	1643
Gimp.....	C. E. Hertlein	22,351	Apr. 18	63	456
Gimp.....	H. Hook	22,245	Feb. 28	62	1343
Gimp.....	H. Hook	22,246	Feb. 28	62	1343
Gimp.....	H. Hook	22,266	Mar. 7	62	1504
Gimp.....	C. Lindenthal	22,267	Mar. 7	62	1504
Gimp.....	C. Weinberg	22,579	July 4	64	148
Glass dish.....	T. Singleton, Jr.	22,203	Feb. 7	62	893
Glass dish. Cut.....	W. C. Anderson	22,433	May 9	63	904
Glass dish. Cut.....	D. Forbes	22,662	Aug. 1	64	707
Glass dish. Cut.....	D. Forbes	22,663	Aug. 1	64	707
Glass dish. Ornamental.....	T. Singleton, Jr.	22,169	Jan. 31	62	733
Glass dish. Ornamental.....	T. Singleton, Jr.	22,170	Jan. 31	62	734
Glass dish. Ornamental.....	T. Singleton, Jr.	22,287	Mar. 14	62	1644
Glass or other vessels. Ornamentation of.....	W. Egginton	22,136	Jan. 17	62	445
Glass. Ornamentation of.....	W. L. Pilkington	22,173	Jan. 31	62	734
Glass. Pattern for window.....	C. Apple	22,962	Dec. 26	65	2056
Glass pattern. Plate.....	W. L. Pilkington	22,753	Aug. 29	64	1258
Glass. Plate.....	T. J. Woodward	22,566	June 27	63	1953
Glass. Sheet.....	C. C. Hartung	22,343	Apr. 11	63	304
Glass. Sheet.....	A. L. Rowe	22,097	Jan. 3	62	154
Glass. Surface ornamentation of.....	W. L. Pilkington	22,099	Jan. 3	62	155
Glass. Surface ornamentation of sheet.....	A. D. Brogan and A. M. Malloch	22,350	Apr. 18	63	457
Glass vessel.....	J. J. O'Connor	22,581	July 4	64	148
Glass vessels. Ornamentation of.....	B. Davies	22,286	Mar. 14	62	1644
Glassware. Ornamentation of.....	W. C. Anderson	22,098	Jan. 3	62	154
Glassware. Ornamentation of.....	W. C. Anderson	22,213	Feb. 14	62	1057
Globe-holder.....	E. J. McEvoy	22,227	Feb. 21	62	1200
Grate-bar.....	W. F. Gregory	22,739	Aug. 22	64	1125
Grate. Cellar.....	F. A. Peter	22,448	May 16	63	1053

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Grate. Cellar.....	F. A. Peter.....	22,738	Aug. 22	64	1125
Grate-frame.....	J. T. Phillips.....	22,634	July 18	64	432
Hair-pin.....	G. P. Farmer.....	22,642	July 25	64	554
Halter-plate.....	H. L. Heald.....	22,204	Feb. 7	62	893
Handkerchief.....	J. H. Tarbell.....	22,334	Apr. 11	63	303
Hardware ornamentation.....	L. Kahn.....	22,604	July 11	64	292
Harness-loop.....	M. E. Zeller.....	22,383	May 2	63	749
Harrow-frame.....	M. J. Todd.....	22,692	Aug. 8	64	853
Hat. Lady's.....	J. D. Stange.....	22,766	Sept. 5	64	1390
Hat-trimming.....	G. Gutlohn.....	22,457	May 23	63	1194
Hat-trimming.....	G. Gutlohn.....	22,645	July 25	64	555
Heel or sole plate.....	G. J. Davison.....	22,294	Mar. 14	62	1645
Hinge.....	J. Holmes and K. Peterson.....	22,875	Nov. 7	65	887
Hook. Drapery.....	G. W. McGill.....	22,820	Oct. 3	65	130
Horse-boot.....	W. S. Ray.....	22,955	Dec. 5	65	1587
Horseshoe.....	P. J. Sullivan.....	22,794	Sept. 19	64	1645
Horseshoe.....	J. A. Wright.....	22,450	May 16	63	1053
Hub band. Wagon.....	C. C. Field.....	22,469	May 23	63	1196
Hub-runner.....	J. E. Hobbs.....	22,912	Nov. 14	65	1061
Humidifier-casing.....	O. Hoffmann.....	22,706	Aug. 15	64	1000
Ice-cream freezers. Cross-bar for.....	C. W. Packer.....	22,276	Mar. 7	62	1505
Ice-mold.....	J. A. Smith, Sr.....	22,298	Mar. 14	62	1646
Ice-pick.....	J. Austice, W. E. Warner, and N. R. Streeter.....	22,394	May 2	63	751
Inkstand.....	A. W. McNeil.....	22,773	Sept. 12	64	1527
Inkstand.....	E. Thomas.....	22,416	May 9	63	902
Ink-well.....	C. A. Gildemeyer.....	22,311	Mar. 28	62	1959
Insulator.....	L. B. Gray.....	22,684	Aug. 8	64	852
Insulator.....	A. Wright.....	22,876	Nov. 7	65	887
Jar.....	J. A. Lanning.....	22,751	Aug. 29	64	1258
Jar.....	J. E. Lee.....	22,115	Jan. 10	62	308
Jar.....	C. Wahlers.....	22,157	Jan. 24	62	582
Jewel-casket.....	J. L. Boulay.....	22,641	July 18	64	433
Jewel-setting.....	M. L. Powers and J. W. Mayer.....	22,797	Sept. 26	64	1783
Jigger.....	C. P. Dungan.....	22,768	Sept. 5	64	1390
Kerchief.....	J. H. Anderson.....	22,615	July 18	64	428
Knee-protector.....	A. C. Bull.....	22,767	Sept. 5	64	1390
Knife.....	C. F. Smith.....	22,700	Aug. 15	64	999
Knife-blade.....	C. F. Smith.....	22,482	May 30	63	1374
Knife-handle, &c.....	J. H. Crosby, Jr.....	22,681	Aug. 8	64	852
Knife-handle.....	D. Greenleaf and J. H. Crosby, Jr.....	22,860	Oct. 31	65	747
Knives, &c. Handle for.....	G. S. Boutwell.....	22,564	June 27	63	1953
Knob. Door.....	H. E. Russell.....	22,755	Aug. 29	64	1259
Lace fabric.....	E. Cope.....	22,281	Mar. 14	62	1643
Lace fabric.....	E. Cope.....	22,282	Mar. 14	62	1643
Lace fabric.....	E. Frances.....	22,314	Mar. 28	62	1959
Lamp-base.....	F. Koenig.....	22,144	Jan. 17	62	446
Lamp-base.....	F. C. Koenig.....	22,442	May 16	63	1052
Lamp-base.....	F. C. Koenig.....	22,443	May 16	63	1052
Lamp-base.....	F. C. Koenig.....	22,444	May 16	63	1053
Lamp-body.....	F. Koenig.....	22,140	Jan. 17	62	445
Lamp-burner.....	R. T. Barton.....	22,395	May 2	63	751
Lamp-chimney.....	L. King.....	22,139	Jan. 17	62	445
Lamp-fount.....	E. L. Edes.....	22,819	Oct. 3	65	129
Lamp-fount holder.....	J. C. Miller.....	22,422	May 9	63	903
Lamp-stand.....	T. W. Ricketts.....	22,550	June 20	63	1812
Lamps. Stalactite for electric.....	J. Dalzell.....	22,712	Aug. 15	64	1001
Lantern.....	G. C. Dressel.....	22,854	Oct. 24	65	594
Last. Lap.....	H. L. Heine.....	22,289	Mar. 14	62	1644
Lavatory-bracket.....	R. W. Miller.....	22,387	May 2	63	750
Lavatory-leg.....	E. Hammann.....	22,689	Aug. 8	64	853
Lavatory or sink trap.....	W. Bunting, Jr.....	22,785	Sept. 12	64	1529
Lavatory-support.....	W. F. Malloy.....	22,465	May 23	63	1195
Lavatory-table frame.....	W. F. Malloy.....	22,466	May 23	63	1195
Lawn-rake.....	F. E. Kohler.....	22,605	July 11	64	292
Leggin.....	M. Sachs.....	22,603	July 11	64	292
Letter-box post.....	C. T. Schoen.....	22,432	May 9	63	904
Letter. Sign.....	M. J. Masters.....	22,325	Apr. 4	63	144
Lid-lifter.....	D. N. Waller.....	22,329	Apr. 4	63	145
Lock-nut.....	A. M. Rouse.....	22,813	Sept. 26	64	1785
Looking-glass frame.....	M. Reinfeld.....	22,392	May 2	63	750
Match-box.....	W. W. Hayden.....	22,095	Jan. 3	62	154
Match-box.....	W. W. Hayden.....	22,377	May 2	63	748
Match-safe.....	L. Berger.....	22,366	Apr. 25	63	604
Match-safe.....	W. Bernard and L. Frank.....	22,353	Apr. 18	63	456
Measuring-instruments. Case for electrical.....	E. Weston.....	22,101	Jan. 3	62	155
Medal.....	C. C. Bonney.....	22,455	May 23	63	1194
Medal.....	E. J. Hahn.....	22,675	Aug. 8	64	851
Medal.....	C. W. McCain.....	22,300	Mar. 21	62	1815
Medal.....	C. F. Naegle.....	22,240	Feb. 23	62	1342
Medal.....	C. Orsini.....	22,335	Apr. 11	63	303
Medal.....	P. Philipsen.....	22,556	June 27	63	1952
Medal.....	J. A. Yount.....	22,241	Feb. 23	62	1342
Metal border.....	L. C. Hiller.....	22,460	May 23	63	1194
Metal border.....	W. H. Tomey.....	22,485	May 30	63	1375
Metal sheet. Ornamental.....	L. Kahn.....	22,625	July 18	64	431
Metallic fastener.....	G. W. McGill.....	22,653	Aug. 1	64	706
Metallic fastener.....	G. W. McGill.....	22,654	Aug. 1	64	706
Metallic fastener.....	G. W. McGill.....	22,655	Aug. 1	64	706
Metallic fastener.....	G. W. McGill.....	22,821	Oct. 3	65	130
Metallic fastener.....	G. W. McGill.....	22,822	Oct. 3	65	130
Metallic fastener.....	G. W. McGill.....	22,823	Oct. 3	65	130
Metallic fastener.....	G. W. McGill.....	22,824	Oct. 3	65	130

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Metallic finishing-plate.....	W. S. Grafton, E. C. Ewing, and A. Glass.	22,344	Apr. 11	63	304
Metallic finishing-plate.....	W. S. Grafton, E. C. Ewing, and A. Glass.	22,345	Apr. 11	63	305
Metallic finishing-plate.....	W. S. Grafton, E. C. Ewing, and A. Glass.	22,346	Apr. 11	63	305
Meter-case.....	H. Chrisman.....	22,349	Apr. 11	63	305
Money-receptacle.....	L. G. Smith.....	22,323	Apr. 4	63	144
Monument.....	H. T. Clawson.....	22,476	May 30	63	1373
Monument.....	W. H. Perry.....	22,372	May 2	63	748
Monument.....	W. H. Perry.....	22,373	May 2	63	748
Monument.....	W. H. Perry.....	22,374	May 2	63	748
Monument.....	W. H. Perry.....	22,577	June 27	63	1955
Monument.....	W. H. Perry.....	22,593	July 4	64	150
Monument.....	W. H. Perry.....	22,856	Oct. 24	65	594
Monument.....	E. de Saptees.....	22,612	July 11	64	294
Mop fulcrum-post.....	C. W. Hart.....	22,812	Sept. 26	64	1785
Motto.....	T. Metzeler.....	22,866	Nov. 7	65	885
Mower frame, Lawn.....	W. E. Lape.....	22,431	May 9	63	904
Muff.....	J. Juran.....	22,828	Oct. 10	65	291
Music-rack.....	G. Porteous.....	22,219	Feb. 28	62	1343
Nail-set or countersink.....	J. E. Hitch.....	22,647	July 25	64	555
Napkin-holder.....	J. Walter.....	22,454	May 23	63	1193
Napkin-ring.....	H. B. Beach.....	22,947	Dec. 5	65	1586
Nasal tube.....	A. G. Ely.....	22,757	Aug. 29	64	1259
Nozzle for lawn-sprinklers.....	J. H. Melavin.....	22,491	May 30	63	1375
Oil-can.....	P. and A. Good.....	22,489	May 30	63	1375
Oil-can.....	W. C. Winfield.....	22,428	May 9	63	903
Oil-cup.....	T. R. Hill.....	22,385	May 2	63	749
Oiler, Bicycle.....	H. O. Hall.....	22,357	Apr. 18	63	457
Packing-can.....	E. L. Button.....	22,664	Aug. 1	64	707
Padlock-case.....	H. Horne.....	22,456	May 23	63	1194
Pamphlet-cover.....	L. S. Graham.....	22,147	Jan. 24	62	581
Paper-knife.....	W. E. Allen.....	22,378	Mar. 14	62	1642
Paper, Sheet of wrapping.....	B. B. Van Derveer.....	22,184	Jan. 31	62	736
Paper-weight.....	W. and L. Dorsam.....	22,682	Aug. 8	64	852
Paper-weight.....	A. T. Smith.....	22,774	Sept. 12	64	1527
Pattern for printed fabrics.....	C. M. Smith.....	22,178	Jan. 31	62	735
Pattern for quilting.....	A. C. Diehl.....	22,247	Feb. 28	62	1343
Pattern for textile fabrics.....	J. P. Gelas.....	22,179	Jan. 31	62	736
Pattern for textile fabrics.....	J. P. Gelas.....	22,180	Jan. 31	62	736
Pattern for textile fabrics.....	J. P. Gelas.....	22,181	Jan. 31	62	736
Pattern-strip, Metallic.....	F. L. Thompson.....	22,734	Aug. 22	64	1124
Pattern-strip, Metallic.....	F. L. Thompson.....	22,735	Aug. 22	64	1124
Pattern-strip, Metallic.....	F. L. Thompson.....	22,736	Aug. 22	64	1125
Pattern-strip, Metallic.....	F. L. Thompson.....	22,737	Aug. 22	64	1125
Pattern-strip, Metallic.....	F. L. Thompson.....	22,919	Nov. 28	65	1395
Penholder.....	L. L. Lydick.....	22,264	Mar. 7	62	1503
Penholder.....	D. L. Lydick.....	22,523	June 13	63	1620
Penholder-handle.....	O. C. Eckert and L. Cohen.....	22,524	June 13	63	1620
Pen-rack.....	W. J. Gilmore.....	22,861	Oct. 31	65	747
Pencil.....	H. W. Morgan.....	22,989	Dec. 26	65	2057
Pencil, Lead.....	B. B. Goldsmith.....	22,511	June 6	63	1525
Pencil, Lead.....	B. B. Goldsmith.....	22,512	June 6	63	1525
Pencil, Lead.....	B. B. Goldsmith.....	22,513	June 6	63	1525
Pencil, Lead.....	B. B. Goldsmith.....	22,514	June 6	63	1525
Pencil, Lead.....	S. Kraus.....	22,413	May 9	63	902
Pencil, Lead.....	S. Kraus.....	22,414	May 9	63	902
Pencil, Lead.....	S. Kraus.....	22,415	May 9	63	902
Pencil-sharpener.....	J. R. Foster.....	22,853	Oct. 24	65	594
Pepper or salt box.....	J. Walter.....	22,486	May 30	63	1375
Pepper or salt box.....	J. Walter.....	22,487	May 30	63	1375
Perfumery-holder.....	D. R. Bradley.....	22,624	July 18	64	430
Perfumery-holder.....	H. J. Geer.....	22,112	Jan. 10	62	308
Piano-case.....	A. C. Duncan.....	22,188	Jan. 31	62	737
Picture-frame.....	R. Golde.....	22,949	Dec. 5	65	1586
Picture-frame, &c.....	R. Golde.....	22,977	Dec. 19	65	1912
Picture-frame.....	A. Sametz.....	22,146	Jan. 24	62	520
Picture-frame.....	P. Wiederer.....	22,459	May 23	63	1194
Picture or analogous frame.....	C. J. Jorgensen.....	22,292	Mar. 14	62	1645
Pie-holder.....	P. Julian.....	22,921	Nov. 28	65	1396
Pincushion.....	F. Ratcliff.....	22,776	Sept. 12	64	1527
Pitcher.....	J. G. Donoghue.....	22,214	Feb. 14	62	1054
Plane frame, Circular.....	E. A. Schade.....	22,208	Feb. 7	62	894
Plant-support.....	A. W. Smith.....	22,206	Feb. 7	62	893
Planting-dibble.....	W. E. Warner.....	22,315	Mar. 28	62	1960
Plaque.....	J. A. Goldstein.....	22,600	July 11	64	292
Plaque.....	L. Tonetti.....	22,522	June 13	63	1620
Plate.....	G. A. Glahn.....	22,602	July 11	64	292
Plate.....	A. Hache.....	22,720	Sept. 12	64	1528
Plate.....	C. E. Haviland.....	22,617	July 18	64	429
Plate.....	C. E. Haviland.....	22,440	May 16	63	1052
Plate, Compartment.....	W. R. Gulick.....	22,305	Mar. 21	62	1816
Plate-lifter.....	W. T. Russell.....	22,534	June 13	63	1682
Plush fabric.....	J. Schofield.....	22,233	Feb. 21	62	1201
Pocket-book.....	I. Scheuer.....	22,417	May 9	63	902
Pocket-book, case, or wallet.....	C. Scheuer.....	22,362	Apr. 25	63	603
Pole-bracket.....	E. Roos.....	22,142	Jan. 17	62	446
Printed fabrics, Pattern for.....	I. A. Gutsell.....	22,946	Dec. 5	65	1586
Printer's border.....	W. Spencer.....	22,806	Sept. 26	64	1725
Printer's border.....	W. Spencer.....	22,807	Sept. 26	64	1785
Printer's border.....	W. Spencer.....	22,808	Sept. 26	64	1729
Printer's side-stick.....	S. Starrett.....	22,965	Dec. 12	65	1761

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Design.	Name.	No.	Date.	Official Gazette.	
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Pulsometer	F. M. Criswell	22,198	Feb. 7	62	892
Pump-governor casing	G. I. Roberts	22,953	Dec. 5	65	1587
Puzzle	W. S. Bates	22,479	May 30	63	1374
Puzzle-board	C. K. Leedy	22,265	Mar. 7	62	1504
Radiator	J. E. Bidwell	22,493	May 30	63	1376
Radiator	L. R. Blackmore	22,401	May 2	63	752
Radiator	L. R. Blackmore	22,402	May 2	63	752
Radiator	E. Gurney	22,543	June 13	63	1683
Radiator	T. H. Williams and E. Ambrose	22,787	Sept. 12	64	1529
Raisin-seeder frame	W. S. Scales	22,393	May 2	63	750
Range, Cooking	W. W. Culver	22,131	Jan. 10	62	311
Razor-holder	A. Dufault	22,831	Oct. 10	65	292
Razor-strop	F. J. Herrick	22,871	Nov. 7	65	886
Resistance-box	E. Weston	22,207	Feb. 7	62	893
Rope-hook	W. A. Perry	22,293	Mar. 14	62	1645
Rosette	M. C. Reese	22,754	Aug. 29	64	1259
Rosette, Metallic	F. L. Thompson	22,733	Aug. 22	64	1124
Rug	E. H. Bennett	22,210	Feb. 14	62	1057
Rug	E. H. Bennett	22,211	Feb. 14	62	1057
Rug	A. Petzold	22,472	May 30	63	1372
Rug	A. Petzold	22,578	July 4	64	147
Rug	W. T. Smith	22,285	Mar. 14	62	1643
Rug-fastener	G. B. Shellsborn	22,288	Mar. 14	62	1644
Rule, Measuring	W. H. Goldsberry	22,124	Jan. 10	62	310
Ruler	P. Cox	22,583	July 4	64	148
Ruler	P. Cox	22,584	July 4	64	148
Ruler, Dressmaker's	S. S. Freeman	22,646	July 25	64	555
Sad-iron	J. W. Brown, Jr.	22,211	Sept. 26	64	1785
Saddle-seat	W. B. Jourdan and J. A. Hunt	22,713	Aug. 15	64	1001
Safety-pin frame	J. B. Brower	22,948	Dec. 5	65	1586
Salad-bowl	C. E. Haviland	22,618	July 18	64	429
Saloon fixture	D. Rothschild	22,222	Feb. 14	62	1059
Salt-holder	A. E. and H. A. Smith	22,342	Apr. 11	63	304
Scarf	M. O. Roberts	22,495	June 6	63	1522
Scarf-pin	F. Comte	22,555	June 27	63	1952
Seal	F. MacMonnies	22,658	Aug. 1	64	706
Seat	V. A. Taylor	22,396	May 2	63	751
Sewing-machine frame	L. Onderdonk	22,837	Oct. 17	65	437
Sewing-machine frame	H. R. Tracy	22,544	June 13	63	1683
Sheet metal	T. M. Stone	22,567	June 27	63	1953
Shovel	D. Walsh	22,834	Oct. 10	65	292
Show-stand	A. L. Yearous	22,569	June 27	63	1954
Siding plate	P. A. Deslauriers	22,297	Mar. 14	62	1646
Siding plate	P. A. Deslauriers	22,609	July 11	64	293
Siding plate	P. A. Deslauriers	22,610	July 11	64	293
Sign	C. W. Spalding	22,585	July 4	64	148
Silversmiths' stock	G. L. Crowell, Jr.	22,194	Feb. 7	62	892
Sink-trap	W. H. Graham	22,237	Feb. 21	62	1202
Sink-trap	W. H. Graham	22,238	Feb. 21	62	1202
Skate	S. D. Mosher	22,951	Dec. 5	65	1587
Soap-cup holder	L. Bradfield and R. C. Riggs	22,728	Aug. 22	64	1123
Spool-stand and pincushion. Combined	R. Walsh	22,791	Sept. 19	64	1644
Spoon	C. Barclay	22,558	June 27	63	1953
Spoon	C. B. Barker	22,639	July 18	64	433
Spoon	E. C. Bernheim	22,093	Jan. 3	62	154
Spoon	W. A. Bigler	22,094	Jan. 3	62	154
Spoon	J. E. Birmingham and C. Grandjean	22,223	Feb. 14	62	1059
Spoon, &c	E. A. Blake	22,375	May 2	63	748
Spoon	H. E. Buechner	22,545	June 20	63	1811
Spoon	L. Burger	22,242	Feb. 28	62	1342
Spoon	L. Burger	22,253	Mar. 7	62	1502
Spoon	L. Burger	22,254	Mar. 7	62	1503
Spoon	L. Burger	22,255	Mar. 7	62	1503
Spoon	L. Burger	22,256	Mar. 7	62	1503
Spoon	L. Burger	22,257	Mar. 7	62	1503
Spoon	J. T. Curran	22,698	Aug. 15	64	999
Spoon, &c	F. A. Dawling	22,778	Sept. 12	64	1527
Spoon	E. N. Denison	22,859	Oct. 31	65	747
Spoon	M. A. Fisher	22,438	May 16	63	1052
Spoon	J. J. Freeman	22,376	May 2	63	748
Spoon	G. Freund	22,406	May 9	63	900
Spoon	M. B. Frye	22,546	June 20	63	1811
Spoon	D. Greenleaf and J. H. Crosby, Jr.	22,717	Aug. 22	64	1122
Spoon	J. F. Hilyard	22,197	Feb. 7	62	892
Spoon, &c	M. S. Hinde	22,407	May 9	63	901
Spoon, &c	H. W. Hirschfeld	22,525	June 13	63	1681
Spoon	G. E. Homer	22,480	May 30	63	1374
Spoon	F. F. Horn	22,229	Feb. 21	62	1200
Spoon	F. F. Horn	22,629	July 18	64	431
Spoon	A. F. Jackson	22,453	May 23	63	1193
Spoon	G. T. Jacobs	22,718	Aug. 22	64	1122
Spoon	W. H. Jamouneau	22,678	Aug. 8	64	851
Spoon	W. H. Jamouneau and J. Verschuur	22,499	June 6	63	1523
Spoon	W. H. Jamouneau and J. Verschuur	22,500	June 6	63	1523
Spoon	G. B. Kelley	22,228	Feb. 21	62	1200
Spoon	A. F. Koch	22,526	June 13	63	1681
Spoon	J. W. Maillot	22,251	Mar. 7	62	1502
Spoon	J. W. Maillot	22,318	Apr. 4	63	143
Spoon	J. W. Maillot	22,916	Nov. 28	65	1395
Spoon	W. A. Montague	22,660	Aug. 1	64	707
Spoon, &c	W. S. O'Brien	22,301	Mar. 21	62	1815
Spoon	W. S. O'Brien	22,408	May 9	63	901
Spoon	W. S. O'Brien	22,561	June 27	63	1953
Spoon	C. Osborne	22,243	Feb. 28	62	1343
Spoon	C. Otero	22,557	June 27	63	1953

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Design.	Name.	No.	Date.	Official Gazette.	
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Spoon	C. E. Prétat	22,527	June 13	63	1681
Spoon	C. E. Prétat	22,661	Aug. 1	64	706
Spoon	M. O. Roberts	22,212	Feb. 14	62	1057
Spoon, &c	G. Rockwell	22,409	May 9	63	901
Spoon	A. G. Rogers	22,560	June 27	63	1953
Spoon	G. W. Shiebler	22,363	Apr. 25	63	604
Spoon	D. G. Smallwood	22,559	June 27	63	1953
Spoon	W. H. Tomey	22,498	June 6	63	1523
Spoon, &c	W. H. Tomey	22,501	June 6	63	1523
Spoon	C. P. Truesdell	22,364	Apr. 25	63	604
Spoon	C. P. Truesdell	22,643	July 25	64	555
Spoon	J. Verschuur	22,195	Feb. 7	62	892
Spoon	J. Verschuur	22,196	Feb. 7	62	892
Spoon	J. Verschuur	22,679	Aug. 8	64	851
Spoon	C. E. Winslow	22,562	June 27	63	1953
Spoon	J. Wood	22,092	Jan. 3	62	153
Spoon-bowl	U. Racine	22,699	Aug. 15	64	990
Spoon-handle	A. F. Jackson	22,105	Jan. 10	62	307
Spoon-handle	A. F. Jackson	22,133	Jan. 17	62	444
Spoon-handle	J. W. Maillot	22,302	Mar. 21	62	1815
Spoon-handle, &c	W. S. O'Brien	22,308	Mar. 28	62	1958
Spoon-handle	H. A. Weihman	22,252	Mar. 7	62	1502
Spoon or fork	G. Wilkinson	22,320	Apr. 4	63	144
Spoon or fork handle	R. N. Oakman, Jr	22,502	June 6	63	1523
Spoon or fork handle	G. W. Shiebler	22,149	Jan. 24	62	581
Spoon. Souvenir	L. Burger	22,319	Apr. 4	63	143
Spoons, &c. Handle for	J. T. Curran	22,830	Oct. 10	65	292
Spoons, &c. Handle for	W. H. Gaines	22,746	Aug. 29	64	1258
Spoons, &c. Handle for	F. E. Prétat	22,747	Aug. 29	64	1258
Spoons, &c. Handle for	R. Rhodes	22,779	Sept. 12	64	1528
Spoons, &c. Handle for	C. C. Wientge	22,719	Aug. 22	64	1122
Spoons, &c. Handle for	G. Wilkinson	22,748	Aug. 29	64	1258
Spoons, &c. Handle for	G. Wilkinson	22,749	Aug. 29	64	1258
Sprinkler frame. Lawn	J. G. Baker and T. H. Asbury	22,190	Jan. 31	62	737
Square. Dressmaker's	F. E. Flesher	22,248	Feb. 28	62	1343
Stable-comb	F. E. Kohler	22,537	June 13	63	1682
Statuette	C. M. Smith	22,867	Nov. 7	65	886
Stay. Dress	D. H. Warner	22,283	Mar. 14	62	1643
Stay. Dress	D. H. Warner	22,458	May 23	63	1194
Stay-strip	W. A. Neely	22,269	Mar. 7	62	1504
Stool. Foot	F. A. Richards	22,549	June 20	63	1812
Store wall-fixture	J. D. Warren	22,962	Dec. 12	65	1761
Stove	C. H. Boeck	22,709	Aug. 15	64	1000
Stove	G. W. Cope	22,189	Jan. 31	62	737
Stove	G. W. Cope	22,430	May 9	63	901
Stove	I. De Haven	22,220	Feb. 14	62	1059
Stove	G. H. Holland	22,575	June 27	63	1955
Stove	G. H. Holland	22,576	June 27	63	1955
Stove	W. J. Keep	22,688	Aug. 8	64	853
Stove	E. D. Nellis	22,667	Aug. 1	64	708
Stove	W. D. Southard	22,464	May 23	63	1195
Stove	W. H. Wilder	22,143	Jan. 17	62	446
Stove. Cooking	F. A. Seifert	22,608	July 11	64	293
Stove. Cooking	C. Wipfler	22,447	May 16	63	1053
Stove. Cooking	C. W. Wipfler	22,770	Sept. 5	64	1391
Stove. Fireplace	T. I. Rankin	22,541	June 13	63	1683
Stove. Gas	W. L. Cort	22,429	May 9	63	904
Stove. Gas or oil	A. C. West	22,445	May 16	63	1053
Stove. Heating	G. O. Bergstrom	22,910	Nov. 14	65	1060
Stove. Heating	G. H. Holland	22,542	June 13	63	1683
Stove. Heating	G. H. Holland	22,573	June 27	63	1954
Stove. Heating	G. H. Holland	22,574	June 27	63	1955
Stove. Heating	L. D. Rayner	22,952	Dec. 5	65	1587
Stove. Heating	R. F. Schermerhorn and F. S. Weller	22,446	May 16	63	1053
Stove. Lamp	J. F. Myers	22,540	June 13	63	1683
Stove. Lamp	J. F. Myers	22,911	Nov. 14	65	1061
Stove-lid	A. W. Walker	22,740	Aug. 22	64	1125
Stove-mat	J. F. Lockwood	22,123	Jan. 10	62	309
Stove. Oil	G. W. Cope	22,371	Apr. 25	63	605
Stove. Oil	J. Keils	22,592	July 4	64	150
Stove. Oil	C. W. Wipfler	22,710	Aug. 15	64	1000
Stove roller-base. Oil	C. H. Boeck	22,742	Aug. 22	64	1126
Stove. Vapor	L. Stockstrom	22,551	June 20	63	1812
Stove water-tank	W. J. Keep	22,741	Aug. 22	64	1125
Surgical-instrument handle	W. Scheerer	22,134	Jan. 17	62	444
Suspender-web	C. Bloomberg	22,924	Nov. 28	65	1396
Sweater	W. T. Pitchers	22,877	Nov. 7	65	887
Sweater	W. T. Pitchers	22,878	Nov. 7	65	887
Sweater	W. T. Pitchers	22,879	Nov. 7	65	888
Sweater	W. T. Pitchers	22,880	Nov. 7	65	888
Sweater	W. T. Pitchers	22,881	Nov. 7	65	888
Syringe	C. W. Treverton	22,669	Aug. 1	64	708
Table	V. Camizzi	22,758	Aug. 29	64	1259
Table	C. E. Dean	22,461	May 23	63	1194
Table	F. C. Koenig	22,708	Aug. 15	64	1000
Table	J. C. Miller	22,219	Feb. 14	62	1058
Table	A. Nacke	22,539	June 13	63	1682
Table	T. J. Rogers	22,993	Dec. 26	65	2057
Table-cover	A. Petzold	22,650	Aug. 1	64	705
Table-cover	A. Petzold	22,651	Aug. 1	64	705
Table-knife	P. McGuigan	22,439	May 16	63	1052
Tablet. Memorial	W. H. Campbell and J. J. Willingham	22,611	July 11	64	293
Tag. Label	F. P. D'Arcy	22,726	Aug. 22	64	1123
Tape	G. N. Steere	22,119	Jan. 10	62	309

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Design.	Name.	No.	Date.	Official Gazette.	
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Tassel	A. Davenport	22,944	Dec. 5	65	1585
Tea or coffee pot	A. F. Jackson	22,727	Aug. 22	64	1123
Tea-pot	C. Osborne	22,369	Apr. 25	63	604
Teething-plate	C. Wahler	22,987	Dec. 26	65	2057
Textile fabric	G. T. Garey	22,434	May 16	63	1051
Textile fabric	C. H. Schopbach	22,693	Aug. 15	64	998
Textile fabric	E. Whitcomb	22,554	June 27	63	1952
Thimble	M. C. Scherer	22,106	Jan. 10	62	307
Thimble	H. A. Weihman	22,547	June 20	63	1811
Thimble-plate	G. Rischmüller	22,917	Nov. 28	65	1395
Tile. Crest	J. R. Bryant	22,832	Oct. 10	65	292
Timepiece-hand	W. C. Ball	22,702	Aug. 15	64	999
Timepiece-hand	W. C. Ball	22,703	Aug. 15	64	999
Tobacco-bag	D. Ferry, Jr.	22,674	Aug. 8	64	851
Tobacco. Plug	W. T. Brown	22,827	Oct. 3	65	130
Toilet cabinet-case	J. O. Spear	22,786	Sept. 12	64	1529
Tool-handle	W. P. Alger	22,221	Feb. 14	62	1059
Tool-handle	E. W. Hutchinson	22,633	July 18	64	432
Tooth-pick case	H. W. Bingham	22,505	June 6	63	1521
Top	G. W. Coon	22,378	May 2	63	718
Toy	M. Cunningham	22,626	July 18	64	431
Toy bank	C. A. Bailey	22,405	May 2	63	752
Toy money-safe	M. J. Shimer	22,291	Mar. 14	62	1645
Toy savings-bank	H. Byron	22,950	Dec. 5	65	15-6
Toy savings-bank	E. Charest	22,419	May 9	63	992
Toy savings-bank	H. Dillingham	22,232	Feb. 21	62	1201
Toy. Wheeled	C. A. Bailey	22,863	Oct. 31	65	747
Toy windmill-head	F. T. Thrush	22,164	Jan. 24	62	583
Trace-carrier	M. E. Zeller	22,427	May 9	63	903
Tray	F. T. Pearce	22,685	Aug. 8	64	852
Tray	J. Rees	22,215	Feb. 14	62	1058
Trimming	J. Jacobson	22,658	Oct. 31	65	747
Trimming	E. Miller and C. Barton	22,494	June 6	63	1522
Trimming. Dress	J. Dreyfuss	22,672	Aug. 8	64	851
Trimming. Dress	H. Hook	22,652	Aug. 1	64	706
Truck-brace	F. K. Gale	22,915	Nov. 21	65	1271
Truck side bar	J. A. Brill	22,920	Nov. 28	65	1396
Trucks. Upper chord for car	J. A. Brill	22,471	May 23	63	1196
Trucks. Upper chord for car	J. A. Brill	22,492	May 30	63	1376
Tub-support. Stationary	C. Graham	22,316	Mar. 28	62	1960
Type	E. Etter	22,656	Aug. 1	64	706
Type. Font of	G. F. Schroeder	22,104	Jan. 10	62	307
Type. Font of phonetic printing	R. S. Avery	22,613	July 18	64	428
Type. Font of printing	R. S. Avery	22,478	May 30	63	1374
Type. Font of printing	R. Guichwitz	22,148	Jan. 24	62	581
Type. Font of printing	R. Guichwitz	22,412	May 9	63	901
Type. Font of printing	R. Guichwitz	22,870	Nov. 7	65	886
Type. Font of printing	W. W. Jackson	22,437	May 16	63	1052
Type. Font of printing	G. F. Schroeder	22,263	Mar. 7	62	1503
Type-writer cabinet	S. L. Conde	22,398	May 2	63	751
Type-writer finger-guide	E. Terry	22,971	Dec. 19	65	1911
Umbrella-carrier	P. Hill	22,262	Mar. 7	62	1503
Umbrella-handle	E. Stein	22,310	Mar. 28	62	1958
Umbrella-stand	S. S. Senecaugh and A. J. Ives	22,568	June 27	63	1953
Valve-casing	J. H. Pierce	22,865	Oct. 31	65	747
Vault-light-frame pattern	J. Jacobs	22,980	Dec. 26	65	2055
Vault-light-frame pattern	J. Jacobs	22,981	Dec. 26	65	2056
Vault-light lens	J. Jacobs	22,388	May 2	63	750
Vault-light lens	J. Jacobs	22,389	May 2	63	750
Vault-light lens	J. Jacobs	22,390	May 2	63	750
Vault-light lens	J. Jacobs	22,391	May 2	63	750
Vehicle-step	A. A. Pope	22,404	May 2	63	752
Vehicle toe-rail	W. A. Schleicher	22,771	Sept. 5	64	1391
Velocipede-frame	W. Hillman	22,715	Aug. 15	64	1001
Velocipede-handle	T. B. Jeffery	22,760	Aug. 29	64	1260
Vending machine case	A. Lyon	22,102	Jan. 3	62	155
Vending machine case	R. Mills	22,126	Jan. 10	62	310
Vending-machine casing	J. R. Rowlands	22,666	Aug. 1	64	708
Vessel	J. E. Miller	22,114	Jan. 10	62	308
Vessel	A. Steffn	22,171	Jan. 31	62	734
Vessel	A. Steffn	22,367	Apr. 25	63	604
Wagon-body	Z. T. Rickards	22,470	May 23	63	1196
Wagon body. Lunch	T. H. Buckley	22,743	Aug. 22	64	1126
Wagon-spring	G. Penn	22,632	July 18	64	432
Wall and ceiling paper	F. Aumonier	22,805	Sept. 26	64	1784
Wall-paper	F. Aumonier	22,762	Aug. 29	64	1260
Wall-paper	F. Aumonier	22,763	Aug. 29	64	1260
Wall-paper	F. Aumonier	22,764	Aug. 29	64	1260
Wall-paper	F. Aumonier	22,765	Aug. 29	64	1260
Wall-paper	F. Aumonier	22,801	Sept. 26	64	1784
Wall-paper	F. Aumonier	22,802	Sept. 26	64	1784
Wall-paper	F. Aumonier	22,803	Sept. 26	64	1781
Wall-paper	F. Aumonier	22,804	Sept. 26	64	1784
Wall-paper	F. Aumonier	22,956	Dec. 5	65	1587
Wall-paper	F. Aumonier	22,957	Dec. 5	65	1588
Wall-paper	F. Aumonier	22,958	Dec. 5	65	1588
Wall-paper	F. Aumonier	22,959	Dec. 5	65	1588
Wall-paper	F. Aumonier	22,960	Dec. 12	65	1760
Wall-paper	F. Aumonier	22,961	Dec. 12	65	1761
Wall-paper	F. Aumonier	22,969	Dec. 19	65	1910
Wall-paper	F. Aumonier	22,970	Dec. 19	65	1910
Wall-paper	C. Booze	22,789	Sept. 19	64	1644
Wall-paper	C. Booze	22,888	Oct. 24	65	591
Wall-paper	C. Booze	22,839	Oct. 24	65	591

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
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Wall-paper	C. Booze	22,840	Oct. 24	65	591
Wall-paper	C. Booze	22,841	Oct. 24	65	591
Wall-paper	C. Booze	22,842	Oct. 24	65	592
Wall-paper	C. Booze	22,843	Oct. 24	65	592
Wall-paper	C. Booze	22,844	Oct. 24	65	592
Wall-paper	C. Booze	22,845	Oct. 24	65	592
Wall-paper	C. Booze	22,846	Oct. 24	65	592
Wall-paper	C. Booze	22,847	Oct. 24	65	593
Wall-paper	C. Booze	22,848	Oct. 24	65	593
Wall-paper	C. Booze	22,849	Oct. 24	65	593
Wall-paper	C. Booze	22,850	Oct. 24	65	593
Wall-paper	C. Booze	22,851	Oct. 24	65	593
Wall-paper	C. Booze	22,852	Oct. 24	65	594
Wall-paper	C. Booze	22,885	Nov. 14	65	1057
Wall-paper	C. Booze	22,886	Nov. 14	65	1057
Wall-paper	C. Booze	22,887	Nov. 14	65	1058
Wall-paper	C. Booze	22,888	Nov. 14	65	1058
Wall-paper	C. Booze	22,889	Nov. 14	65	1058
Wall-paper	C. Booze	22,890	Nov. 14	65	1058
Wall-paper	C. Booze	22,891	Nov. 14	65	1058
Wall-paper	C. Booze	22,892	Nov. 14	65	1058
Wall-paper	C. Booze	22,893	Nov. 14	65	1058
Wall-paper	C. Booze	22,894	Nov. 14	65	1058
Wall-paper	C. Booze	22,895	Nov. 14	65	1058
Wall-paper	C. Booze	22,896	Nov. 14	65	1059
Wall-paper	C. Booze	22,897	Nov. 14	65	1059
Wall-paper	C. Booze	22,898	Nov. 14	65	1059
Wall-paper	C. Booze	22,899	Nov. 14	65	1059
Wall-paper	C. Booze	22,900	Nov. 14	65	1059
Wall-paper	C. Booze	22,901	Nov. 14	65	1059
Wall-paper	C. Booze	22,902	Nov. 14	65	1059
Wall-paper	C. Booze	22,903	Nov. 14	65	1059
Wall-paper	C. Booze	22,904	Nov. 14	65	1060
Wall-paper	C. Booze	22,905	Nov. 14	65	1060
Wall-paper	C. Booze	22,906	Nov. 14	65	1060
Wall-paper	C. Booze	22,907	Nov. 14	65	1060
Wall-paper	C. Booze	22,908	Nov. 14	65	1060
Wall-paper	C. Booze	22,909	Nov. 14	65	1060
Wall-paper	C. Booze	22,926	Nov. 28	65	1397
Wall-paper	C. Booze	22,927	Nov. 28	65	1397
Wall-paper	C. Booze	22,928	Nov. 28	65	1397
Wall-paper	C. Booze	22,929	Nov. 28	65	1397
Wall-paper	C. Booze	22,930	Nov. 28	65	1397
Wall-paper	C. Booze	22,931	Nov. 28	65	1398
Wall-paper	C. Booze	22,932	Nov. 28	65	1398
Wall-paper	C. Booze	22,933	Nov. 28	65	1398
Wall-paper	C. Booze	22,934	Nov. 28	65	1398
Wall-paper	C. Booze	22,935	Nov. 28	65	1398
Wall-paper	C. Booze	22,936	Nov. 28	65	1398
Wall-paper	C. Booze	22,988	Dec. 26	65	2057
Wall-paper	M. G. Hatch	22,938	Nov. 28	65	1399
Wall-paper	M. G. Hatch	22,939	Nov. 28	65	1399
Wall-paper	M. G. Hatch	22,940	Nov. 28	65	1399
Wall-paper	M. G. Hatch	22,941	Nov. 28	65	1399
Wall-paper	M. G. Hatch	22,942	Nov. 28	65	1400
Wall-paper	M. G. Hatch	22,943	Nov. 28	65	1400
Wall-paper	C. K. Herrick	22,937	Nov. 28	65	1399
Wall-paper	J. Twyman	22,103	Jan. 10	62	306
Washboiler-screen	W. Mitchell	22,923	Nov. 28	65	1396
Wash-bowls. Ornamentation of stationary	C. H. Moore	22,122	Jan. 10	62	309
Watch-bridge	G. M. Rouge	22,365	Apr. 25	63	604
Watch-dial	J. C. Dueber	22,599	July 11	64	291
Water-closet cover	E. Hammann and W. C. Peet	22,449	May 16	63	1053
Wax for sad-irons. Laundry	J. E. Morrison	22,925	Nov. 28	65	1397
Weatherboard	S. Miller	22,795	Sept. 19	64	1645
Whiffletree-clip	H. C. Swan	22,670	Aug. 1	64	708
Whip-antirattler	S. F. Milliron and J. Preiss	22,833	Oct. 10	65	292
Work table	C. M. B. Boller	22,518	June 6	63	1526
Woven fabric	L. D. Erben	22,945	Dec. 5	65	1585
Woven fabric	W. G. Oldham and W. K. Smith	22,159	Jan. 24	62	583
Woven fabric	W. T. Smith	22,158	Jan. 24	62	582
Woven fabric	W. T. Smith	22,234	Feb. 21	62	1201
Woven fabric	W. T. Smith and W. G. Oldham	22,160	Jan. 24	62	583

ALPHABETICAL LIST OF TRADE-MARKS.

Title.	Name.	No.	Date.	Official Gazette.	
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Agricultural implements and handles for same	Markt & Company	23,014	May 9	63	908
Ale	Christian Feigenspan	22,498	Feb. 21	62	1204
Ale, aerated and non-alcoholic	Kops Brewery	23,872	Nov. 28	65	1402
Ale and beer	G. W. Wiedenmayer	23,460	Aug. 8	64	854
Ale and lager-beer	Burkhardt Brewing Co.	22,987	May 9	63	906
Ale and stout. Aerated and non-alcoholic	Kops Brewery	23,793	Nov. 7	65	890
Ale. Extracts for making ginger	H. W. Weeks	23,765	Oct. 31	65	749
Ale, porter, and beer	Peter Stumpf Brewing Company	23,522	Aug. 22	64	1127
Ale, s-da and mineral waters, and draft and bottled beer.	J. W. Waynick	22,602	Mar. 7	62	1508
Ginger					
Ales, porters, and beers	S. Liebmann's Sons Brewing Company.	23,139	May 30	63	1379
Alloy of metal	Smith & Egge Manufacturing Company.	23,567	Aug. 29	64	1262
Alteratives, tonics, and blood-purifiers	Sawyer Medicine Co.	23,037	May 16	63	1055
Ammonia carbonate	Michigan Carbon Works	23,233	June 20	63	1813
Anæsthetic	Hale Dental Co.	23,176	June 6	63	1527
Anæsthetics	C. E. Hale	23,402	July 25	64	557
Animal-shoes	Bryden Horse Shoe Company	22,964	May 2	63	758
Anodyne and antifebrile preparations	G. F. Harvey Company	23,772	Oct. 31	65	750
Antidote for poison and remedies for blood and liver diseases	Anti-Poison Medicine Company	22,994	May 9	63	907
Antipyretic anodyne in powdered form	J. W. Newburne	22,568	Feb. 28	62	1350
Antiseptic compound for purifying the blood	C. W. Eman and J. S. Powley	22,686	Mar. 21	62	1819
Antiseptic for destroying insects, fungi, and the like	Farbenfabriken, vormals Fr. Bayer & Co.	23,606	Sept. 12	64	1531
Antiseptics	J. D. D. de Holmfeld	23,773	Oct. 31	65	750
Antiseptics and embalming fluids	Embalmer's Supply Company	23,367	Jan. 24	62	585
Apparel. Certain named wearing	Haer Mercantile Company	23,547	Aug. 22	64	1130
Apparel. Wearing	J. Maddocks	23,502	Aug. 15	64	1003
Asphaltum	A. L. Barber	22,954	May 2	63	757
Axles. Wagon and carriage	Concord Axle Company	23,691	Oct. 10	65	293
Bakers' products and confectionery. Certain named	American Biscuit and Manufacturing Company.	23,552	Aug. 29	64	1261
Baking-powder	W. D. Cleveland & Co.	23,166	June 6	63	1527
Baking-powder	C. N. Hoagland	22,798	Apr. 11	63	309
Baking-powder	W. F. McLaughlin	23,294	July 4	64	152
Baking-powder	Nash-Smith Tea and Coffee Company.	23,382	July 18	64	436
Baking-powder	S. W. Simmons	22,738	Apr. 4	63	148
Baking-powder	W. J. Stone	23,048	May 16	63	1057
Baking-powder	D. S. Thompson	22,914	May 2	63	754
Baking-powder	Toledo Spice Company	22,737	Apr. 4	63	148
Bale ties. Cotton	W. Clark's Son & Co.	22,590	Mar. 7	62	1507
Banjos, guitars, and mandolins	W. W. Knight & Son	23,061	May 23	63	1197
Batteries and battery-motors	Mason Electric Company	22,749	Apr. 4	63	149
Bearing metal	Fairbanks Company	23,190	June 6	63	1528
Bearings and antifriction purposes. Steel balls for	Grant Anti-Friction Ball Company	22,750	Apr. 4	63	149
Bearings and antifriction purposes. Steel balls for	Grant Anti-Friction Ball Company	22,751	Apr. 4	63	149
Bearings, commutator-brushes, and electrical conductors	Holmes Fibre-Graphite Manufacturing Company.	23,240	June 20	63	1214
Bed-springs. Woven-wire	B. Fitch	23,515	Aug. 15	64	1004
Beds. Folding	Standard Folding Bed Company	22,576	Feb. 28	62	1350
Beef and beef and pork products, including lard. Extracts of	N. Morris & Co.	23,680	Oct. 3	65	132
Beef and pork products, including lard and tallow	Fairbank Canning Company	23,771	Oct. 31	65	750
Beer, ale, porter, and stout	Goebel Brewing Company	23,762	Oct. 31	65	749
Beer and ale	Beadleston & Woerz	22,322	Jan. 10	62	313
Beer and ale	Wm. J. Lemp Brewing Company	23,134	May 30	63	1378
Beer and ale	Wm. J. Lemp Brewing Company	23,135	May 30	63	1378
Beer and ale	O'Donnell & Duer Bavarian Brewing Company.	23,656	Sept. 26	64	1788
Beer and ale	O'Donnell & Duer Bavarian Brewing Company.	23,657	Sept. 26	64	1788
Beer. Bottled lager	Beadleston & Woerz	22,604	Mar. 7	62	1508
Beer. Draft lager	Beadleston & Woerz	22,605	Mar. 7	62	1508
Beer. Lager	Bartholomay Brewery Company	22,825	Apr. 18	63	459
Beer. Lager	Bartholomay Brewery Company	23,039	May 16	63	1056
Beer. Lager	Bartholomay Brewery Company	23,209	June 14	63	1685
Beer. Lager	A. Bauer	22,287	Jan. 3	62	157
Beer. Lager	Bohemian Brewing Company of Chicago.	23,040	May 16	63	1056
Beer. Lager	Chatanooga Brewing Company	22,680	Mar. 21	62	1818
Beer. Lager	Conrad Seipp Brewing Company	22,774	Apr. 11	63	307
Beer. Lager	J. Everard	22,481	Feb. 14	62	1062
Beer. Lager	O. Feigenspan	23,902	Dec. 5	65	1590
Beer. Lager	W. Gerst	23,433	Aug. 1	64	710
Beer. Lager	Gotfried Brewing Company	22,775	Apr. 11	63	307
Beer. Lager	Gotfried Brewing Company	22,776	Apr. 11	63	307
Beer. Lager	Henn & Gabler Brewing Company	22,499	Feb. 21	62	1204
Beer. Lager	Henn & Gabler Brewing Company	23,303	July 4	64	152
Beer. Lager	Joseph Kohnle Brewing Company	22,427	Feb. 7	62	896
Beer. Lager	Lauer Brewing Company	23,792	Nov. 7	65	890
Beer. Lager	O'Donnell & Duer Bavarian Brewing Company.	22,867	Apr. 25	63	607
Beer. Lager	Peptonized Lager Company	23,669	Oct. 3	65	131
Beer. Lager	Quandt Brewing Company	23,078	May 23	63	1198
Beer. Lager	H. Rahr's Sons	22,428	Feb. 7	62	899
Beer. Lager	F. Reisch & Bros	22,288	Jan. 3	62	157

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Beer. Lager.....	Robert Portner Brewing Company.....	23,870	Nov. 28	65	1401
Beer. Lager.....	Ruff Brewing Company.....	23,805	Nov. 14	65	1062
Beer. Lager.....	Star Brewery.....	22,868	Apr. 25	63	607
Beer. Lager.....	Star Brewery Company.....	23,903	Dec. 5	65	1590
Beer. Lager.....	E. Tosetti Brewing Company.....	22,500	Feb. 21	62	1204
Beer. Lager.....	Wacker & Birk Brewing and Malt- ing Company.....	22,826	Apr. 18	63	460
Beer. Lager.....	Wacker & Birk Brewing and Malt- ing Company.....	22,988	May 9	63	906
Beer. Lager.....	Wacker & Birk Brewing and Malt- ing Company.....	23,041	May 16	63	1056
Beer. Lager.....	Wehr-Hobelmänn-Gottlieb Brewing and Maltling Company.....	23,555	Aug. 29	64	1261
Beer. Lager.....	West Side Brewery Company.....	22,733	Apr. 4	63	148
Beer. Lager.....	West Side Brewery Company.....	22,777	Apr. 11	63	308
Beer. Root.....	F. J. Smith.....	23,378	July 18	64	435
Belting. Leather.....	Chas. Munson Belting Company.....	23,779	Nov. 7	65	889
Belting. Leather.....	J. F. and C. G. Warren.....	22,863	Apr. 25	63	606
Belting. Metallic fastenings for leather.....	Judson L. Thomson Manufacturing Company.....	22,376	Jan. 24	62	586
Beverage. Certain carbonated.....	Eclipse Carbonating Co.....	22,430	Feb. 7	62	896
Beverages and waters. Certain carbonated.....	E. L. Jacques.....	22,466	Feb. 14	62	1061
Beverages. Carbonated.....	T. H. McCusker.....	23,835	Nov. 21	65	1218
Beverages. Carbonated.....	H. Wheaton & Sons.....	22,778	Apr. 11	63	308
Beverages. Certain named.....	F. L. Hazelton.....	23,350	July 11	64	297
Beverages classed as soft drinks Unfermented malt-and-hops.....	Non-Alcoholic Beer Brewing Com- pany.....	23,625	Sept. 19	64	1647
Beverages. Nutrient or tonic.....	Coca Cola Company.....	22,406	Jan. 31	62	740
Bicycles.....	Derby Cycle Company.....	22,801	Apr. 11	63	310
Bicycles.....	Eagle Bicycle Manufacturing Com- pany.....	22,960	May 2	63	758
Bicycles.....	J. E. Geigan.....	22,697	Mar. 21	62	1820
Bicycles.....	Gibson & Prentiss.....	23,108	May 23	63	1206
Bicycles.....	Kenyon Bicycle Manufacturing Company.....	22,661	Mar. 14	62	1650
Bicycles.....	Royal Cycle Works.....	22,413	Jan. 31	62	740
Bicycles and other velocipedes and parts thereof.....	E. C. Stearns & Co.....	22,710	Mar. 28	62	1962
Bicycles and sulkies.....	Central Cycle Manufacturing Com- pany.....	23,162	May 30	63	1380
Bicycles and their parts.....	A. G. Spalding & Bros.....	22,754	Apr. 4	63	150
Bicycles and their parts.....	A. G. Spalding & Bros.....	22,755	Apr. 4	63	150
Bicycles and tricycles and parts thereof.....	Black Manufacturing Company.....	23,324	July 4	64	154
Bicycles. Safety.....	H. D. Hedger.....	22,858	Apr. 18	63	462
Bicycles, tricycles, and parts thereof.....	H. W. James.....	23,450	Aug. 1	64	712
Bicycles, tricycles, and velocipedes.....	Stover Bicycle Manufacturing Com- pany.....	23,594	Sept. 5	64	1394
Bicycles, velocipedes, and articles accessory thereto.....	Hulbert Bros. & Co.....	22,454	Feb. 7	62	898
Bicycles, velocipedes, and articles accessory thereto.....	Yost Manufacturing Company.....	22,455	Feb. 7	62	898
Billiard-tables.....	Brunswick-Balke-Collender Com- pany.....	23,238	June 20	63	1814
Biscuit and crackers.....	L. A. Goudy.....	22,634	Mar. 14	62	1647
Bitters.....	J. Grossman.....	22,921	May 2	63	755
Bitters, emulsions, cough mixtures, sarsaparilla, and remedy for rheumatism.....	C. H. Smith.....	23,314	July 4	64	153
Bitters, liniment, and cough-sirup.....	W. M. Ward.....	22,780	Apr. 11	63	308
Bitters. Orange.....	Les Héritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin.....	22,922	May 2	63	755
Bitters. Stomach.....	Firm of Th. Lappe.....	23,489	Aug. 15	64	1003
Bitters. Tonic.....	E. J. Kennedy.....	22,992	May 9	63	907
Blackening and burnishing compounds for boots and shoes.....	W. R. Albertson.....	23,143	May 30	63	1379
Blackening and dressing. Shoe.....	Reliance Manufacturing Company.....	22,556	Feb. 28	62	1349
Blackening for polishing leather. Liquid.....	J. S. Keyser.....	23,168	June 6	63	1527
Blankets.....	Shepard, Norvell & Co.....	23,550	Aug. 29	64	1261
Bleaching compound.....	Roessler & Hasslacher Chemical Company.....	22,435	Feb. 7	62	896
Bleaching fluid.....	H. Kohnstamm.....	22,619	Mar. 7	62	1509
Bleaching-powder.....	United Alkali Company.....	22,939	May 2	63	756
Bleaching-powder.....	United Alkali Company.....	22,940	May 2	63	756
Bleaching-powder.....	United Alkali Company.....	22,941	May 2	63	756
Blood-purifier and remedy for gonorrhea and gleet.....	L. M. Byrne.....	23,354	July 11	64	297
Bluing.....	A. E. Palmer.....	22,889	Apr. 25	63	609
Bluing. Laundry.....	A. J. Conroe.....	23,446	Aug. 1	64	711
Bluing. Wash.....	Reliance Manufacturing Company.....	22,848	Apr. 18	63	462
Boiler, brick-set, and portable ranges, cook, heating, and all kinds of gas, gasoline, and oil stoves and ranges. Ele- vated.....	A. Weiskittel & Son.....	22,379	Jan. 24	62	586
Boiler-tubing.....	R. W. Mack.....	23,802	Nov. 7	65	890
Boilers. Steam and hot-water.....	A. Boyce.....	22,963	May 2	63	758
Bonbons.....	Walter M. Lowney Company.....	23,693	Oct. 10	65	293
Books. Pictorial story.....	Russell Printing Company.....	22,456	Feb. 14	62	1060
Boot and shoe bottom stock. Cut-leather.....	Baxter, Stoner & Schenkelberger.....	23,337	July 11	64	296
Boot and shoe dressing.....	B. F. Brown & Co.....	22,890	Apr. 25	63	609
Boot and shoe heel-plates.....	L. Sacks.....	23,540	Aug. 22	64	1129
Boots and shoes.....	W. H. Fearey.....	23,113	May 30	63	1377
Boots and shoes.....	W. H. Fearey.....	23,114	May 30	63	1377
Boots and shoes.....	W. H. Fearey.....	23,115	May 30	63	1377
Boots and shoes.....	W. H. Fearey.....	23,116	May 30	63	1377
Boots and shoes.....	Hayden, Guardenier & Co.....	22,669	Mar. 21	62	1817
Boots and shoes.....	Hine & Lynch.....	22,301	Jan. 10	62	312
Boots and shoes.....	J. S. Nelson & Son Shoe Company.....	22,302	Jan. 10	62	312
Boots and shoes.....	I. Prouty & Co.....	22,303	Jan. 10	62	312
Boots and shoes.....	I. Prouty & Co.....	22,355	Jan. 24	62	584
Boots and shoes.....	I. Prouty & Co.....	22,522	Feb. 28	62	1346

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Title.	Name.	No.	Date.	Official Gazette.	
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Boots and shoes	Standard Shoe Company	23,243	June 27	63	1956
Boots and shoes	N. F. Tucker	22,629	Mar. 14	62	1647
Boots and shoes. Children's	G. M. Coburn & Co	22,814	Apr. 18	63	458
Boots and shoes for men, boys, and youths	Hanan & Son	22,587	Mar. 7	62	1506
Boots and shoes. Leather stays for	W. A. Neely	22,523	Feb. 28	62	1346
Boots. Ladies' carriage	B. Cohen & Son	23,327	July 11	64	295
Boots, shoes, and analogous footwear	Pfister & Vogel Leather Company	22,721	Apr. 4	63	146
Boots, shoes, and lasts	J. Maddocks	23,505	Aug. 15	64	1004
Boots, shoes, and leather	Foot, Schulze & Co	23,643	Sept. 26	64	1787
Boots, shoes, and slippers	R. E. Larcom	23,728	Oct. 24	65	595
Bottles and vials. Glass	Whitney Glass Works	23,156	May 30	63	1380
Bottles. Nursing	W. M. Decker	23,734	Oct. 24	65	595
Bougies and suppositories	F. Wuersten	23,930	Dec. 19	65	1913
Boxes containing implements for shoe repairs.	L. Sacks	23,449	Aug. 1	64	711
Brandy	Brossault & Co	22,482	Feb. 14	62	1062
Brandy	Les Héritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin.	22,926	May 2	63	755
Brandy	Les Héritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin.	22,927	May 2	63	755
Brandy	E. Martell	23,042	May 16	63	1056
Brandy	G. Sayer & Co	23,869	Nov. 28	65	1401
Brandy	Wm. Bergethal Company	23,138	May 30	63	1378
Brandy. Cognac	Brossault & Co	22,366	Jan. 24	62	585
Brandy or cordial. Cherry	P. N. Heering	22,923	May 2	63	755
Brass articles for trimming and decoration, including screws and electric and gas fittings.	Lindner & Remig Manufacturing Company.	23,380	July 18	64	435
Bread	G. Alber	22,432	Feb. 7	62	896
Bread, biscuit, and fancy cakes	R. Smith	23,788	Nov. 7	65	890
Brewer's pitch, a pine-tree product	S. P. Shotter Company	23,004	May 9	63	908
Brewer's pitch, a pine-tree product	S. P. Shotter Company	23,005	May 9	63	908
Bricks, retorts, tiles, quares, pipes, lumps, and other articles made of fire-clay.	J. Cowen & Co	23,653	Sept. 26	64	1788
Bridle-bits	R. Sears	23,690	Oct. 10	65	293
Bronzes and silver and plated ware	Tiffany & Company	23,572	Sept. 5	64	1392
Brushes	S. Giesecke	22,411	Jan. 31	62	740
Brushes. Tooth	Florence Manufacturing Company	23,179	June 6	63	1528
Burlap bags	John C. Grafflin Company	22,489	Feb. 21	62	1203
Burlaps	J. T. Bailey & Co	22,671	Mar. 21	62	1817
Burlaps	J. T. Bailey & Co	22,985	May 9	63	906
Burlaps	J. T. Bailey & Co	22,986	May 9	63	906
Burlaps and buckram	J. T. Bailey & Co	22,672	Mar. 21	62	1817
Burlaps and buckram	J. T. Bailey & Co	22,983	May 9	63	906
Burlaps and buckram	J. T. Bailey & Co	22,984	May 9	63	996
Butter	Fox River Butter Company	23,257	June 27	63	1957
Butter and lard. Compound used as a substitute for	Parker, Webb & Company	23,432	Aug. 1	64	710
Butter, cheese, and milk-sugar	Potsdam Milk-Sugar Company	22,795	Apr. 11	63	309
Butterine	Swift & Company	23,201	June 13	63	1684
Butterine	Swift & Company	23,290	July 4	64	151
Buttons, clasps, and spring-fasteners for wearing-apparel and gloves.	Consolidated Fastener Company	23,194	June 6	63	1528
Buttons, tie-holders, studs, and kindred jewelry. Collar	Parks Bros. & Rogers	22,899	May 2	63	753
Cakes and crackers	La Fayette Cracker and Confectionery Company.	23,866	Nov. 28	65	1401
Calimine	W. A. Hall	22,562	Feb. 28	62	1349
Calisaya. Preparation of	C. A. Reed	23,155	May 30	63	1380
Cameras	G. I. Spalding	23,389	July 18	64	436
Candied pop-corn and other candied goods	R. E. Hunt	23,867	Nov. 24	65	1401
Candies	Hawley & Hoops	23,478	Aug. 15	64	1002
Candles	Phoenix Candle Company	23,619	Sept. 19	64	1646
Candles. Certain	Phoenix Candle Company	23,288	July 4	64	151
Candles of a high grade	Phoenix Candle Company	23,722	Oct. 17	65	439
Candles, stearine or stearic acid, oleine, and glycerine	De Roubaix, Oedenkoven & Co	23,528	Aug. 22	64	1128
Canned and preserved fish	J. M. Chapman	23,370	July 18	64	434
Canned corn	Illinois Canning Co	23,463	Aug. 8	64	855
Canned corn	Illinois Canning Co	23,464	Aug. 8	64	855
Canned corn	Illinois Canning Co	23,481	Aug. 15	64	1002
Canned corn	J. C. Michael & Sons	22,707	Mar. 24	62	1961
Canned corn	J. C. Michael & Sons	22,913	May 2	63	754
Canned corn	Mitchell Bros	23,345	July 11	64	296
Canned corn, fruits, and vegetables	D. W. Archer	23,679	Oct. 3	65	132
Canned fish, fruits, and vegetables	DeLafield, McGovern & Co	23,087	May 23	63	1199
Canned fish, fruits, and vegetables	DeLafield, McGovern & Co	23,088	May 23	63	1199
Canned fish, fruits, vegetables, soups, and milk	W. B. Timms	23,423	Aug. 15	64	1002
Canned fruit and vegetables	C. E. Bassett	23,431	Aug. 1	64	710
Canned fruit, oysters, vegetables, and fish	W. D. Cleveland	22,831	Apr. 18	63	460
Canned fruits	Seaman Brothers	23,089	May 23	63	1199
Canned fruits and vegetables	Hoopston Canning Co	22,497	Feb. 21	62	1204
Canned fruits and vegetables	Turin Canning and Pickling Company.	23,209	Nov. 14	65	1062
Canned fruits and vegetables	Turin Canning and Pickling Company.	23,810	Nov. 14	65	1062
Canned fruits, fish, meats, oysters, catsup, and soup	A. F. Remy Co	22,742	Apr. 4	63	148
Canned fruits, vegetables, fish, meat, oysters, catsup, and soup	A. F. Remy & Co	22,399	Jan. 31	62	739
Canned fruits, vegetables, fish, meats, oysters, catsup, and soup	A. F. Remy Co	23,015	May 9	63	908
Canned fruits, vegetables, fish, meats, oysters, catsup, and soup	A. F. Remy Co	23,466	Aug. 8	64	855
Canned fruits, vegetables, fish, meats, oysters, catsup, and soup	A. F. Remy Co	23,482	Aug. 15	64	1002
Canned goods	Randall, Rühl & Co	23,255	June 27	63	1957
Canned goods	Wells-Stone Mercantile Company	23,786	Nov. 7	65	889
Canned salmon	George & Barker	23,346	July 11	64	296

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Title.	Name.	No.	Date.	Official Gazette.	
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Canned salmon	George & Barker	23,371	July 18	64	434
Canned sweet corn	E. H. Lounsberry	23,736	Oct. 24	65	595
Canned vegetables	Illinois Canning Co	23,465	Aug. 8	64	855
Canned vegetables	Illinois Canning Co	23,621	Sept. 19	64	1646
Canned vegetables and fruits	D. W. Archer	23,905	Dec. 5	65	1590
Canned vegetables and fruits	B. S. Janney, Jr., & Co	23,130	May 30	63	1378
Canned vegetables and fruits	B. S. Janney, Jr., & Co	23,163	June 6	63	1527
Canned vegetables, including corn	Delafield, McGovern & Co	23,164	June 6	63	1527
Caps, detonators, cartridges, and shells	Zündhütchen-und Patronenfabrik, vormals Sellier & Bellot	23,650	Sept. 26	64	1787
Capsules, antiseptic uterine lotion, and laxative tablets. Vaginal	J. A. Miller	23,318	July 4	64	154
Car and locomotive wheels	Boies Steel Wheel Company	22,802	Apr. 11	63	310
Car-couplers and their parts	Trojan Car Coupler Company	22,381	Jan. 24	62	586
Car-couplings and parts thereof	Smillie Coupler and Manufacturing Company	23,419	July 25	64	558
Carbons for electrical purposes	H. Reisinger	23,777	Oct. 31	65	750
Cards. Playing	United States Printing Company	22,580	Mar. 7	62	1506
Cards. Playing	United States Printing Company	22,581	Mar. 7	62	1506
Cards. Playing	United States Printing Company	22,582	Mar. 7	62	1506
Cards. Playing	United States Printing Company	23,781	Nov. 7	65	889
Cards. Playing	United States Printing Company	23,782	Nov. 7	65	889
Carpets	Abegg & Rusch	22,278	Jan. 3	62	156
Carriages and wagons	G. B. Marx	22,856	Apr. 18	63	462
Cash-recorders and cash-registers	A. C. Hough	22,474	Feb. 14	62	1061
Cashmere	F. Probst & Co	22,905	May 2	63	753
Cashmeres	E. Petel & Co	22,422	Feb. 7	62	895
Cathartic	Eli Lilly & Company	22,650	Mar. 14	62	1649
Cathartics	Allaire, Woodward & Company	22,571	Feb. 28	62	1350
Cement	Phenix Portland Cement Company	22,362	Jan. 24	62	584
Cement. English Portland	National Building Supply Company	23,813	Nov. 14	65	1063
Cement. German Portland	National Building Supply Company	23,814	Nov. 14	65	1063
Cement. Hydraulic	Portland-Cement-Fabrik "Germania" H. Manske & Co	23,567	Sept. 5	64	1393
Cement. Portland	Aktieselskabet Aalborg Portland-Cement Fabrik	23,278	June 27	63	1959
Cement. Portland	Skanska Cement Aktie-Bolaget	23,277	June 27	63	1959
Cements. Portland and other stone	Baetjer & Meyerstein	22,790	Apr. 11	63	309
Cereal products. Certain named	Seeman Brothers	23,126	May 30	63	1378
Chains. Sash	Smith & Egge Manufacturing Company	23,590	Sept. 5	64	1393
Champagne	Kunkelmann & Co	23,626	Sept. 19	64	1647
Champagne	Kunkelmann & Co	23,627	Sept. 19	64	1647
Champagne	Kunkelmann & Co	23,628	Sept. 19	64	1647
Cheese	B. S. Janney, Jr., & Co	23,202	June 13	63	1684
Cheese	Koehler & Hinrichs	23,314	July 11	64	296
Cheese	A. C. Thuraas	23,524	Aug. 22	64	1127
Cheese. American, brick, Limburger, and imitation Swiss	N. Simon & Co	23,553	Aug. 29	64	1261
Chemical substances and mixtures. Certain named	Lee & Smith	22,493	Feb. 21	62	1204
Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes	United Alkali Company	22,946	May 2	63	757
Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes	United Alkali Company	22,947	May 2	63	757
Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes	United Alkali Company	22,948	May 2	63	757
Chicory and other coffee substitutes	H. Franck Söhne	23,623	Sept. 19	64	1647
Chicory and other coffee substitutes	H. Franck Söhne	23,624	Sept. 19	64	1647
Chicory or a coffee substitute	Haesaert & Buysse & Theo. D. Floto	23,789	Nov. 7	65	890
China, glass, and porcelain for table use and bric-a-brac	F. N. Osborne	23,934	Dec. 19	65	1913
China-ware and faience	A. Hache & Co	23,935	Dec. 19	65	1913
Chisels, gouges, plane-irons, and hand-tools for carpenters, builders, and woodworkers	C. Buck	23,105	May 23	63	1200
Chloride of sodium or common salt	T. Higgin & Co	23,675	Oct. 3	65	132
Chocolate	J. M. Chapman	22,329	Jan. 31	62	738
Chocolate	H. L. Pierce	22,356	Jan. 24	62	584
Chocolate for use in beverages, ice-cream, cakes, and the like	J. H. Barker & Co	23,790	Nov. 7	65	890
Chocolate icing	A. H. Stillwell	23,200	June 13	63	1684
Chocolates and other bonbons	Walter M. Lowney Company	22,591	Mar. 7	62	1507
Chucks	Westcott Chuck Company	22,800	Apr. 11	63	310
Cigar-molds	Miller, Dubrul & Peters Manufacturing Co	23,541	Aug. 22	64	1129
Cigar-molds	Miller, Dubrul & Peters Manufacturing Co	23,542	Aug. 22	64	1129
Cigar-molds	Miller, Dubrul & Peters Manufacturing Co	23,543	Aug. 22	64	1129
Cigar-molds	Miller, Dubrul & Peters Manufacturing Co	23,544	Aug. 22	64	1129
Cigars	Berninger Bros	23,741	Oct. 24	65	596
Cigars	Estabrook & Eaton	23,946	Dec. 26	65	2053
Cigars	F. Hanchett	22,402	Jan. 31	62	739
Cigars	T. R. Hennessy	22,424	Feb. 7	62	895
Cigars	H. H. Knollenberg & Son	22,823	Apr. 18	63	459
Cigars	E. F. Law	23,874	Nov. 28	65	1402
Cigars	F. Menendez	22,403	Jan. 31	62	739
Cigars	Silver State Cigar Company	22,864	Apr. 25	63	606
Cigars	F. X. Spitz	23,377	July 18	64	435
Cigars	B. Wasserman	22,350	Jan. 17	62	448
Cigars	B. Wasserman	22,351	Jan. 17	62	448
Cigars	B. Wasserman	22,352	Jan. 17	62	448
Cigars	Wertheimer Company	23,403	July 25	64	557
Cigars	Wertheimer Company	23,404	July 25	64	557
Cigars	Wertheimer Company	23,405	July 25	64	557
Cigars and cigarettes	G. W. Emich & Co	22,824	Apr. 18	63	459
Cigars and cigarettes	D. S. Erb & Co	23,668	Oct. 3	65	131
Cigars and cigarettes	Wing Brothers & Hart	23,076	May 23	63	1198

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Cigars, stogies, cheroots, and cigarettes, and smoking and chewing tobacco.	Baer Brothers.	23,198	June 13	63	1684
Cigarette-paper.	Abadie & Company.	23,306	July 4	64	153
Cigarettes.	American Tobacco Company.	23,580	Sept. 5	64	1390
Cigarettes.	American Tobacco Company.	23,581	Sept. 5	64	1392
Cigarettes.	American Tobacco Company.	23,602	Sept. 12	64	1531
Cigarettes.	American Tobacco Company.	23,740	Oct. 24	65	595
Cigarettes.	J. Lhove.	23,132	May 30	63	1378
Cigarettes and cut tobacco.	R. López.	22,404	Jan. 31	62	740
Cigarettes and smoking-tobacco.	S. Schinasi.	23,459	Aug. 8	64	854
Cigarettes and tobacco.	National Cigarette and Tobacco Company.	23,307	July 4	64	153
Cleaning and polishing preparation.	L. Mason & Co.	23,880	Nov. 28	65	1402
Cleanser for white gloves and shoes and white goods of all descriptions.	Cleansor Manufacturing Co.	23,519	Aug. 22	64	1127
Cleansing compound for the removal of spots and stains from fabrics.	S. B. Mims.	23,268	June 27	63	1958
Clocks.	F. Kroeber Clock Company.	22,718	Apr. 4	63	146
Clocks.	F. Kroeber Clock Company.	22,719	Apr. 4	63	146
Clocks. Alarm.	Electrical Reminder Company.	23,470	Aug. 8	64	855
Cloth. Press and filter.	Puech & Freret.	22,821	Apr. 18	63	459
Cloths for outer garments. Woolen, worsted, and cotton.	B. W. Greer.	23,121	May 30	63	1377
Cloths for outer garments. Woolen, worsted, and cotton.	B. W. Greer.	23,122	May 30	63	1377
Clothes-driers. Folding.	W. F. Redding.	23,372	Aug. 8	64	855
Clothes-wringers.	American Wringer Company.	23,635	Sept. 19	64	1648
Clothes-wringers.	Bissell Carpet Sweeper Company.	23,054	May 16	63	1057
Clothes wringers and driers.	American Wringer Company.	23,636	Sept. 19	64	1648
Clothing and shirts, collars, cuffs, neckwear, and underwear. Men's and boys' outer.	Vogel Brothers.	23,422	Aug. 1	64	709
Clothing. Boys' and children's.	David Bros. & Rose.	23,504	Aug. 15	64	1004
Clothing for men and boys.	Grossman, Michaelsohn & Co.	23,329	July 11	64	295
Clothing made from a knit fabric having a smooth face and a plush back.	I. Jaros.	23,615	Sept. 19	64	1646
Clothing. Men's, boys', and children's.	Straus, Glaser & Co.	23,949	Dec. 26	65	2058
Clothing. Oil.	H. M. Sawyer & Son.	22,766	Apr. 11	63	306
Coal.	Newell Coal Company.	22,503	Feb. 21	62	1204
Coal and wood.	H. L. Herbert & Co.	23,007	May 9	63	908
Coal. Bituminous.	Westmoreland Coal Company.	22,955	May 2	63	757
Coal. Mineral.	Jellico and Bird-Eye Coal Company.	22,438	Feb. 7	62	897
Coats, pantaloons, and vests for men and boys.	W. E. Smith.	22,521	Feb. 28	62	1346
Coats, pantaloons, and vests. Men's.	C. R. Lewis Clothing Manufacturing Co.	22,813	Apr. 18	63	458
Cocks and faucets.	J. Conity.	23,191	June 6	63	1528
Cocoa and chocolate.	P. Griffing.	23,080	May 23	63	1198
Cocoa and cocoa butter. Prepared.	J. and D. Blooker.	23,807	Nov. 14	65	1062
Coffee.	J. Aparicio & Co.	22,635	Mar. 14	62	1647
Coffee.	J. Butler.	23,944	Dec. 26	65	2058
Coffee.	T. H. Messenger & Co.	22,600	Mar. 7	62	1508
Coffee.	T. H. Messenger & Co.	22,919	May 2	63	755
Coffee.	E. T. Smith & Co.	22,433	Feb. 7	62	896
Coffee.	W. J. Stitt & Co.	23,383	July 18	64	436
Coffee.	Toledo Spice Company.	22,735	Apr. 4	63	148
Coffee and its substitutes.	C. A. Liftton.	22,460	Feb. 14	62	1060
Coffee and spices.	Wheeling Coffee and Spice Company.	22,636	Mar. 14	62	1647
Coffee and tea.	T. J. Lipton.	23,837	Nov. 21	65	1218
Coffee and tea.	T. J. Lipton.	23,838	Nov. 21	65	1218
Coffee and tea.	Wing Brothers & Hartt.	23,044	May 16	63	1056
Coffee berries.	T. B. Messenger & Co.	22,736	Apr. 4	63	148
Coffee. Chicory or a substitute for.	Haesnaert & Buysse & T. D. Floto.	22,895	Apr. 25	63	610
Coffee classifiers, hullers, polishers, power-screens, pulpers, and elevators.	M. Mason & Co.	22,676	Mar. 21	62	1218
Coffee, cocoa, and chocolate.	R. D. Harris.	23,678	Oct. 3	65	1321
Coffee. Composition.	Cody-Powell Coffee Company.	23,868	Nov. 28	65	1402
Coffee. Condensed.	Condensed Coffee Company.	22,599	Mar. 7	62	1507
Coffee. Hygienic.	Arand Brothers.	23,768	Oct. 31	65	749
Coffee machinery, including hullers, classifiers, polishers, screens, pulpers, engines, elevators, and boilers.	M. Mason & Co.	22,803	Apr. 11	63	310
Coffee. Preparation for improving the taste of.	O. E. Weber.	23,720	Oct. 17	65	439
Coffee. Roasted.	T. H. Messenger & Co.	22,598	Mar. 7	62	1507
Coffee substitute.	J. Montgomerie.	22,601	Mar. 7	62	1508
Coffee substitute.	E. C. Wheeler.	23,081	May 23	63	1198
Coffins.	W. H. Shockey.	22,414	Jan. 31	62	740
Collars and cuffs.	T. D. and J. L. Neelands.	23,642	Sept. 26	64	1787
Collyrium employed as a remedy for the eyes.	R. Hudnut.	23,310	July 4	64	153
Colors, varnishes, and driers. Artists'.	J. G. Müller & Co.	23,457	Aug. 8	64	854
Combs. Fine-tooth.	W. H. Noyes & Bro.	22,838	Apr. 18	63	461
Complexion-powder.	Tetlow Manufacturing Company.	22,644	Mar. 14	62	1648
Composition for cleaning fabrics and for household use. Powdered.	Progressive Product Company.	23,142	May 30	63	1379
Composition for cleaning wood, marble, tilings, ceilings, &c.	C. J. Jorgensen.	22,655	Mar. 14	62	1649
Compound for female disorders. Fluid.	J. L. Lyon.	23,876	Nov. 28	65	1402
Condition-powders for sick animals.	B. K. Adams.	22,993	May 9	63	907
Cones for receiving masses of yarn or thread wound thereon.	A. A. Brigham.	22,450	Feb. 7	62	898
Confectionery.	Wallace & Co.	23,075	May 23	63	1198
Confectionery. Coloring-matter for use in.	G. Morris.	22,888	Apr. 25	63	609
Confectionery in the form of flavored tablets.	Hance Bros. & White.	22,725	Apr. 4	63	147
Confections.	H. Williamson.	22,632	Mar. 14	62	1647
Coniferæ. Certain named products of the.	R. S. Prindle.	22,554	Feb. 28	62	1349
Cooking utensils and other enameled domestic ware. Enameled.	Schweimler Emailirwerk Braselmann, Pittmann & Co.	23,157	May 30	63	1380
Copying press, bath, or moistening apparatus.	H. C. Davison.	22,810	Apr. 18	63	458
Cord. Braided sash.	Samson Cordage Works.	23,509	Aug. 15	64	1004
Cordials.	G. Budde.	23,718	Oct. 17	65	439
Cordials.	P. W. Engs & Sons.	23,521	Aug. 22	64	1127
Corn and bunion cure.	Nichols Manufacturing Company.	23,846	Nov. 21	65	1219

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Corn having a flaky form. Alimentary products from	Indianapolis Hominy Mills	23,787	Nov. 7	65	889
Corn in the form of flakes. Alimentary products from	Indianapolis Hominy Mills	22,637	Mar. 14	62	1648
Corn-shellers	Kingsland & Douglas Manufacturing Company.	22,336	Jan. 10	62	314
Corset-waists	O. P. Flynt	22,420	Feb. 7	62	895
Corset-waists	H. W. Lyon	22,976	May 9	63	905
Corset-waists	H. W. Lyon	22,977	May 9	63	905
Corset-waists	H. W. Lyon	22,978	May 9	63	905
Corsets	Bortree Manufacturing Company	23,938	Dec. 19	65	1914
Corsets	H. B. Cladin Company	22,628	Mar. 14	62	1647
Corsets	Farcy & Oppenheim	22,811	Apr. 18	63	458
Corsets	Fellheimer & Lindauer	23,755	Oct. 31	65	748
Corsets	Gage-Downs Company	22,519	Feb. 28	62	1346
Corsets	C. H. Langdon and G. C. Batcheller	22,277	Jan. 3	66	156
Corsets	Schilling Corset Co	23,242	June 27	63	1956
Corsets	E. Schweinburg	23,804	Nov. 14	65	1062
Corsets	Worcester Corset Company	23,686	Oct. 10	65	293
Corsets, corset-waists, and shoulder-braces	Williamson Corset and Brace Company.	22,668	Mar. 21	62	1817
Corsets for ladies	C. L. Olmstead	23,112	May 30	63	1377
Cosmetic	H. W. Frisby	22,804	Apr. 11	63	310
Cosmetic	South Bend Medicine Company	23,026	May 16	63	1055
Cosmetic. Liquid	Fredrickson & Fredrickson	23,358	July 11	64	298
Cosmetics	T. H. Bates	22,541	Feb. 28	62	1348
Cosmetics	Nielsen & Wyler	22,310	Jan. 10	62	312
Cosmetics	Wakelee & Company	23,177	June 6	63	1528
Cotton. Chemical composition for softening or treating	Zelner Bros	22,944	May 2	63	756
Cotton cloth. Printed	Sharpless Bros	23,072	May 23	63	1197
Cotton cloth with a silk finish for dresses and linings	Sharpless Bros	22,904	May 2	63	753
Cotton dress goods	Smith, Hogg & Gardner	22,862	Apr. 25	63	606
Cotton fabrics	Amoskeag Manufacturing Company	22,817	Apr. 18	63	459
Cotton fabrics	Amoskeag Manufacturing Company	22,902	May 2	63	753
Cotton goods	Massachusetts Cotton Mills	23,019	May 16	63	1054
Cotton goods. Bleached, brown, and printed	G. Willis	22,903	May 2	63	753
Cotton goods. Bleached, brown, and printed	G. Willis	23,022	May 16	63	1054
Cotton goods. Brown, bleached, and printed	G. Willis	23,712	Oct. 17	65	438
Cotton goods. Gray, bleached, dyed, printed, and fancy domestic	Neuss, Hesslein & Co.	22,818	Apr. 18	63	459
Cotton goods. Gray, bleached, dyed, printed, and fancy domestic	Neuss, Hesslein & Co.	22,819	Apr. 18	63	459
Cotton goods. Gray, bleached, dyed, printed, and fancy domestic	Neuss, Hesslein & Co.	22,820	Apr. 18	63	459
Cotton goods. Woven	Massachusetts Cotton Mills	23,710	Oct. 17	65	438
Cotton goods. Woven	Massachusetts Cotton Mills	23,711	Oct. 17	65	438
Cotton goods. Woven	Massachusetts Cotton Mills	23,780	Nov. 7	65	889
Cotton pile fabrics	Jones Brothers & Co.	22,982	May 9	63	906
Cotton, wool, and silk fabrics	Gladstone Manufacturing Co.	22,304	Jan. 10	62	312
Cotton, wool, silk, and worsted or hair piece goods	J. Maddocks	23,713	Oct. 17	65	438
Cough drops	G. D. Feidt	23,847	Nov. 21	65	1219
Cough drops	Smith Brothers	22,294	Jan. 3	62	158
Cough elixir	M. A. Lemm	23,631	Sept. 19	64	1647
Cough pills, catarrh cure, liniment, and tonics	J. Schermanson	22,295	Jan. 3	62	158
Crackers, cakes, and biscuits	Independent Biscuit and Cracker Company.	23,251	June 27	63	1957
Crackers, cakes, and biscuits	Independent Biscuit and Cracker Company.	23,343	July 11	64	296
Crackers or biscuits	New York Biscuit Company	23,737	Oct. 24	65	595
Cream	West Surrey Central Dairy Co	23,839	Nov. 21	65	1219
Cribs, cradles, and children's beds	Kenosha Crib Company	23,451	Aug. 1	64	712
Cultivators and bean-harvesters	Wells Cultivator Co.	22,452	Feb. 7	62	898
Cure. Catarrh	Century Manufacturing Company	22,348	Jan. 17	62	447
Cure. Dandruff	Columbian Chemical Co.	22,936	May 2	63	756
Cure. Dropsy	Smith & Bailey	22,610	Mar. 7	62	1508
Cure for the tobacco habit	K. Tinker and W. A. Hibbard	22,392	Jan. 31	62	738
Cure. Kidney and liver	Peterboro Medicine Co.	22,447	Feb. 7	62	897
Cures. Headache	E. A. Butts	23,147	May 30	63	1379
Currycombs	Holgate Brothers Company	22,505	Feb. 21	62	1204
Curry powder	W. H. Crossman & Bro.	23,917	Dec. 12	65	1764
Cutlery	Sperry & Alexander	23,158	May 30	63	1380
Cutlery, including knives, razors, shears, files, &c	Estate of F. Wiebusch	23,639	Sept. 19	64	1648
Decorative work. Certain named	Hall & Garrison	23,613	Sept. 19	64	1646
Denims. Blue	Massachusetts Cotton Mills	23,752	Oct. 31	65	748
Dental dams	I. B. Kleinert Rubber Company	23,276	June 27	63	1959
Dental remedies and specifics	M. L. Pine	23,027	May 16	63	1055
Dental rubber	E. J. McCormick	23,067	May 23	63	1197
Dentifrice	W. H. Farrand	22,441	Feb. 7	62	897
Dentifrice	S. S. White Dental Manufacturing Company.	22,542	Feb. 28	62	1348
Dentifrice	S. C. Wells & Co.	23,486	Aug. 15	64	1002
Dermal toilet preparations	J. A. Maxim	22,689	Mar. 21	62	1819
Dishes for table and toilet use	Jones, McDuffee & Stratton	23,646	Sept. 26	64	1787
Dishes for table and toilet use	Jones, McDuffee & Stratton	23,647	Sept. 26	64	1787
Disinfectant	H. B. Platt	22,653	Mar. 14	62	1649
Disinfectant and sterilizing compounds	"Animes" Syndicate	22,789	Apr. 11	63	309
Disinfectants	Embalmers' Supply Company	22,368	Jan. 24	62	585
Disinfectants	Newton, Chambers & Company	23,664	Sept. 26	64	1788
Disinfectants	C. A. Simpson	22,461	Feb. 14	62	1060
Disinfecting and therapeutical preparations. Certain named	Ichthyol-Gesellschaft Cordes, Hermann & Co.	23,561	Aug. 29	64	1262
Disinfecting chemical compound for purifying water	J. Q. Lemmon	23,217	June 13	63	1686
Disinfecting compounds. Certain named receptacle for	Excelsior Disinfecter Co.	22,574	Feb. 28	62	1350
Distillation of pure water. Portable still and water-condenser for the	American Water Purifying Company.	22,300	Jan. 3	62	158
Dividers. Proportional	Keuffel & Esser Company	23,640	Sept. 19	64	1648
Dolls	Craemer & Héron	23,548	Aug. 29	64	1261

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Title.	Name.	No.	Date.	Official Gazette.	
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Dress and corset stays	J. Janowitz	23,328	July 11	64	295
Dress goods. Wool and silk and wool black	Les de A. Guillaumet & G. Maes	22,421	Feb. 7	62	895
Dress-shields. Seamless stockinet	I. B. Kleinert Rubber Company	22,812	Apr. 18	63	458
Dress-trimmings	Dreyfuss & Toff	23,282	July 4	64	151
Dresses and dress goods. Women's	C. E. Taylor	23,937	Dec. 19	65	1914
Drilling	Minot, Hooper & Co	22,630	Mar. 14	62	1647
Drugs	L. Sollmann	23,583	Sept. 5	64	1393
Drum heads, strings, and materials	E. Boulanger	22,585	Mar. 7	62	1506
Dye-stuffs produced from logwood	William J. Matheson & Company	22,950	May 2	63	757
Electric batteries. Open-circuit	P. C. Burns	23,219	June 13	63	1686
Electric batteries. Open-circuit	P. C. Burns	23,220	June 13	63	1686
Electrical instruments employed in the treatment of disease. Certain	Electrolibration Company	22,617	Mar. 7	62	1509
Emollient for the skin	Shirey & Brown	23,800	Nov. 7	65	890
Engraving-plates for making relief-cuts	T. M. Bell, W. T. Dickinson, and N. A. Pollock	22,660	Mar. 14	62	1649
Extract or coloring material for food	Waverly Manufacturing Co	22,540	Feb. 28	62	1348
Extracts. Handkerchief	A. B. Wrisley	22,439	Feb. 7	62	897
Eye guard and protector	E. G. Stevens	23,330	July 11	64	295
Eyes. Artificial	F. A. Müller Söhne	23,275	June 27	63	1959
Eyeglasses. Metal	Ziegler Brothers	23,885	Nov. 28	65	1402
Fabrics of wool, worsted, hair, silk, linen, hemp, and cotton. Piece	Dr. Jaeger's Sanitary Woollen System Co.	23,196	June 13	63	1684
Face-powder	Oak Chemical Company	22,844	Apr. 18	63	461
Face-wash and curling fluid	German American Drug Company	23,417	July 25	64	558
Fat. Prepared and refined beef	M. Zimmermann	22,480	Feb. 14	62	1062
Fats used for culinary purposes. Refined	M. Zimmermann	22,285	Jan. 3	62	157
Feed-water heaters and purifiers	W. Webster	23,013	May 9	63	908
Fertilizer. Plant	J. Weber	22,945	May 2	63	756
Fertilizers	Cleveland Linseed Oil Company	23,279	June 27	63	1959
Fertilizers	Cleveland Linseed Oil Company	23,633	Sept. 19	64	1648
Fertilizers. Artificial	Marline Manufacturing Company	22,467	Feb. 14	62	1061
Filters. Oil	F. A. Nusbaum	22,575	Feb. 23	62	1350
Filters. Water	J. C. Wands	23,945	Dec. 26	65	2058
Fire-hose and woven fabric of which it is composed	New York Belting and Packing Company	23,124	May 30	63	1378
Firearms. Revolving	Smith & Wesson	23,056	May 16	63	1057
Fish. Fresh, frozen, and pickled	S. Schmidt & Co.	23,840	Nov. 21	65	1219
Fish. Preserved	J. Pew & Son	22,906	May 2	63	754
Fish. Preserved	J. Pew & Son	22,907	May 2	63	754
Fish. Preserved	J. Pew & Son	22,908	May 2	63	754
Fish. Preserved	J. Pew & Son	22,909	May 2	63	754
Fish. Preserved	J. Pew & Son	22,910	May 2	63	754
Fish. Whole, cut, and boneless	L. Hough Co	22,538	Feb. 28	62	1348
Fishing-lines and twine	S. Green	23,884	Nov. 28	65	1402
Flavoring extracts and compositions for flavoring purposes	Avery Lactart Company	23,000	May 9	63	907
Florida water	L. R. Morrison & Co	23,557	Aug. 29	64	1261
Flour	G. T. Chester	22,534	Feb. 28	62	1347
Flour	Leaycraft & Co	23,259	June 27	63	1957
Flour	C. T. Long	22,708	Mar. 28	62	1962
Flour	H. W. Peabody & Co	22,740	Apr. 4	63	148
Flour	Philip H. Postel Milling Company	23,260	June 27	63	1957
Flour	B. S. Rembaugh	23,128	May 30	63	1378
Flour	R. Smith	22,739	Apr. 4	63	148
Flour	L. A. Wright & Co	23,167	June 6	63	1527
Flour and meal	Leaycraft & Co	23,372	July 18	64	435
Flour and meal	Leaycraft & Co	23,373	July 18	64	435
Flour and meal	G. F. Moyer	22,398	Jan. 31	62	739
Flour and other cereal products	Royal Milling Company	23,677	Oct. 3	65	132
Flour, hominy, and cornmeal. Wheat, graham, rye, and buckwheat	Minneapolis Grain and Feed Co.	22,320	Jan. 10	62	313
Flour, meal, and crushed cereals	E. Elsworth & Co.	23,910	Dec. 12	65	1763
Flour. Wheat	Bryan, Miner & Read	22,358	Jan. 24	62	584
Flour. Wheat	Daisy Roller Mill Company	22,535	Feb. 28	62	1347
Flour. Wheat	C. Dorr & Son	23,429	Aug. 1	64	709
Flour. Wheat	Duluth Imperial Mill Company	23,695	Oct. 10	65	293
Flour. Wheat	Empire Mill Co	22,282	Jan. 3	62	156
Flour. Wheat	F. L. Greenleaf	23,002	May 9	63	907
Flour. Wheat	Kauffman Milling Company	23,381	July 18	64	435
Flour. Wheat	Lyon, Dupuy & Co	23,906	Dec. 5	65	1590
Flour. Wheat	Marshall, Kennedy Milling Company	23,421	July 25	64	558
Flour. Wheat	North Dakota Milling Company	22,319	Jan. 10	62	313
Flour. Wheat	Northwestern Consolidated Milling Company	22,359	Jan. 24	62	584
Flour. Wheat	Northwestern Consolidated Milling Company	23,296	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,297	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,298	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,299	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,300	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,301	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,302	July 4	64	152
Flour. Wheat	Northwestern Consolidated Milling Company	23,384	July 18	64	436
Flour. Wheat	Northwestern Consolidated Milling Company	23,696	Oct. 10	65	294
Flour. Wheat	Northwestern Consolidated Milling Company	23,769	Oct. 31	65	749
Flour. Wheat	A. C. & E. A. Pry	23,261	June 27	63	1958

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Flour. Wheat.....	C. S. Seaver.....	22,830	Apr. 18	63	460
Flour. Wheat.....	Spanogle & Yeager.....	23,049	May 16	63	1057
Flour. Wheat.....	Star and Crescent Milling Company.....	23,262	June 27	63	1958
Flour. Wheat.....	W. H. Stokes.....	22,283	Jan. 3	62	157
Flour. Wheat.....	W. H. Stokes.....	23,295	July 4	64	152
Flour. Wheat.....	Thompson Milling Company.....	23,430	Aug. 1	64	709
Flour. Wheat and rye.....	S. Green.....	22,284	Jan. 3	62	157
Fly-paper. Adhesive.....	Detroit Fly Paper Company.....	23,225	June 20	63	1813
Fodder for animals.....	Cleveland Linseed Oil Company.....	23,263	June 27	63	1958
Food and systemic tonic and restorative. Liquid.....	F. A. Lovcraft.....	23,210	June 13	63	1685
Food. Animal.....	S. D. Goodrich.....	22,317	Jan. 10	62	313
Food for horses, cattle, sheep, swine, and fowl.....	W. D. Carpenter.....	23,235	June 20	63	1814
Food for horses, cattle, sheep, swine, and fowl.....	W. D. Carpenter.....	23,236	June 20	63	1814
Food for horses, cattle, sheep, swine, and fowl.....	W. D. Carpenter.....	23,237	June 20	63	1814
Food for infants and invalids.....	Harvard Baby Food Co.....	23,125	May 30	63	1378
Food for infants and invalids. Prepared.....	Imperial Granum Company.....	23,909	Dec. 13	65	1763
Food for stock. Medicated compound.....	Phoenix Stock Food Co.....	23,355	July 11	64	297
Food or peptone. Artificially-digested.....	Fairchild Bros. & Foster.....	23,467	Aug. 8	64	855
Food substances. Oleaginous.....	N. K. Fairbank & Company.....	23,697	Oct. 10	65	294
Food for horses, cattle, sheep, swine, and fowl.....	W. D. Carpenter.....	23,529	Aug. 22	64	1128
Fountains, brooders, and incubators for poultry.....	G. S. Singer.....	23,829	Nov. 14	65	1064
Fowling-pieces and other small firearms.....	H. Keidel.....	22,965	May 2	63	758
Fruit. Pie.....	W. H. Marvin & Co.....	23,808	Nov. 14	65	1062
Fruits.....	P. H. Westervelt & Co.....	23,575	Sept. 5	64	1392
Fuel. Chemical.....	W. E. Tarbel.....	22,314	Jan. 10	62	313
Fuller's earth.....	L. A. Salomon & Bro.....	22,891	Apr. 25	63	609
Furnaces or agricultural boilers. Caidron.....	T. Cascaden, Jr.....	22,961	May 2	63	758
Furs.....	A. Jacobson & Bro.....	22,589	Mar. 7	62	1507
Game implements consisting of lariats and targets.....	Lariat Manufacturing Company.....	23,539	Aug. 22	64	1129
Game. Parlor.....	W. A. Walker.....	23,224	June 20	63	1813
Game played with a board and pieces of wood or other suitable material.....	W. Eacrett.....	22,897	May 2	63	753
Games. Apparatus for outdoor.....	A. Lauder.....	23,363	July 11	64	298
Games. Apparatus for outdoor.....	A. Lauder.....	23,385	July 18	64	436
Games. Apparatus for outdoor.....	A. Lauder.....	23,386	July 18	64	436
Games. Apparatus for outdoor.....	A. Lauder.....	23,387	July 18	64	436
Garment-supporters. Certain.....	G. N. Buck.....	23,452	Aug. 8	64	854
Garment-supporters. Certain.....	G. N. Buck.....	23,453	Aug. 8	64	854
Garments worn by men, women, and children.....	Dr. Jaeger's Sanitary Woollen System Co.....	23,477	Aug. 8	64	856
Gas purification. Washer-scrubber for.....	Kirkham, Hulett & Chandler.....	22,415	Jan. 31	62	740
Germicides, disinfectants, and other deodorizing preparations.....	Chemische Fabrik auf Actien, vormals E. Schering.....	23,629	Sept. 19	64	1647
Glass-cleaning preparations.....	Reliance Manufacturing Company.....	22,557	Feb. 28	62	1349
Glass, known as picture, window, coffin, car, coach, store, and show-case glass. Sheet.....	Chambers Glass Company.....	22,324	Jan. 10	62	314
Glass. Rolled sheet.....	Mississippi Glass Company.....	23,510	Aug. 15	64	1004
Glass. Translucent material in sheets for decorating window-glassware. Cut.....	McCaw, Stevenson & Orr.....	22,791	Apr. 11	63	309
Glassware, including tableware and fancy articles.....	C. Dorfinger & Sons.....	22,761	Apr. 11	63	306
Glassware, including tableware and fancy articles.....	Mount Washington Glass Company.....	22,408	Jan. 31	62	740
Glassware, including tableware and fancy articles.....	Mount Washington Glass Company.....	22,409	Jan. 31	62	740
Glassware. Shades, globes, and other.....	Phoenix Glass Company.....	23,832	Nov. 21	65	1218
Glove-grain leather.....	Allen, Field & Lawrence.....	23,336	July 11	64	295
Gloves.....	Fownes Brothers & Co.....	23,017	May 16	63	1054
Gloves.....	J. & M. Lehman.....	22,484	Feb. 21	62	1203
Gloves.....	Perrin Frères et Cie.....	23,331	July 11	64	295
Gloves.....	Perrin Frères et Cie.....	23,332	July 11	64	295
Gloves.....	Perrin Frères et Cie.....	23,333	July 11	64	295
Gloves.....	Perrin Frères et Cie.....	23,334	July 11	64	295
Gloves.....	Perrin Frères et Cie.....	23,335	July 11	64	295
Glue for mending china, glass, leather, &c.....	O. Cabana, Jr.....	23,406	July 25	64	557
Glue. Liquid.....	Reliance Manufacturing Company.....	22,552	Feb. 28	62	1349
Gold, silver, and plated flat and table ware and jewelry.....	W. B. Durgin.....	23,326	July 11	64	295
Goods. Certain named dry.....	York Manufacturing Company.....	22,767	Apr. 11	63	306
Grain-header.....	Acme Harvester Company.....	23,476	Aug. 8	64	856
Grain, seeds, fertilizers, and the like. Machines for distributing.....	Empire Drill Company.....	23,570	Aug. 29	64	1262
Granite-ware articles for household use.....	Vienna Enamel and Stamping Company.....	23,471	Aug. 8	64	855
Grapes.....	I. Newton.....	23,249	June 27	63	1956
Grapes and grape-vines.....	J. S. McKinley.....	23,760	Oct. 31	65	749
Graters. Nutmeg.....	Steel Edge Stamping and Retinning Company.....	22,299	Jan. 3	62	158
Grease and blacking. Harness.....	A. Gerstner.....	22,315	Jan. 10	62	313
Grease. Belt.....	G. W. Southwick.....	23,605	Sept. 12	64	1531
Grease for vehicles. Axle.....	Cassette Oil Company.....	23,360	July 11	64	298
Grease. Plumbago axle.....	United States Graphite Company.....	22,851	Apr. 18	63	462
Guitars.....	A. Gemünder & Sons.....	22,759	Apr. 11	63	306
Guitars, mandolins, banjos, and zithers.....	W. J. Dyer & Bro.....	23,193	June 13	63	1684
Gum. Chewing.....	N. Bate and H. C. Enos.....	22,592	Mar. 7	62	1507
Gum. Chewing.....	Boss & Hoover Co.....	22,305	Jan. 10	62	312
Gum. Chewing.....	Boss & Hoover Company.....	22,726	Apr. 4	63	147
Gum. Chewing.....	Carleton & Co.....	22,357	Jan. 24	62	584
Gum. Chewing.....	G. Elmendorf.....	22,390	Jan. 31	62	733
Gum. Chewing.....	S. B. Lafferty.....	22,633	Mar. 14	62	1647
Gum. Chewing.....	W. S. Robison.....	23,479	Aug. 15	64	1002
Gum. Chewing.....	F. W. Sultan and J. A. Wellington.....	23,574	Sept. 5	64	1392
Gum. Chewing.....	E. W. Thompson.....	22,727	Apr. 4	63	147
Gum. Chewing.....	E. W. Thompson.....	23,833	Nov. 21	65	1218
Gum. Chewing.....	R. Wright.....	23,369	July 18	64	434
Gunpowder. Sporting.....	American Powder Mills.....	23,458	Aug. 8	64	854
Hair-clippers.....	American Shearer Manufacturing Company.....	23,733	Oct. 24	65	595
Hair-clippers.....	Brown & Sharpe Manufacturing Company.....	23,726	Oct. 17	65	440
Hair-dressing.....	M. T. Hickey.....	22,645	Mar. 14	62	1648

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Hair-eradicators.....	C. A. Vogeler Co.....	22,309	Jan. 10	62	312
Hair-invigorator.....	M. Glencle.....	22,998	May 9	63	907
Hair preparation.....	M. S. Kelso.....	23,747	Oct. 24	65	596
Hair preparation.....	R. Shoemaker & Co.....	23,897	Dec. 5	65	1589
Hair. Preparation to remove superfluous.....	A. E. Oppenheimer.....	22,937	May 2	63	756
Hair restorative and perfumery.....	J. W. Perry.....	22,839	Apr. 18	63	461
Hair tonics.....	L. P. Federmeier.....	23,882	Nov. 28	65	1402
Hams and pork meat.....	Edward Heitzberg Packing and Provision Company.....	23,292	July 4	64	132
Hams, bacon, and shoulders.....	Swift & Company.....	22,638	Mar. 14	62	1648
Hams, bacon, smoked meats, and shoulders.....	Jersey City Packing Company.....	22,595	Mar. 7	62	1507
Hams, breakfast-bacon, and shoulders.....	Swift & Company.....	23,480	Aug. 15	64	1002
Hams, shoulders, breakfast bacon, and lard. Sugar-cured.....	Swift & Company.....	23,050	May 16	63	1057
Hams. Sugar-cured.....	Jersey City Packing Company.....	22,400	Jan. 31	62	739
Hardware, including locks and latches. Builders'.....	Reading Hardware Company.....	23,325	July 4	64	154
Harmonicas.....	S. Blumenthal.....	23,888	Dec. 5	65	1589
Harmonicas, accordions, and similar instruments.....	C. Essbach.....	23,614	Sept. 19	64	1646
Harness for horses and other draft-animals.....	F. O. Bailey & Co.....	23,186	June 6	63	1528
Harness, saddles, and collars.....	S. R. & I. C. McConnell.....	23,418	July 25	64	558
Harvesting-machines. Guard-fingers, cutters, knife-sections, and other parts of.....	Warder, Bushnell & Glessner Company.....	23,681	Oct. 3	65	132
Harvesting-machines, mowing-machines, reaping-machines, and combined reapers and mowers.....	Warder, Bushnell & Glessner Company.....	23,683	Oct. 3	65	132
Hats and caps.....	H. M. Silverman Company.....	22,483	Feb. 21	62	1203
Hats, caps, and bonnets.....	J. Maddocks.....	23,503	Aug. 15	64	1004
Hats. Polishing preparation for silk.....	F. N. Blanc.....	22,555	Feb. 28	62	1349
Henrietta cloth.....	W. L. Wellington.....	23,407	July 25	64	557
Herrings and sardines.....	Yzermans & Co.....	23,293	July 4	64	152
Hides, sides, splits, or skins, or similar forms of leather.....	H. Smith.....	22,423	Feb. 7	62	895
Hogs. Trimmings from the fore shoulders of.....	Swift & Company.....	23,525	Aug. 22	64	1128
Hollow ware. Enameled.....	Stransky & Co.....	23,413	July 25	64	558
Honey.....	C. M. Blanchard.....	22,280	Jan. 3	62	156
Hooks and eyes.....	Firm of W. Prym.....	23,925	Dec. 12	65	1764
Hooks and eyes.....	A. Steinhardt & Bro.....	23,648	Sept. 26	64	1787
Horse-blankets.....	W. B. Riley & Co.....	23,342	July 11	64	296
Horse-rasps.....	Heller & Bros.....	23,188	June 6	63	1528
Horses and other animals. Cleansing mixture for.....	T. E. and W. V. Baird.....	23,959	July 11	64	298
Horseshoe-nails.....	New Process Nail Company.....	23,157	June 6	63	1528
Hose and belting. Rubber and textile.....	Boston Woven Hose and Rubber Company.....	23,598	Sept. 12	64	1530
Hose. Hydraulic and fire.....	Eureka Fire Hose Company.....	23,616	Sept. 19	64	1646
Hose. Hydraulic and fire.....	Eureka Fire Hose Company.....	23,617	Sept. 19	64	1646
Hose. Hydraulic and fire.....	Eureka Fire Hose Company.....	23,618	Sept. 19	64	1646
Hose. Rubber-lined.....	C. Callahan.....	23,428	Aug. 1	64	709
Hose-supporters.....	C. J. Higley and E. C. Tooker.....	23,756	Oct. 31	65	748
Hosiery.....	J. Blood & Co.....	23,426	Aug. 1	64	709
Hosiery.....	I. C. Hunsicker & Co.....	22,341	Jan. 17	62	447
Hosiery.....	I. C. Hunsicker & Co.....	22,342	Jan. 17	62	447
Hosiery and underwear.....	Willcox & Gibbs Sewing Machine Company.....	23,194	June 13	63	1684
Hot air and water heaters.....	Richardson & Boynton Company.....	23,323	July 4	64	154
Incubators and brooders.....	G. H. Stahl.....	22,865	Nov. 28	65	1401
Ingots or other castings of brass.....	Manganese Bronze and Brass Company.....	23,732	Oct. 24	65	595
Ingots or other castings of bronze.....	Manganese Bronze and Brass Company.....	23,731	Oct. 24	65	595
Inhaler in the form of a bottle provided with tubes. Medical.....	W. H. Bergfels.....	22,371	Jan. 24	62	585
Injectors. Steam-boiler.....	Pembrey Injector Company.....	22,962	May 2	63	758
Ink. Drawing.....	H. Sandrock & Co.....	23,907	Dec. 5	65	1590
Ink. Writing.....	Reliance Manufacturing Company.....	22,809	Apr. 18	63	458
Inks. Writing, copying, and all kinds of.....	J. Lyons.....	22,715	Apr. 4	63	146
Insect and vermin destroying preparations.....	A. Isaacson & Son.....	23,498	Aug. 15	64	1003
Insect-exterminating compound.....	Watson, Erwin & Co.....	23,320	July 4	64	154
Insect-powder.....	M. A. Hawley.....	22,316	Jan. 10	62	313
Insecticide.....	R. E. King.....	23,391	July 18	64	436
Insecticide.....	S. Mueller.....	23,875	Nov. 28	65	1402
Insecticide, disinfectant, and cleansing liquid.....	G. H. Smith and T. W. Day.....	23,706	Oct. 10	65	294
Insecticides.....	D. J. Lambert.....	23,705	Oct. 10	65	294
Insulated wire and insulated wire cables.....	Phillips Insulated Wire Company.....	23,857	Nov. 21	65	1220
Insulating-varnish.....	Massachusetts Chemical Company.....	23,051	May 16	63	1057
Insulators. Electrical.....	E. Munsell, L. W. Kingsley, and F. Brooks.....	22,623	Mar. 7	62	1510
Irish frieze and chevrot cloths.....	E. Connor & Co.....	23,922	Dec. 12	65	1764
Japans and varnishes.....	Herberts & Dax.....	22,563	Feb. 28	62	1349
Jewelry and silverware.....	Davis & Galt.....	22,275	Jan. 3	62	156
Jewelry and watches.....	Tiffany & Company.....	23,573	Sept. 5	64	1392
Jewelry formed of artificial flowers. Ornamental.....	Fishel, Nessler & Co.....	23,016	May 16	63	1054
Jewelry, spoons, and other flat ware.....	G. B. Stocking.....	22,807	Apr. 18	63	458
Jewelry, spoons, forks, ladles, cutlery, and similar articles.....	F. N. Osborne.....	23,729	Oct. 24	65	595
Jewelry, spoons, forks, ladles, cutlery, and similar articles.....	F. N. Osborne.....	23,730	Oct. 24	65	595
Journal-bearings. Babbitt metal and antifriction metal for.....	W. A. Rottmann.....	23,280	June 27	63	1959
Kerosene.....	H. W. Peabody & Co.....	22,951	May 2	63	757
Ketchup, chowchow, pickles, and other preserved fruits and vegetables, sauces, and jellies.....	H. Wichert.....	22,887	Apr. 25	63	609
Knit underwear.....	W. Bengel Söhne.....	23,684	Oct. 10	65	293
Knit underwear.....	W. Bengel Söhne.....	23,685	Oct. 10	65	293
Knit underwear.....	Brown, Durrell & Co.....	23,863	Nov. 28	65	1401
Knit underwear. Medicated.....	Montreal Silk Mills Company.....	22,979	May 9	63	906
Knitted shawls.....	Schlottmann & Co.....	23,597	Sept. 12	64	1530
Knitted undergarments.....	A. N. Loeb & Co.....	22,487	Feb. 21	62	1203
Knives and razors.....	J. Engstrom.....	22,852	Apr. 18	63	462
Knives, scissors, pocket implements and tools, and the like.....	Christy Knife Company.....	23,501	Aug. 15	64	1003
Kraut.....	C. Schopp & Co.....	23,812	Nov. 14	65	1062

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Lace-pins, scarf-pins, studs, ear-drops, and similar articles	R. L. Moorhead & Co	22,627	Mar. 14	62	1647
Lamp-chimneys	F. W. Büning	22,218	June 13	63	1686
Lamps and lamp-burners	Bridgeport Brass Company	22,693	Mar. 21	62	1819
Lamps and lanterns. Tubular	Steam Gauge and Lantern Company	23,239	June 20	63	1814
Lamps. Arc and incandescent	W. D. and J. W. Packard	23,514	Aug. 15	64	1004
Lamps, dynamos, and electric fixtures. Incandescent	J. W. and W. D. Packard	22,577	Feb. 28	62	1350
Lamps. Holders, switches, and appliances for electrical	Edison & Swan United Electric Light Company	23,365	July 11	64	298
Lamps. Incandescent electric	Electric Manufacturing Company	22,412	Jan. 31	62	740
Lamps. Oil-burning	Edward Miller & Company	23,008	May 9	63	908
Lamps. Oil-burning	Edward Miller & Company	23,009	May 9	63	908
Lamps. Oil-burning	Edward Miller & Company	23,010	May 9	63	908
Lard	Anglo-American Provision Company	22,705	Mar. 28	62	1961
Lard	Anglo-American Provision Company	22,706	Mar. 28	62	1961
Lard	Anglo-American Provision Company	22,796	Apr. 11	63	309
Lard	Anglo-American Provision Company	23,526	Aug. 22	64	1128
Lard	J. M. Ceballos & Co.	23,738	Oct. 24	65	595
Lard	J. M. Ceballos & Co.	23,912	Dec. 12	65	1763
Lard	F. Garcia & Co.	23,911	Dec. 12	65	1763
Lard	North Packing and Provision Company	23,131	May 30	63	1378
Lard	North Packing and Provision Company	23,258	June 27	63	1957
Lard and butter. Substitute for	Armour & Co	23,291	July 4	64	151
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	22,911	May 2	63	754
Lard and oil. Hog	W. J. Wilcox Lard and Refining Company	23,943	Dec. 26	65	2058
Lard, sausage, hams, bacon, salt pork, dried beef, and beef-tongues	I. B. Mason & Sons	22,401	Jan. 31	62	739
Lard substitute	Anglo-American Provision Company	22,537	Feb. 28	62	1348
Lard substitute	Anglo-American Provision Company	23,527	Aug. 22	64	1128
Lard substitute	Swift & Company	22,797	Apr. 11	63	309
Laxative	Bordeaux Prune Company	23,214	June 13	63	1685
Laxative	W. P. Stevens and J. E. Durham	22,477	Feb. 14	62	1062
Laxatives and tonics	Searby, Zeilin & Co	22,834	Apr. 18	63	460
Lead	Chadwick Lead Works	23,511	Aug. 15	64	1004
Lead and zinc. Compound of white	Mound City Paint and Color Company	23,207	June 13	63	1585
Lead, including dry, mixed in oil, and mixed in oil with colors. White	Walker Paint Company	22,956	May 2	63	757
Lead. White	Mound City Paint and Color Company	22,747	Apr. 4	63	149
Lead. White	A. Pflugh & Co	22,437	Feb. 7	62	897
Lead. White	Whittier, Fuller & Co	23,919	Dec. 12	65	1764
Leads. Tinted	Wadsworth, Howland & Company	23,110	May 30	63	1377
Leather	E. H. Dewson & Son	23,123	May 30	63	1377
Leather. Belt and lace	Bay State Belting Company	23,185	June 6	63	1528
Leather-dressing	Batchelder & Lincoln	23,374	July 18	64	435
Leather-dressings	J. C. Ryan, Jr	23,281	June 27	63	1960
Leather for boots and shoes and similar articles. Combination	Lyman Smith's Sons Company	23,506	Aug. 15	64	1004
Leather for boots and shoes and similar articles. Combination	Lyman Smith's Sons Company	23,507	Aug. 15	64	1004
Leather for satchels and for cases for musical instruments, &c.	Maulbetsch & Whittemore	23,375	July 18	64	435
Leather goods. Liquid dressing for	G. A. Warren and G. H. Pike	23,518	Aug. 22	64	1127
Lime. Manufactured	Marble Head Lime Company	23,101	May 23	63	1200
Liniment	A. Burger	23,366	July 18	64	434
Liniment	J. M. Englehart	23,879	Nov. 28	65	1402
Liniment	C. W. Hawes	23,440	Aug. 1	64	711
Liniment	D. May	23,671	Oct. 3	65	131
Liniment	Michigan Chemical Co	23,401	July 25	64	557
Liniment	Reliance Manufacturing Company	22,615	Mar. 7	62	1509
Liniment	J. E. Rock	23,672	Oct. 3	65	131
Liniment	W. W. Smith	22,369	Jan. 24	62	585
Liniment	R. H. Wagner	23,562	Aug. 29	64	1262
Liniment and remedies for diseases of the blood, skin, lungs, and throat	H. E. Goodrich	23,795	Nov. 7	65	890
Liniment for the cure of rheumatism	M. Blackistone	22,307	Jan. 10	62	312
Liniments	Goodrich & Jennings	23,849	Nov. 21	65	1219
Liniments	Hotbauer Bros	22,687	Mar. 21	62	1819
Liniments	C. Protector	23,826	Nov. 14	65	1064
Liniments and croup tinctures	A. W. Sward	23,216	June 13	63	1685
Liniments, hair restoratives and removers, medicated soap, and embrocations	J. W. Garney & Son	23,703	Oct. 10	65	294
Linings for clothing. Certain named stuffs for	Bartels Manufacturing Co	23,092	May 23	63	1199
Linoleums and window-shades	S. Kirk & Sons	22,699	Mar. 28	62	1961
Liqueur crème de cacao-chouao à la vanille	Lyon, Hall & Co	23,339	July 11	64	296
	Les Héritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin	22,924	May 2	63	755
Liquid filler	B. F. Ruth & Co	22,746	Apr. 4	63	149
Liquors and wines. Spirituous	M. B. Foster & Sons	22,836	Nov. 21	65	1219
Liquors. Fermented and spirituous	Brockbank & Mellor	22,501	Feb. 21	62	1204
Liver-purifier	A. C. Simmons Jr. Medicine Company	23,494	Aug. 15	64	1003
Locks and keys	Smith & Egge Manufacturing Company	23,589	Sept. 5	64	1393
Locket, brooches, charms, badges, finger-rings, and similar jewelry	W. L. Paine	22,716	Apr. 4	63	146
Lotion for external use as a cosmetic, dentifrice, hair-tonic, and remedy for skin diseases, &c.	Athlophoros Company	23,146	May 30	63	1379
Lotions for remedial purposes	D. A. Bowker	22,646	Mar. 14	62	1648
Lubricating compounds	J. Deyo	22,850	Apr. 18	63	462

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Lye and washing-powders	E. A. Donaldson	23,634	Sept. 19	64	1648
Lye product.	J. Picot	22,361	Jan. 24	62	584
Macaroni, vermicelli, egg-noodles, and similar compounds	A. M. Caffé	22,678	Mar. 21	62	1818
Magazines.	M. N. Forney	23,759	Oct. 31	65	749
Magnesia.	M. J. Marquez	23,397	July 25	64	556
Malt extracts.	Trommer Extract of Malt Company	22,603	Mar. 7	62	1508
Malt extract and other food for infants and invalids	Horlicks Food Company	23,791	Nov. 7	65	890
Malt for brewing purposes. Extract of	W. Junge & Co	23,871	Nov. 28	65	1401
Mandolins and accessories	A. Gemünder & Sons	23,060	May 23	63	1197
Mangers. Iron	F. O. Worthley	22,626	Mar. 7	62	1510
Matches.	Oshkosh Match Works	23,287	July 4	64	151
Matches. Friction, parlor, safety, and wax.	E. Holmberg	23,415	July 25	64	558
Mattresses and mattress-ticks	G. S. Delano	23,891	Dec. 5	65	1589
Meat and compounds thereof. Extracts of.	Valentine's Meat-Juice Company	23,811	Nov. 14	65	1062
Meat extract	R. Crowell, Jr	22,912	May 2	63	754
Meat extracts	Thomson & Taylor Spice Company	22,360	Jan. 24	62	584
Meat extracts and compounds thereof	Valentine's Meat-Juice Company	23,841	Nov. 21	65	1219
Mears and lard. Pork.	C. Perceval	22,743	Apr. 4	63	149
Medical and disinfecting compounds and apparatus. Certain named	Vapo-Cresolene Company	23,441	Aug. 1	64	711
Medical compounds. Certain named.	J. E. Fox	23,659	Sept. 26	64	1788
Medical compound containing golden-rod.	C. F. Fortin	22,835	Apr. 18	63	460
Medical compounds for the treatment of nervous diseases	Empire Cure Company	23,774	Oct. 31	65	750
Medical compounds for the treatment of nervous diseases	Empire Cure Company	23,706	Nov. 7	65	890
Medical plasters	Johnson & Johnson	22,832	Apr. 18	63	460
Medical purposes. Coal-tar products in the form of tablets for	Mellier Drug Company	22,703	Mar. 28	62	1961
Medical tonic.	J. P. Gilbert	22,566	Feb. 28	62	1350
Medicated beverage	Lundin & Co	23,035	May 16	63	1055
Medicated beverage containing wild cherry	P. M. Hanney	22,533	Feb. 28	62	1347
Medicated cough-drops.	N. W. Stiles	22,492	Feb. 21	62	1203
Medicated food for domestic animals	M. E. Savage	22,886	Apr. 25	63	609
Medicated oils.	D. M. Bye	23,099	May 23	63	1200
Medicated oils for external and internal use	C. Keizer	23,487	Aug. 15	64	1002
Medicated plasters	S. H. Gunder	23,443	Aug. 1	64	711
Medicated soap	B. J. Douds	23,270	June 27	63	1958
Medicinal agents derived from hydrocarbon compounds	Lehn & Fink	22,293	Jan. 3	62	157
Medicinal agents for nervous diseases and a febrifuge	Firm of E. Merck	23,534	Aug. 22	64	1129
Medicinal and toilet powders.	McKesson & Robbins	22,724	Apr. 4	63	147
Medicinal bitters	L. P. De Bantte & Co.	22,732	Apr. 4	63	147
Medicinal coal-tar derivative	R. D. Robinson	23,878	Nov. 28	65	1402
Medicinal essence of herbs and roots and wine and alcohol.	N. Sperry	23,435	Aug. 1	64	710
Medicinal herb sirups	Hofbauer Bros.	22,731	Apr. 4	63	147
Medicinal lotion for human and animal use	M. J. Elton	23,497	Aug. 15	64	1003
Medicinal mineral water.	E. L. Jacques	22,465	Feb. 14	62	1060
Medicinal mixture for certain named diseases	J. R. Blumenberg	23,924	Dec. 12	65	1764
Medicinal pills and tablets	Frederick Stearns & Company	22,884	Apr. 25	63	608
Medicinal plasters	Athlophoros Company	23,145	May 30	63	1379
Medicinal plasters.	G. M. Dorrance	22,652	Mar. 14	62	1649
Medicinal preparation for internal and external use. Oily	W. E. Pearson	23,662	Sept. 26	64	1788
Medicinal preparation for internal and external use. Oily	W. E. Pearson	23,663	Sept. 26	64	1788
Medicinal preparation used as an antifat and rheumatocide.	Walker Pharmacal Company	22,878	Apr. 25	63	608
Medicinal preparations of an antiseptic, deodorant, or germicide character.	P. Melfi	23,442	Aug. 1	64	711
Medicinal preparations of roots and herbs. Certain named	Pastor Kneipp Medicine Company	22,782	Apr. 11	63	308
Medicinal purposes. Celery tea for	P. C. Melrose	22,607	Mar. 7	62	1508
Medicinal purposes. Liquid prepared food for.	Coleman & Company	23,437	Aug. 1	64	710
Medicinal tablets.	Fernine Tablet Co	23,932	Dec. 19	65	1913
Medicinal tea.	E. B. Schoenike	23,036	May 16	63	1055
Medicinal tonic.	Allaire, Woodward & Company	22,683	Mar. 21	62	1818
Medicinal tonic.	L. Mansfield	22,290	Jan. 3	62	157
Medicinal whisky for lung diseases and debility	J. F. Broderick	23,746	Oct. 24	65	596
Medicine and pharmacy. Chemical substances prepared for use in	J. B. Halcrow	23,172	June 6	63	1527
Medicine. Blood-purifying	E. S. Batchelder	23,469	Aug. 8	64	855
Medicine for asthma and like affections	R. Schifmann	22,880	Apr. 25	63	608
Medicine for coughs, colds, bronchitis, and kindred diseases	Shawnee Remedy Co	23,900	Dec. 5	65	1590
Medicine for diseases of the blood and resultant disorders	Rogers, Moore & Bunting	23,034	May 16	63	1055
Medicine for expelling tape-worms	R. Phillips	23,610	Sept. 12	64	1531
Medicine for external use. Liquid	Cyona Company	22,688	Mar. 21	62	1819
Medicine for hog-cholera	D. Campbell and J. F. Harris	22,787	Apr. 11	63	308
Medicine for internal and external use	G. Bamford	22,882	Apr. 25	63	608
Medicine for the cure of alcoholism	New England Cure Co	23,716	Oct. 17	65	439
Medicine for the cure of blood, liver, and kidney diseases	A. V. Young	23,495	Aug. 15	64	1003
Medicine for the cure of liver and kidney diseases	P. P. Bradt	23,933	Dec. 19	65	1913
Medicine for the cure of nervous diseases. Proprietary	M. D. Brown	22,995	May 9	63	907
Medicine for the cure of rheumatism	Brahma Medicine Company	22,306	Jan. 10	62	312
Medicine for topical application	X-Zalia Medicine Company	23,367	July 18	64	434
Medicine for use in fevers. Tonic	Diffusible Tonic Company	23,211	June 13	63	1685
Medicine in capsules. Tape-worm	G. E. Thum	22,462	Feb. 14	62	1060
Medicine. Preparation for disguising the bitter or disagreeable taste of	Eli Lilly & Company	22,609	Mar. 7	62	1508
Medicine to prevent leanness.	E. M. Beals	22,881	Apr. 25	63	608
Medicine. Tonic	J. S. Bailey	23,717	Oct. 17	65	439
Medicines and pills. Liver and kidney	Lincoln Pill Company	23,316	July 4	64	153
Medicines and remedies. Homeopathic and other	Munson's Homeopathic Family Medicine Company	22,647	Mar. 14	62	1649
Medicines. Certain named.	C. E. Brunning	23,658	Sept. 26	64	1788
Medicines. Certain named.	J. R. Watkins	23,585	Sept. 5	64	1393
Medicines. Cough	L. B. Taylor	22,702	Mar. 28	62	1961
Medicines for coughs, colds, rheumatism, sprains, bruises, and healing purposes.	J. C. Banaszynski	22,836	Apr. 18	63	460
Metal and antifriction journal-bearings. Babbitt.	T. Hiertz & Son	22,658	Mar. 14	62	1649
Metal. Antifriction	Hyde Brothers & Co	22,892	Apr. 25	63	609

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Metal. Leaf or powder	L. Spiegelberger	22,949	May 2	63	757
Metal-polishing compound	A. O. Bettes	22,788	Apr. 11	63	309
Metal-polishing compound	A. L. Jaggard	22,494	Feb. 21	62	1204
Metals. Antifriction and Babbitt	New York Smelting and Refining Company.	23,057	May 16	63	1058
Milk. Condensed	W. D. Cleveland & Co.	23,165	June 6	63	1527
Milk. Condensed	Norwegian Milk Condensing Company.	23,721	Oct. 17	65	439
Milk, cream, butter, and cheese	New York Condensed Milk Company.	22,536	Feb. 28	62	1348
Milk. Fluid or dairy	New York Condensed Milk Company.	23,604	Sept. 12	64	1531
Milk for nursery and sick-room use. Pure	Walker-Gordon Laboratory Co.	23,043	May 16	63	1056
Milk product in the form of a prepared food for invalids and infants.	W. Clark	23,252	June 27	63	1957
Mineral-spring water.	Eisner & Mendelson Company.	23,520	Aug. 22	64	1127
Mineral-spring water.	H. K. Wampole & Co.	22,527	Feb. 28	62	1347
Mineral-spring water.	H. K. Wampole & Co.	23,245	June 27	63	1956
Mineral-spring water. Natural	Stafford Mineral Spring Company.	22,869	Apr. 25	63	607
Mineral water	B. Chrisman	23,742	Oct. 24	65	596
Mineral water	Waukesha-Lithia Spring Company.	23,038	May 16	63	1056
Mineral water and beverages into which it enters as a constituent.	Waukesha Hygeia Mineral Springs Company.	22,643	Mar. 14	62	1648
Mineral water and ginger ale. Carbonated and natural.	Bethesda Mineral Spring Company.	22,405	Jan. 31	62	740
Mineral water, ginger ale, phosphate, ozonate, and carbonated beverages.	White Rock Mineral Spring Company.	23,873	Nov. 28	65	1402
Mineral water. Natural	Salutaris Natural Mineral Water Company.	22,365	Jan. 24	62	525
Mineral water. Natural	Victoria Mineral Water Spring Company.	23,136	May 30	63	1378
Mineral water. Natural	Victoria Mineral Water Spring Company.	23,137	May 30	63	1378
Mineral water. Natural	W. J. Williams	22,834	Nov. 21	65	1218
Mineral waters	E. W. Woodcock	22,920	May 2	63	755
Mineral waters. Natural	Victoria Mineral Water Spring Company.	23,170	June 6	63	1527
Mineral waters. Natural	Victoria Mineral Water Spring Company.	23,246	June 27	63	1956
Mirrors. Plate-glass	R. A. Schlegel & Bro.	23,321	July 4	64	154
Molasses	H. T. Cottam & Company	22,915	May 2	63	754
Momie cloth and linen lap dusters	Epstein, Pollitz & Co.	22,981	May 9	63	906
Mordants	Firm of Th. Goldschmidt.	23,707	Oct. 10	65	294
Mordants for use in dyeing fibers and fabrics. Cleansing.	Nashoba Manufacturing Company.	23,141	May 30	63	1379
Mortar and coatings for walls	Perfection Chemical and Manufacturing Company.	23,512	Aug. 15	64	1004
Moth-proof fabric.	Case Brothers	22,822	Apr. 18	63	459
Mucilage	Reliance Manufacturing Company.	22,553	Feb. 28	62	1349
Music. Sheet	P. J. Howley & Co.	23,830	Nov. 21	65	1218
Musical instruments, and trimmings therefor. Wind, string, and other	J. W. Pepper	22,517	Feb. 28	62	1346
Mustard	J. B. Tre'Denick	22,741	Apr. 4	63	148
Nail-strip. Metallic	McKay Metallic Fastening Association.	23,104	May 23	63	1200
Nails	Atlas Tack Corporation	22,855	Apr. 18	63	462
Nails. Wire	McKay Metallic Fastening Association.	23,159	May 30	63	1380
Needles	Excelsior Needle Company	23,649	Sept. 26	64	1787
Needles	T. Harper	23,390	July 18	64	436
Needles. Gold-eyed	C. H. Crowley	23,688	Oct. 10	65	293
Needles. Sewing-machine and hand sewing	National Needle Company	23,612	Sept. 12	64	1532
Newspapers	Army and Navy Register Publishing Company.	22,896	May 2	63	753
Noodles. Egg	G. A. Pfaffmann	22,431	Feb. 7	62	896
Oatmeal and similar oat foods	H-O (Hornby's Oatmeal) Company.	23,770	Oct. 31	65	749
Oats and oatmeal. Rolled	Muscatine Oat Meal Company	23,554	Aug. 29	64	1261
Oats. Rolled	Stobie Cereal Mills	22,828	Apr. 18	63	460
Oats. Rolled white	E. Meinrath	23,086	May 23	63	1199
Oil and extract. Eucalyptus	Woods & Co.	23,468	Aug. 8	64	855
Oil and its extract and medicinal and sanitary compounds having these constituents. Eucalyptus	Tasmania Eucalyptus Oil Co.	23,751	Oct. 24	65	596
Oil. Castor	Baker Castor Oil Company.	23,895	Dec. 5	65	1589
Oil. Castor	Baker Castor Oil Company.	23,896	Dec. 5	65	1589
Oil. Clock and watch	E. Kelley	23,894	Dec. 5	65	1589
Oil. Cooking	Merchants and Planters Oil Company.	23,698	Oct. 10	65	294
Oil extracts for use as internal and external remedies for disease	G. W. Hooton	22,445	Feb. 7	62	897
Oil for harness and leather	Reliance Manufacturing Company.	22,564	Feb. 28	62	1349
Oil for inhalation purposes. Oxidized	Carrnick & Company	23,098	May 23	63	1200
Oil for medicinal and other uses. Eucalyptus	T. Ingham	23,630	Sept. 19	64	1647
Oil, French peas, mushrooms, haricots verts, flageolets, macedoines, truffes, sardines, prunes d'ente, and similar articles. Olive.	A. M. Caffé	22,677	Mar. 21	62	1818
Oil. Illuminating	W. M. Bird & Co.	23,946	Dec. 26	65	2058
Oil. Linseed	S. Kellogg	23,052	May 16	63	1057
Oil. Lubricating	Reliance Manufacturing Company.	22,654	Mar. 14	62	1649
Oil. Lubricating	F. L. Smith	23,588	Sept. 5	64	1393
Oil of roses	G. Lueders	23,883	Nov. 28	65	1402
Oil. Olive	J. L. Duret & Co.	22,916	May 2	63	754
Oil. Olive	J. L. Duret & Co.	22,917	May 2	63	754
Oil. Olive	F. Reiset and G. A. Waeber	23,940	Dec. 19	65	1914
Oil. Rosin	S. P. Shotter Company.	22,952	May 2	63	757
Oil. Rosin	S. P. Shotter Company.	22,953	May 2	63	757
Oil. Rosin	S. P. Shotter Company.	23,003	May 9	63	908

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Oil-stones and whetstones	Pike Manufacturing Company	23,448	Aug. 1	64	711
Oils and other wood-preserving compounds	P. H. Gerhard	22,396	Jan. 31	62	739
Oils for mechanical and for food purposes. Cotton-seed	American Cotton Oil Company	23,776	Oct. 31	65	750
Oils. Lubricating	Abbott Cylinder Oil Company	23,289	July 4	64	151
Oils. Lubricating	Allen, Bradley & Co	22,565	Feb. 28	62	1349
Oils. Lubricating	S. E. Heymann	22,621	Mar. 7	62	1509
Oils. Lubricating	F. Shumpp	23,815	Nov. 14	65	1063
Ointment	As-Ker-Shaw Manufacturing Company.	23,488	Aug. 15	64	1003
Ointment for beautifying the skin. Face	C. Petzelt	22,935	May 2	63	756
Ointment for skin diseases	Walker Pharmacal Company	23,923	Dec. 12	65	1764
Ointment or jelly for external use	C. J. Uhl	23,670	Oct. 3	65	131
Ointment or salve	J. J. Hayman	22,997	May 9	63	907
Ointment. Preparation for the skin, consisting of a cream-like	F. H. Müller	23,793	Nov. 7	65	890
Ointment used as a remedy for skin diseases	Rayson & Smith	22,704	Mar. 28	62	1961
Ointments, salves, and similar preparations	Soule Medicine Co	23,564	Aug. 29	64	1262
Optical instruments	J. E. Blackmore	22,860	Apr. 25	63	606
Oranges and lemons	L. Contencin & Son	23,601	Sept. 12	64	1530
Oranges, lemons, and peaches	J. T. Waller	23,842	Nov. 21	65	1219
Overalls and colored and white shirts. Men's	Carter & Churchill	23,423	Jan. 1	64	709
Overalls, pantaloons, shirts, and drawers. Men's	Rice, Stix & Co	22,337	Jan. 10	62	314
Overcoats	A. Benjamin & Co	23,454	Aug. 8	64	854
Overcoats	Byck Bros.	23,753	Oct. 31	65	748
Overcoats	Byck Bros.	23,754	Oct. 31	65	748
Overgaiters and leggins	Sachs, Rosenwasser & Stern	22,476	Feb. 14	62	1062
Oysters	W. L. Ellis & Co.	22,640	Mar. 14	62	1648
Oysters in cans and wood packages. Raw	C. H. Lightheiser	23,256	June 27	63	1957
Oysters. Raw and processed	W. A. Wheatley	22,318	Jan. 10	62	313
Packing for machinery	Garlock Packing Co	23,420	July 25	61	558
Padlocks	E. T. Fraim	23,364	July 11	64	298
Pails, tubs, and analogous wooden receptacles	Felix & Marston	22,748	Apr. 4	63	149
Paint for covering wood and iron	Thomas & Klein	23,206	June 13	63	1665
Paints and compositions for protecting iron structures from corrosion	Wailles, Dove & Co.	23,817	Nov. 14	65	1063
Paints and paint-removers	Rinald Bros.	23,100	May 23	63	1200
Paints for roofs, &c.	Mica Roofing Co.	22,397	Jan. 31	62	739
Paints, pigments, and oxides. Mineral	A-F Paint and Color Company	23,361	July 11	64	298
Paints. Prepared	Lowe Brothers	23,205	June 13	63	1685
Paints, stains, varnishes, and similar articles	Harrison Bros. & Co	22,656	Mar. 14	62	1649
Paints, varnishes, stains, driers, japans, and kindred goods.	Chicago Varnish Company	22,395	Jan. 31	62	739
Paints. Vehicle	J. C. Weaver	23,816	Nov. 14	65	1063
Pants. Boys' knee	B. M. Holzman	23,889	Dec. 5	65	1569
Pants. Knee	E. Schwerin & Co.	23,425	Aug. 1	64	709
Paper	John Dickinson & Company	23,516	Aug. 22	64	1127
Paper. Albumenized	Scovill & Adams Company	22,666	Mar. 21	62	1817
Paper and envelopes. Writing	G. B. Hurd & Co.	23,500	Aug. 15	64	1003
Paper and envelopes. Writing	G. B. Hurd & Co.	23,708	Oct. 17	65	438
Paper and envelopes. Writing	G. B. Hurd & Co.	23,758	Oct. 31	65	748
Paper and envelopes. Writing	Worcester Envelope Company	23,709	Oct. 17	65	438
Paper bags	New York Paper Bag Machine and Manufacturing Company.	23,783	Nov. 7	65	889
Paper bags	Union Bag and Paper Company	23,066	May 23	63	1197
Paper, paper boxes, and paper bags. Wrapping	W. A. Bingham & Company	22,518	Feb. 28	62	1346
Paper receptacle. Toilet	Steel Edge Stamping and Retinning Company.	22,326	Jan. 10	62	314
Paper. Waterproof	F. W. Bird & Son	22,516	Feb. 28	62	1346
Paper. Writing	Kastner & Williams Paper Co.	23,571	Sept. 5	64	1392
Paper. Writing	L. A. Lehmaier	23,644	Sept. 26	64	1787
Paper. Writing	Norman Paper Company	22,808	Apr. 18	63	458
Paper. Writing	Springdale Paper Company	22,665	Mar. 21	62	1817
Papers. Waterproof	F. W. Bird & Son	22,490	Feb. 21	62	1203
Paste and cement for paper, leather, and similar materials	G. Tegeler	22,286	Jan. 3	62	157
Peas, sardines, mushrooms, truffles, macaroni, capers, olive-oil, olives, and prunes.	S. J. Valk & Bro	23,622	Sept. 19	64	1647
Pencils. Eyebrow	E. N. Gaillard	22,543	Feb. 28	62	1348
Pencils. Lead	Eagle Pencil Company	23,784	Nov. 7	65	889
Pencils. Lead	L. & C. Hardtmuth	22,973	May 9	63	905
Pens of all kinds	Firm of William Mitchell	22,515	Feb. 28	62	1346
Pepsin, pancreatin, and rennet and their compounds	Swift & Company	22,539	Feb. 28	62	1348
Perfume. Liquid	Telfow Manufacturing Company.	22,722	Apr. 4	63	147
Perfumes	R. Schweickhardt and A. de Lorenzi	23,356	July 11	64	297
Perfumes	Williams, Davis, Brooks & Co	23,223	June 20	63	1813
Perfumes, powders, cosmetics, lotions, and soaps	Stark Medicine Company	22,999	May 9	63	907
Perfumes, sachet-powders, complexion preparations, toilet soaps, and tooth-washes.	Stark Medicine Company	22,938	May 2	63	756
Perfumed articles for the toilet that are consumed in use	V. Klotz	23,844	Nov. 21	65	1219
Perfumed toilet preparations, including soap	V. Klotz	22,690	Mar. 21	62	1819
Perfumery	C. L. Cotton	23,265	July 4	64	151
Perfumery	C. L. Cotton	23,226	July 4	64	151
Perfumery	Lazell, Dalley & Company	23,272	June 27	63	1959
Perfumery	Lazell, Dalley & Company	23,273	June 27	63	1959
Perfumery	Oakley Soap and Perfumery Company.	23,024	May 16	63	1054
Perfumery and perfumed soap	J. L. Grossmith	23,025	May 16	63	1055
Perfumery, sachet-powders, and toilet soap	Firm of Solon Palmer	22,363	Jan. 24	62	584
Perfumery, soaps, and cosmetics	C. E. Foote and C. C. Jenks	23,178	June 6	63	1528
Perfumery, soaps, oils, tooth-powder, smelling extracts, rice powders, and cologne.	Roger & Gallet	22,440	Feb. 7	62	897
Perfumery, toilet soaps, and cosmetics	Blondeau et Cie	23,283	July 4	64	151
Perfumery, toilet soaps, and cosmetics	Blondeau et Cie	23,284	July 4	64	151
Periodical journal	Kittredge Company	23,410	July 25	64	557
Periodical journal	Kittredge Company	23,411	July 25	64	557
Periodical. Printed	Fashion Company	22,419	Feb. 7	62	895

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Title	Name.	No.	Date.	Official Gazette.	
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Periodicals. Printed.....	McCall Company.....	23,862	Nov. 28	65	1401
Pharmaceutical or dietetical compounds.....	Farbenfabriken, vormals Fr. Bayer & Co.....	23,823	Nov. 14	65	1063
Photographic preparations.....	J. Hauff.....	22,274	Jan. 3	62	156
Photographic-printing paper.....	Eastman Kodak Company.....	23,065	May 23	63	1197
Photographing. Artists' paper used for.....	Diamond Aristotype Co.....	23,180	June 6	63	1528
Photographs.....	Edison United Phonograph Company.....	22,898	May 2	63	753
Piano-actions.....	Wessell, Nickel & Gross.....	23,274	June 27	63	1959
Pianos.....	McCammon Piano Company.....	23,322	July 4	64	154
Pianos, organs, guitars, mandolins, and banjos.....	Memphis Music Co.....	23,414	July 25	64	558
Pickled and preserved fruits and vegetables.....	H. B. Mills.....	22,597	Mar. 7	62	1507
Pie. Ready-made paste or composition for lemon.....	G. H. Higdon.....	23,253	June 27	63	1957
Pies.....	F. Hahn & Son.....	22,799	Apr. 11	63	309
Pills.....	F. J. Cheney.....	23,950	Dec. 26	65	2058
Pills.....	M. De Tar.....	23,028	May 16	63	1055
Pills.....	Jolly & Son.....	23,608	Sept. 12	64	1531
Pills.....	C. Wright.....	22,614	Mar. 7	62	1509
Pills and wafers. Certain.....	Cleveland Pill Company.....	23,095	May 23	63	1199
Pills. Cathartic.....	C. B. Riker.....	22,572	Feb. 28	62	1350
Pills for sick and nervous headaches.....	E. T. Leach.....	22,570	Feb. 28	62	1350
Pills. Medicinal.....	P. B. MacNamara.....	23,029	May 16	63	1055
Pills, plasters, lozenges, and a remedy for coughs.....	B. A. Hertsch.....	23,824	Nov. 14	65	1063
Pills, tinctures, cough remedies, and medicinal powders and plasters.....	H. Mather.....	23,416	July 25	64	558
Pine wood. Distilled products of.....	Imperial Pine Product Company.....	22,312	Jan. 10	62	313
Pins.....	Plume & Atwood Manufacturing Company.....	22,717	Apr. 4	63	146
Plaster. Cement.....	Salina Cement Plaster Company.....	22,464	Feb. 14	62	1060
Plaster-of-paris.....	J. B. King & Co.....	22,561	Feb. 28	62	1349
Plaster, Portland cement, and analogous compositions.....	T. D. Whitaker.....	23,513	Aug. 15	64	1004
Plasters.....	Firm of E. J. Weiser.....	23,144	May 30	63	1379
Plasters, liniments, ointments, medicated candy, and remedies for coughs, cholera, and headache.....	Wilkins & Beckner.....	23,825	Nov. 14	65	1064
Plasters, powders, ointments, and sarsaparilla.....	Plantation Pharmacal Company.....	23,563	Aug. 29	64	1262
Plows and cultivators.....	Moline Plow Company.....	23,641	Sept. 19	64	1648
Plows. Chilled.....	J. Oliver.....	23,595	Sept. 5	64	1394
Plows, cultivators, rollers, and harrows.....	Wiard Plow Company.....	22,417	Jan. 31	62	740
Polish for gold, silver, nickel, brass, copper, zinc, and tin. Metal.....	R. B. Clark.....	23,920	Dec. 12	65	1764
Polish for silver and like wares.....	Reliance Manufacturing Company.....	22,558	Feb. 28	62	1349
Polish. Furniture.....	F. F. Fluhrer.....	22,313	Jan. 10	62	313
Polish. Furniture.....	F. F. Fluhrer.....	22,620	Mar. 7	62	1509
Polish. Furniture and wood.....	Reliance Manufacturing Company.....	22,849	Apr. 18	63	462
Polish. Metal.....	Reliance Manufacturing Company.....	22,559	Feb. 28	62	1349
Polish or blacking. Stove.....	Morse Bros.....	22,622	Mar. 7	62	1509
Polish. Stove.....	Reliance Manufacturing Company.....	22,560	Feb. 28	62	1349
Polishing substance for use on metal and glass.....	Morain Bros.....	23,204	June 13	63	1684
Pop-corn. Shelled.....	Albert Dickinson Company.....	22,343	Jan. 17	62	447
Pop-corn. Shelled.....	Albert Dickinson Company.....	23,250	June 27	63	1957
Pop-corn. Shelled.....	J. L. Dougall.....	23,047	May 16	63	1057
Pork. Cured.....	Dunlevy & Bro.....	23,090	May 23	63	1199
Pork products. Pig.....	McDowell Packing Company.....	22,639	Mar. 14	62	1648
Powder used as a remedy for dyspepsia and other stomach troubles.....	Home Medical Company.....	22,372	Jan. 24	62	585
Powders. Headache.....	N. L. Munro.....	22,391	Jan. 31	62	738
Powders. Headache.....	J. U. O'Meara.....	23,565	Aug. 29	64	1262
Powders. Healing.....	U. W. Becker.....	23,584	Sept. 5	64	1393
Powders, liquids, and semi-liquids. Receptacles used in dispensing.....	McKesson & Robbins.....	22,853	Apr. 18	63	462
Powders. Liver.....	L. Alexander.....	23,750	Oct. 24	65	596
Preparation for the cure of colic in horses.....	D. E. Prall.....	22,573	Feb. 28	62	1350
Preparation for the cure of venereal diseases.....	M. Markendorf.....	22,463	Feb. 14	62	1060
Preparations. Cleaning and polishing.....	F. A. Schulz and G. A. Philipp.....	23,724	Oct. 17	65	439
Preparations for diseases and blemishes of the skin.....	H. W. Crolley.....	23,091	May 23	63	1199
Preparations for the skin and complexion.....	M. L. Johann.....	22,442	Feb. 7	62	897
Preparations for the skin and complexion.....	Stark Medicine Company.....	22,934	May 2	63	756
Preparations of iron derived from animal matter known as physiological iron preparations.....	Firm of E. Merck.....	23,530	Aug. 22	64	1128
Preparations of iron derived from animal matter known as physiological iron preparations.....	Firm of E. Merck.....	23,531	Aug. 22	64	1128
Preservative. Chemical compound used as a.....	W. A. Loewenthal.....	22,345	Jan. 17	62	447
Preserved fruits and vegetables.....	Griggs, Cooper & Co.....	22,829	Apr. 18	63	460
Preserves, jellies, fruit butters, and mince-meat.....	Van Lill Preserving Company.....	23,254	June 27	63	1957
Preserving compounds. Fruit and vegetable.....	S. Pierce.....	22,281	Jan. 3	62	156
Printed and dyed fabrics.....	Arnold Print Works.....	23,021	May 16	63	1054
Printing-presses.....	Liberty Machine Works.....	23,838	Nov. 14	65	1064
Printing-presses. Perfecting.....	Duplex Printing Press Company.....	23,192	June 6	63	1528
Prints and cotton piece goods.....	Arnold Print Works.....	23,020	May 16	63	1054
Prune juice.....	Ball & Cheyne Company.....	22,429	Feb. 7	62	896
Publications.....	R. J. Buchanan.....	22,457	Feb. 14	62	1060
Publications and periodicals. Printed.....	Christian Union Company.....	22,338	Jan. 17	62	447
Publications. Printed.....	Judge Publishing Company.....	22,579	Mar. 7	62	1506
Publications treating on orthopedic surgery. Printed.....	H. R. Allen.....	23,939	Dec. 19	65	1914
Pulleys. Friction-clutch.....	J. W. Penfield & Son.....	23,908	Dec. 5	65	1590
Pulp and waterproofed. Household and other ware made from wood.....	United Indurated Fibre Company.....	22,377	Jan. 24	62	588
Pulp and waterproofed. Household and other ware made from wood.....	United Indurated Fibre Company.....	22,378	Jan. 24	62	588
Pumps.....	Red Jacket Manufacturing Co.....	22,663	Mar. 14	62	1650
Pumps. Chain.....	Olmsted & Co.....	23,591	Sept. 5	64	1393
Pumps. Wood.....	C. S. Burlingham.....	22,664	Mar. 14	62	1650
Punch.....	W. G. Smoot.....	23,077	May 23	63	1198
Purgative tea.....	A. Sicre.....	23,951	Dec. 26	65	2058
Radiators.....	A. A. Griffing Iron Company.....	23,637	Sept. 19	64	1648

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Radiators. Heat.....	Gurney Hot Water Heater Company.....	23,473	Aug. 8	64	855
Radiators. Steam and hot-water.....	A. A. Griffing Iron Company.....	23,545	Aug. 22	64	1130
Radiators. Steam and hot-water.....	A. A. Griffing Iron Company.....	23,546	Aug. 22	64	1130
Radiators. Steam and hot-water.....	A. A. Griffing Iron Company.....	23,887	Nov. 28	65	1402
Rails, switches, metal cars, wheels, and trucks.....	C. W. Hunt Company.....	22,959	May 2	63	758
Railway iron, switches, frogs, and car wheels and trucks.....	C. W. Hunt Company.....	22,893	Apr. 25	63	609
Raisins.....	W. Forsyth.....	23,576	Sept. 5	64	1392
Rakes, droppers, reels, and supplemental platforms, &c. Self-terminating.....	Warder, Bushnell & Glessner Company.....	22,682	Oct. 3	65	132
Rats, roaches, and like animals and insects. Substance for exterminating.....	C. W. Manwaring.....	23,861	Nov. 21	65	1220
Razors.....	N. Jureidini.....	22,972	May 9	63	905
Razors.....	S. K. Jureidini.....	22,720	Apr. 4	63	146
Remedies, blood medicine, laxative compound, and plasters. Catarrh.....	E. Steinhauer.....	22,874	Apr. 25	63	607
Remedies. Catarrh.....	J. B. Pitt.....	23,148	May 30	63	1379
Remedies. Certain named.....	E. M. Beals.....	23,821	Nov. 14	65	1063
Remedies. Certain named.....	H. W. Beecher.....	23,851	Nov. 21	65	1220
Remedies. Certain named.....	F. P. Cummings.....	23,822	Nov. 14	65	1063
Remedies. Certain named.....	B. Fisher.....	23,212	June 13	63	1685
Remedies. Certain named.....	F. C. Fowler.....	22,870	Apr. 25	63	607
Remedies. Certain named.....	J. P. Lavoie.....	23,266	June 27	63	1958
Remedies. Certain named.....	Od Chem. Company.....	22,871	Apr. 25	63	607
Remedies. Certain named.....	L. A. B. Street & Co.....	22,928	May 2	63	755
Remedies. Certain named.....	Turner-Shaker Medicine Co.....	22,478	Feb. 14	62	1062
Remedies. Certain named line of proprietary.....	Five Points Chemical Co.....	22,373	Jan. 24	62	585
Remedies. Certain named proprietary.....	E. V. Cameron.....	22,996	May 9	63	907
Remedies. Dermal.....	J. Pohl.....	22,933	May 2	63	756
Remedies for cancer and other blood diseases.....	C. H. Mason.....	23,033	May 16	63	1055
Remedies for cancerous diseases.....	Firm of E. Merck.....	22,375	Jan. 24	62	585
Remedies for cancerous diseases.....	Firm of E. Merck.....	23,537	Aug. 22	64	1129
Remedies for catarrhal diseases.....	J. F. Paine.....	22,875	Apr. 25	63	607
Remedies for certain named diseases. External and internal.....	C. I. Hood.....	23,231	June 20	63	1813
Remedies for cholera morbus and similar diseases.....	G. S. Bartles.....	23,702	Oct. 10	65	294
Remedies for coughs and colds.....	H. H. Stoddard.....	23,311	July 4	64	153
Remedies for coughs and diseases of the throat.....	Occidental Manufacturing Co.....	23,032	May 16	63	1055
Remedies for coughs, colds, and throat affections.....	W. B. Shaw.....	22,848	Nov. 21	65	1219
Remedies for cramp, colic, cholera, and catarrh.....	L. E. Peyton.....	23,674	Oct. 3	65	132
Remedies for diarrhea and gouty rheumatism.....	Chemische Fabrik, vormals Hofmann & Schoetensack.....	23,927	Dec. 19	65	1913
Remedies for diseases of the bowels.....	F. Fenn.....	23,496	Aug. 15	64	1003
Remedies for diseases of the head, throat, chest, and lungs.....	H. E. Bucklen & Company.....	23,491	Aug. 15	64	1003
Remedies for diseases of the kidneys, bladder, and urinary organs.....	Buker Pill Company.....	23,439	Aug. 1	64	710
Remedies for diseases of the stomach, spleen, liver, lungs, heart, spine, and nerves.....	K. M. Tata.....	23,929	Dec. 19	65	1913
Remedies for diseases peculiar to women.....	North Chemical Company.....	23,150	May 30	63	1379
Remedies for epileptic fits and other named diseases.....	Jones Remedy Co.....	22,783	Apr. 11	63	308
Remedies for gonorrhea.....	J. Kremer.....	23,213	June 13	63	1685
Remedies for gonorrhea and gleet.....	Plantation Pharmacal Company.....	23,538	Aug. 22	64	1129
Remedies for gonorrhea, gleet, &c.....	C. B. Pease and M. H. Johnston.....	23,317	July 4	64	153
Remedies for gout, rheumatism, and impure blood.....	H. D. Ohlsen.....	22,837	Apr. 18	63	461
Remedies for headache, neuralgia, and rheumatism.....	Cura Chemical Co.....	23,535	Aug. 22	64	1129
Remedies for nervous debility and other named diseases.....	W. G. Dobie.....	22,472	Feb. 14	62	1061
Remedies for nervous disorders.....	Morrison & Banta.....	23,660	Sept. 26	64	1788
Remedies for nervous disorders and all diseases of the blood, liver, and kidneys.....	Turner-Shaker Medicine Co.....	22,479	Feb. 14	62	1062
Remedies for piles.....	Hamilton & Whittin.....	23,931	Dec. 19	65	1913
Remedies for pulmonary diseases.....	T. Smith & Son.....	22,611	Mar. 7	62	1509
Remedies for rheumatic, venereal, and nervous diseases, and other disorders of the skin and blood.....	W. L. Curtiss.....	23,749	Oct. 24	65	596
Remedies for rheumatism, gout, neuralgia, sciatica, and kindred ailments.....	Butler & Clarridge.....	23,797	Nov. 7	65	890
Remedies for rheumatism, neurotic, myopathic, and idiopathic pain, and fevers.....	W. Phelps.....	23,701	Oct. 10	65	294
Remedies for throat and lung affections.....	A. Woolly & Son.....	22,879	Apr. 25	63	608
Remedies for toothache, headache, neuralgia, and rheumatism.....	W. A. Davis, Jr.....	22,877	Apr. 25	63	608
Remedies for whooping-cough and asthmatic diseases.....	Firm of E. Merck.....	23,536	Aug. 22	64	1129
Remedies for worms, coughs, catarrh, and dyspepsia, and a liniment.....	C. G. Clark Company.....	23,714	Oct. 17	65	438
Remedies produced from the pineapple. Proprietary internal.....	T. E. Richards.....	22,883	Apr. 25	63	608
Remedies. Therapeutic.....	Chemische Fabrik auf Actien, vormals E. Schering.....	23,533	Aug. 22	64	1128
Remedy and tonic. Headache.....	E. A. Butts.....	22,929	May 2	63	755
Remedy. Anticholera and tonic.....	M. B. Scala.....	23,850	Nov. 21	65	1219
Remedy. Anticholera and tonic.....	M. B. Scala.....	23,877	Nov. 28	65	1402
Remedy. Anticholera and tonic.....	M. B. Scala.....	23,898	Dec. 5	65	1589
Remedy. Anticholera and tonic.....	M. B. Scala.....	23,899	Dec. 5	65	1590
Remedy. Catarrh.....	F. C. Fowler.....	23,175	June 6	63	1527
Remedy. Catarrh.....	S. C. Wells & Co.....	23,586	Sept. 5	64	1393
Remedy. Cholera.....	S. H. McKellips.....	23,673	Oct. 3	65	131
Remedy for amenorrhea, dismenorrhea, corpulency, and nervous diseases.....	Wilcox Specific Medicine Company.....	23,400	July 25	64	557
Remedy for bronchial diseases.....	W. L. Coakley.....	22,346	Jan. 17	62	447
Remedy for cancers.....	M. A. C. Millen.....	23,748	Oct. 24	65	596
Remedy for catarrh.....	H. J. Mayers.....	23,093	May 23	63	1199
Remedy for catarrh.....	A. H. and P. Volk.....	22,291	Jan. 3	62	157
Remedy for catarrh and scrofulous diseases.....	C. W. Tanner.....	22,784	Apr. 11	63	308
Remedy for certain named diseases.....	F. M. Criswell.....	22,612	Mar. 7	62	1509
Remedy for certain named diseases.....	F. M. Criswell.....	23,154	May 30	63	1380
Remedy for certain named diseases.....	Macura Drug Co.....	22,685	Mar. 21	62	1819
Remedy for certain named diseases.....	J. K. Neagley.....	22,873	Apr. 25	63	607
Remedy for chills.....	W. A. Perkins.....	23,030	May 16	63	1055

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Remedy for chills and fever	L. M. Collins	22,347	Jan. 17	62	447
Remedy for corns, warts, bunions, and callouses	F. M. Criswell	23,775	Oct. 31	65	750
Remedy for coughs and colds and all inflamed conditions of the lungs and air-passages	J. B. Hurtt	23,492	Aug. 15	64	1005
Remedy for coughs, colds, catarrh, &c. Sirup	M. P. Hahn	23,312	July 4	64	153
Remedy for diabetes	J. E. Stroschein	23,493	Aug. 15	64	1003
Remedy for diseases of the blood and excretory organs	T. W. Graydon	22,930	May 2	63	755
Remedy for diseases of the blood and liver	Shawnee Remedy Co.	22,393	Jan. 31	62	739
Remedy for diseases of the blood, kidneys, liver, stomach, and bowels	C. S. Mick	23,152	May 30	63	1380
Remedy for diseases of the kidneys	Taboe Medical Company	22,569	Feb. 28	62	1350
Remedy for diseases of the kidneys and liver	F. Fenn	23,611	Sept. 12	64	1532
Remedy for diseases of the liver, for dropsy, costiveness, and dyspepsia	L. Gerstle	23,715	Oct. 17	65	439
Remedy for diseases of the stomach, blood, and liver, and cure for bites, stings, burns, and sprains. Internal and external	E. J. Fountain	23,153	May 30	63	1381
Remedy for diseases of the throat and lungs	R. L. Hicks	23,229	June 20	63	1813
Remedy for diseases of the throat, lungs, and mucous membrane. Sirup	H. G. Harter	23,149	May 30	63	1379
Remedy for eczema, tetter, sunburn, freckles, and other blemishes of the complexion	S. A. Richmond	23,230	June 20	63	1813
Remedy for eye troubles	A. P. Roth, M. E. and M. C. Harlingen	23,174	June 6	63	1527
Remedy for female diseases. A powder to be used as a	Home Medical Company	22,308	Jan. 10	62	312
Remedy for gonorrhea, female weaknesses, and analogous diseases	Sandalide Co.	22,374	Jan. 24	62	585
Remedy for headache, insomnia, and similar troubles	H. Wade	22,781	Apr. 11	63	308
Remedy for headache, neuralgia, and rheumatism	J. C. Vossler	23,228	June 20	63	1813
Remedy for hog-cholera and other diseases	E. C. Rosenzi	22,649	Mar. 14	62	1649
Remedy for indigestion	H. O. Hyatt	23,398	July 25	64	556
Remedy for indigestion	Monterey Company	22,833	Apr. 18	63	460
Remedy for indigestion, eruptions of the skin, &c. Herb tea used as a	S. C. Wells	23,436	Aug. 1	64	710
Remedy for internal and external use, and atomizers	McKesson & Robbins	22,872	Apr. 25	63	607
Remedy for kidney and liver complaints	Herbaleine Medicine Co.	23,315	July 4	64	153
Remedy for kidney diseases, general debility, and liver troubles	J. B. Daniel	23,438	Aug. 1	64	710
Remedy for man and beast. External	X-Zalia Medicine Company	23,171	June 6	63	1527
Remedy for mucous and cutaneous diseases	T. W. Graydon	22,730	Apr. 4	63	147
Remedy for nervous disorders	D. B. Allen	23,798	Nov. 7	65	890
Remedy for neuralgia	E. B. White	22,648	Mar. 14	62	1649
Remedy for neuralgia, rheumatism, and like ailments	Friends Herbal Association	22,876	Apr. 25	63	607
Remedy for piles	J. Senior	23,031	May 16	63	1055
Remedy for rheumatism	J. P. Greene	23,928	Dec. 19	65	1913
Remedy for rheumatism	G. A. Lehnau	23,313	July 4	64	153
Remedy for rheumatism	W. H. A. Nesbitt	22,684	Mar. 21	62	1818
Remedy for rheumatism	C. E. Thompson & Co.	22,292	Jan. 3	62	157
Remedy for sea-sickness	F. R. Tottenham	23,661	Sept. 26	64	1788
Remedy for skin diseases	G. H. Smith	22,785	Apr. 11	63	308
Remedy for the tobacco habit	U. Stackhouse	23,309	July 4	64	153
Remedy for throat and lung troubles	J. F. Goldaine	23,265	June 27	63	1958
Remedy. Headache	C. F. Neubert	23,264	June 27	63	1958
Remedy. Headache and fever	C. B. Raser	23,566	Aug. 29	64	1262
Remedy known as microbe-killer	W. Radam	23,399	July 25	64	556
Ribbons	Whitney & Co.	23,018	May 16	63	1054
Ribbons. Silk	W. Openhym & Sons	22,670	Mar. 21	62	1817
Ribbons. Velvet	W. Openhym & Sons	22,816	Apr. 18	63	459
Riding-galleries or merry-go-rounds. Portable steam	J. Armitage, G. C. and A. Herschell	22,756	Apr. 4	63	150
Rivets, washers, burrs, and like articles of copper and brass	Plume & Atwood Manufacturing Company	23,651	Sept. 26	64	1787
Roofing purposes. Tarred felt for	Ehret-Warren Manufacturing Company	23,859	Nov. 21	65	1220
Rope, cord, and twine	John Good Cordage and Machine Company	23,858	Nov. 21	65	1220
Rope dressing or filling	C. W. Hunt Company	22,344	Jan. 17	62	447
Rubber goods	Eastern Rubber Manufacturing Company	23,023	May 16	63	1054
Rubber goods. All manufactured	Hodgman Rubber Company	23,376	July 18	64	435
Rubber goods. Certain named	A. U. Betts	22,674	Mar. 21	62	1817
Rubber goods, leather goods, and waterproof oiled fabrics	Goodyear Rubber Company	23,455	Aug. 8	64	854
Rubber goods, leather goods, and waterproof oiled fabrics	Goodyear Rubber Company	23,456	Aug. 8	64	854
Rugs and carpets. Embroidered	H. Enfajian	23,338	July 11	64	296
Saddles, harness, robes, blankets, horse-clothing, and like goods	Chickasaw Saddlery Company	23,053	May 16	63	1057
Salts. Effervescent fruit	Geary Drug Co.	22,532	Feb. 28	62	1347
Salve	G. L. Baldauf & Co.	22,446	Feb. 7	62	897
Salve	G. P. Benson	23,232	June 20	63	1813
Salve	M. P. Hahn	23,319	July 4	64	154
Salve	E. H. Stone	22,932	May 2	63	756
Salve for lumpy jaw in animals	F. C. White	23,267	June 27	63	1958
Salve or ointment for the skin	F. J. Lockwood	22,616	Mar. 7	62	1509
Salves and liniments for animal use	Reliance Manufacturing Company	22,651	Mar. 14	62	1649
Salves and ointments	Baldwin & Nalley	23,097	May 23	63	1199
Salves and ointments	W. H. Lockwood	23,607	Sept. 12	64	1531
Salves, liniments, plasters, and bitters	E. Dort	22,444	Feb. 7	62	897
Salves, pills, vermifuge, liniment, and cough balm	A. H. Gottschall	22,471	Feb. 14	62	1061
Sardines	M. Amieux & Cie	23,739	Oct. 24	65	595
Sardines	S. G. Stevens	22,594	Mar. 7	62	1507
Sarsaparilla and cough-sirup	Red Seal Remedy Co.	22,682	Mar. 21	62	1818
Sarsaparilla compound	C. I. Hood	22,779	Apr. 11	63	308
Sarsaparilla. Compound of	C. I. Hood	23,353	July 11	64	297
Sarsaparilla. Compounds of	W. E. Manners, G. H. Downing, and G. S. Ackley	22,701	Mar. 28	62	1961
Satins, prints, and cotton piece goods	Arnold Print Works	23,071	May 23	63	1197
Scales. Weighing	E. & T. Fairbanks & Company	23,592	Sept. 5	64	1393

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Title.	Name.	No.	Date.	Official Gazette.	
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Scales. Weighing.	E. & T. Fairbanks & Company	23,593	Sept. 5	64	1393
Scouring and polishing preparations	F. A. Schulz and G. A. Philipp	23,820	Nov. 14	65	1063
Screw-plates, taps and dies, and bolt-cutters	Wiley & Russell Manufacturing Company	23,854	Nov. 21	65	1220
Screws, bolts, nuts, rivets, burrs, washers, wire nails, and kindred articles.	American Screw Company	22,709	Mar. 28	62	1962
Scythe-stones	Connecticut Lake Stone Company	23,801	Nov. 7	65	890
Seed. Clover	Vilmar & Goetze	23,843	Nov. 21	65	1219
Seeds, bulbs, plants, and flowers	E. H. Hunt	22,448	Feb. 7	62	898
Seeds. Farm or agricultural	Albert Dickinson Company	23,347	July 11	64	296
Seeding implements, cider-mills, and hay-tools	Superior Drill Company	23,569	Aug. 29	64	1262
Serge	Scarborough, Nephew & Co.	23,667	Oct. 3	65	131
Serges	J. V. Godwin & Co.	23,890	Dec. 5	65	1589
Sewing-machine and attachments	American Buttonhole, Overseaming and Sewing Machine Company.	23,161	May 30	63	1380
Sewing-machines	Cash Buyers' Union	22,353	Jan. 17	62	448
Sewing-machines	Chicago Sewing Machine Company	22,662	Mar. 14	62	1650
Sewing-machines	Standard Sewing Machine Company	23,160	May 30	63	1380
Sewing-machines	H. R. Tracy	23,232	June 13	63	1686
Sewing-machines	White Sewing Machine Company	22,957	May 2	63	757
Sewing-machines and attachments	Firm of J. Wanamaker	23,926	Dec. 12	65	1764
Sewing-machines and attachments	New Home Sewing Machine Company.	23,689	Oct. 10	65	293
Sewing-machines and attachments	Parsons & Bird	22,473	Feb. 14	62	1061
Sewing-machines and sewing-machine attachments	Domestic Sewing Machine Company	23,735	Oct. 24	15	595
Sewing-machines and their attachments	Domestic Sewing Machine Company	22,327	Jan. 10	62	314
Sewing-machines and their attachments	Domestic Sewing Machine Company	22,328	Jan. 10	62	314
Sewing-machines and their attachments	New York Sewing Machine and Manufacturing Company.	22,329	Jan. 10	62	314
Sewing-machines and their attachments	New York Sewing Machine and Manufacturing Company.	22,330	Jan. 10	62	314
Sewing-machines and their attachments	New York Sewing Machine and Manufacturing Company.	22,331	Jan. 10	62	314
Sewing-machines and their attachments	New York Sewing Machine and Manufacturing Company.	22,332	Jan. 10	62	314
Sewing-machines and their attachments	New York Sewing Machine and Manufacturing Company.	22,333	Jan. 10	62	314
Sewing-machines and their attachments	New York Sewing Machine and Manufacturing Company.	22,334	Jan. 10	62	314
Sheathing, packing, or filling paper. Builders'	S. Cabot	23,778	Oct. 31	65	750
Sheep-dips	Newton, Chambers & Company	23,665	Sept. 26	64	1788
Sheeting	Minot, Hooper & Co	22,631	Mar. 14	62	1647
Ships' bottoms. Anticorrosive composition and antifouling composition for	Williams & Co.	22,745	Apr. 4	63	149
Shirt-waists, blouses, ladies' wrappers, and gowns	D. Levy & Sons	23,111	May 30	63	1377
Shirts	D. R. Sillesky & Co.	22,475	Feb. 14	62	1061
Shirts, blouses, trousers, and overalls	Wingate, Stone & Welles Mercantile Company.	23,069	May 23	63	1197
Shirts, collars, cuffs, neckties, underwear, and outer clothing.	I. Perego & Co.	23,517	Aug. 22	64	1197
Shoe-dressing. Liquid	C. L. Hauthaway & Sons	25,560	Aug. 29	64	1262
Shoe-nails	McKay Metallic Fastening Association.	23,012	May 9	63	908
Shoes	Wallace, Elliott & Co.	23,408	July 25	64	557
Shoes for men and women	Ziegler Brothers	23,757	Oct. 31	65	748
Shoes. Ladies' fine	C. K. Sharood and S. S. Crooks	22,861	Apr. 25	63	606
Shoes. Rubber-soled canvas	North British Rubber Company	23,666	Oct. 3	65	131
Shoes. School	P. Cogan & Son	22,815	Apr. 18	63	458
Shoes. School	Giesecke Boot and Shoe Manufacturing Company.	22,901	May 2	63	753
Shoes. School	A. Priesmeyer	23,070	May 23	63	1197
Shoulder-braces and suspenders	Knickerbocker Brace Company	23,427	Aug. 1	64	709
Sifting-machines	C. Hagenmacher	23,654	Sept. 26	64	1788
Silks	Whitney & Co	23,120	May 30	63	1377
Sirup	Bliss Syrup Refining Company	23,046	May 16	63	1057
Sirup. Alternative	J. D. Hutchinson	22,885	Apr. 25	63	609
Sirup and molasses	B. S. Janney, Jr., & Co.	23,082	May 23	63	1198
Sirup and molasses	B. S. Janney, Jr., & Co.	23,083	May 23	63	1198
Sirup. Laxative or cathartic	Fig Honey Company	23,490	Aug. 15	64	1003
Sirup. Maple	Bliss Syrup Refining Company	23,767	Oct. 31	65	749
Sirup of spruce gum. Compound	H. E. Perry	23,351	July 11	64	297
Sirup. Table	Wilson, Palmer & Co	23,084	May 23	63	1199
Sirups and carbonated and effervescing beverages. Flavoring	W. Guilford	23,766	Oct. 31	65	749
Skates	Forbes Manufacturing Company	23,652	Sept. 26	64	1787
Skates. Ice and roller	Union Hardware Company	23,727	Oct. 17	65	440
Skin cleanser and healer	A. S. Frier	22,846	Apr. 18	63	461
Skins. Calf, kid, and goat	Burk Brothers	23,226	June 20	63	1813
Skins or hides or hides treated with patent-leather composition for shoes, &c.	G. F. Stengel	23,197	June 13	63	1684
Skirt-holders	Smith-Brewer Novelty Company	22,586	Mar. 7	62	1506
Slates	Hyatt School Slate Company	22,410	Jan. 31	62	740
Soap	L. I. Buroughs	23,818	Nov. 14	65	1063
Soap	Enterprise Soap Works	23,140	May 30	63	1379
Soap and detergents. Common	United Alkali Company	22,942	May 2	63	756
Soap and detergents. Common	United Alkali Company	22,943	May 2	63	756
Soap and washing powder	Globe Chemical Company	22,847	Apr. 18	63	461
Soap. Carbolic	Reliance Manufacturing Company	22,551	Feb. 28	62	1343
Soap for cleaning carpets, rugs, and similar articles	Electric Cleanser Company	23,269	June 27	63	1958
Soap for family, laundry, and mill use	J. E. Noble	23,600	Sept. 12	64	1530
Soap in chips and bars	H. Kohntamm & Co.	22,618	Mar. 7	62	1509
Soap. Laundry	Lautz Bros. & Co	23,947	Dec. 26	65	2058
Soap. Laundry and toilet	Rice & Robinson Soap Company	22,549	Feb. 28	62	1348
Soap. Laundry and toilet	Rice & Robinson Soap Company	22,550	Feb. 28	62	1348
Soap, lotions, cream, salve, and complexion powders. Toilet	C. Miller	22,723	Apr. 4	63	147

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Soap or cleaning compound. Plastic.....	American Chemical Company.....	22,469	Feb. 14	62	1061
Soap, perfumery, and toilet preparations.....	Colgate & Co.....	22,546	Feb. 23	62	1348
Soap, perfumery, and toilet preparations.....	Colgate & Co.....	22,547	Feb. 23	62	1348
Soap, perfumery, and toilet preparations.....	Colgate & Co.....	22,548	Feb. 23	62	1348
Soap powder.....	E. E. Fox.....	23,785	Nov. 7	65	839
Soap powder.....	M. Werk Company.....	23,394	July 25	64	556
Soap powder.....	M. Werk Company.....	23,395	July 25	64	556
Soap. Toilet.....	P. Neubass.....	22,545	Feb. 23	62	1348
Soap. Toilet.....	Colgate & Co.....	22,632	Sept. 19	64	1647
Soap. Toilet.....	Mexican Root Soap Co.....	22,468	Feb. 14	62	1061
Soap. Toilet.....	Mülhens & Kropff.....	23,357	July 11	64	298
Soap. Toilet.....	Robinson Bros. & Co.....	22,364	Jan. 24	62	585
Soap. Toilet.....	Stearns & Gordon.....	22,496	Feb. 21	62	1204
Soap. Toilet and laundry.....	Amalgam Soap Company.....	22,691	Mar. 21	62	1819
Soap. Toilet and laundry.....	Dunwoody Bros.....	22,470	Feb. 14	62	1061
Soap. Toilet, laundry, and scouring.....	Ke-Li Manufacturing Company.....	23,203	June 13	63	1684
Soaps. Laundry, toilet, and fancy.....	W. H. McMullin.....	23,396	July 25	64	556
Soaps, perfumery, and lotions.....	Lady Grey Perfumery Company.....	22,840	Apr. 18	63	461
Soaps, perfumery, and lotions.....	Lady Grey Perfumery Company.....	22,841	Apr. 18	63	461
Soaps, powders, lotions, dentifrice, and other perfumed preparations for the toilet.....	V. Klotz.....	23,845	Nov. 21	65	1219
Soaps. Toilet and laundry.....	W. M. Marcus.....	23,271	June 27	63	1959
Soaps. Toilet, shaving, and laundry.....	Bernheimer Bros.....	22,842	Apr. 18	63	461
Soda. Dissolved washing.....	A. Stromberg & Co.....	23,819	Nov. 14	65	1063
Soda-water and other carbonated beverages.....	Crystal Spring Bottling Company.....	23,699	Oct. 10	65	294
Sorghum.....	Bliss Syrup Refining Company.....	23,085	May 23	63	1199
Spades. Diamond-pointed.....	Terre Haute Shovel and Tool Company.....	23,409	July 25	64	557
Specifics. Syphilitic.....	W. T. Batterson.....	23,151	May 30	63	1379
Spices and mustard.....	Wing Brothers & Hartt.....	23,045	May 16	63	1056
Spices. Ground or powdered.....	Gilpin, Langdon & Co.....	23,129	May 30	63	1378
Spices, herbs, flavoring extracts, essences, celery salt, tapioca, sago, rice, pepper-sauce, and ketchup.....	W. J. Stitt & Co.....	22,279	Jan. 3	62	156
Starch. Wheat.....	H. Kohnstamm & Co.....	22,434	Feb. 7	62	896
Starching-machines.....	L. B. Porter.....	22,449	Feb. 7	62	898
Stays. Dress.....	F. Hinckel.....	23,195	June 13	63	1684
Stays. Dress.....	H. Lublin.....	22,354	Jan. 24	62	584
Stays. Dress and corset.....	T. P. Taylor.....	22,340	Jan. 17	62	447
Stays or corsets.....	R. B. Appleton.....	22,485	Feb. 21	62	1203
Steam-generators.....	Babcock & Wilcox Company.....	23,692	Oct. 10	65	293
Steel and iron. Soft.....	Wilmot & Hobbs Manufacturing Company.....	22,659	Mar. 14	62	1649
Steel hardening and tempering compound.....	W. F. Altomus.....	22,657	Mar. 14	62	1649
Steel in sheets, strips, bars, and rods.....	Wilmot & Hobbs Manufacturing Company.....	23,059	May 16	63	1058
Steel, steel wire, tools, files, and saws.....	Peter Stubbs.....	22,752	Apr. 4	63	149
Steel, steel wire, tools, files, and saws.....	Peter Stubbs.....	22,753	Apr. 4	63	150
Steel suitable for files and other tools. Tool.....	Jonas & Colver.....	23,058	May 16	63	1058
Stereotype and electrotype plates and blocks.....	F. A. Ringler Company.....	22,974	May 9	63	905
Stove-polish.....	Ayling Brothers.....	23,725	Oct. 17	65	439
Stoves and ranges.....	Art Stove Company.....	22,958	May 2	63	758
Stoves and ranges.....	Famous Stove Co.....	22,695	Mar. 21	62	1819
Stoves and ranges.....	Favorite Stove and Range Company.....	23,886	Nov. 28	65	1402
Stoves and ranges. Cooking and heating.....	Brand Stove Company.....	22,757	Apr. 4	63	150
Stoves. Cooking, heating, and gas.....	F. A. Klaine.....	23,474	Aug. 8	64	856
Stoves, heaters, and parts of the same.....	Reading Stove Works, Orr, Painter & Company.....	22,578	Feb. 28	62	1350
Stoves, ranges, and heaters, and gasoline, oil, coal, and wood burning stoves. Gas.....	A. Weiskittel & Son.....	22,380	Jan. 24	62	586
String instruments.....	C. F. Zimmermann.....	22,339	Jan. 17	62	447
Sugar and sirup. Maple.....	Tuttle & Harmon.....	22,794	Apr. 11	63	309
Suits for boys and children.....	T. M. Rasin.....	23,068	May 23	63	1197
Suppositories.....	Eli Lilly & Company.....	22,786	Apr. 11	63	308
Suppositories.....	R. E. Harris & Co.....	23,827	Nov. 14	65	1064
Suppositories.....	A. Phillips.....	23,096	May 23	63	1199
Suppositories for diseases of the bowels and rectum.....	H. K. Wampole & Co.....	22,370	Jan. 24	62	585
Suspenders and braces.....	E. H. Lieberthal.....	22,763	Apr. 11	63	306
Suspenders, belts, shirts, and drawers.....	L. H. Day.....	23,183	June 6	63	1528
Suspensories.....	Chambers, Bro. & Co.....	22,491	Feb. 21	62	1203
Suspensories of all kinds.....	Curtis & Spindell.....	23,227	June 20	63	1813
Sweaters.....	W. T. Pitchers.....	23,687	Oct. 10	65	293
Tablets. Flavored or medicated.....	Hance Bros. & White.....	22,728	Apr. 4	63	147
Tacks.....	Atlas Tack Corporation.....	23,102	May 23	63	1200
Tea.....	J. Butler.....	23,941	Dec. 19	65	1914
Tea.....	H. C. Fisher.....	22,918	May 2	63	754
Tea.....	C. S. Hicks.....	23,412	July 25	64	558
Tea.....	S. L. Marshall.....	22,792	Apr. 11	63	309
Tea.....	S. L. Marshall.....	22,793	Apr. 11	63	309
Tea.....	McCord, Brady Company.....	23,388	July 18	64	436
Tea, coffee, and spices.....	C. Blaul.....	23,001	May 9	63	907
Teas.....	T. H. Rockwood.....	23,079	May 23	63	1198
Teas and coffees.....	Chase & Sanborn.....	22,827	Apr. 18	63	460
Teas and coffees.....	Walrath & Co.....	23,694	Oct. 10	65	293
Teas. Green and black.....	Reid, Murdoch & Company.....	23,577	Sept. 5	64	1392
Teas. Green and black.....	Reid, Murdoch & Company.....	23,578	Sept. 5	64	1392
Teas. Green and black.....	Reid, Murdoch & Company.....	23,579	Sept. 5	64	1392
Teeth. Preparation for the painless extraction of.....	G. L. Grier.....	23,609	Sept. 12	64	1531
Thill-couplings. Antirattlers for.....	American Shaft Holder Co.....	23,856	Nov. 21	65	1220
Threads and silk fabrics. Sewing, knitting, and embroidery silk.....	Brainerd & Armstrong Company.....	22,694	Mar. 21	62	1819
Threads for machine and hand sewing.....	Kerr Thread Company.....	23,181	June 6	63	1528
Tin andterne plates.....	J. B. Scott & Co.....	23,855	Nov. 21	65	1220
Tin-plate,terne-plate, and coated and uncoated sheet metal.....	N. & G. Taylor Co.....	22,854	Apr. 18	63	462
Tin plates.....	Western Tin Plate Works.....	23,852	Nov. 21	65	1220

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Title.	Name.	No.	Date.	Official Gazette.	
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Tin plates	Western Tin Plate Works	23,853	Nov. 21	65	1320
Tin plates, terne plates, tin taggers, black taggers, and sheet metal and solder.	E. L. Parker & Co	22,325	Jan. 10	62	314
Tires. Vehicle.....	Union Cycle Manufacturing Company.	22,453	Feb. 7	62	896
Tobacco and cigarettes. Plug or chewing, twist, and smoking	J. B. Pace Tobacco Company	23,308	July 4	64	153
Tobacco. Chewing.....	R. Everhart & Co	23,582	Sept. 5	64	1393
Tobacco. Chewing and smoking	W. T. Brown	23,916	Dec. 12	65	1764
Tobacco, cigars, and cigarettes, cheroots, and snuff	American Tobacco Company	23,133	May 30	63	1378
Tobacco, cigars, cigarettes, and cheroots	D. Ritchie & Co	23,348	July 11	64	297
Tobacco, cigars, cigarettes, and cheroots	D. Ritchie & Co	23,349	July 11	64	297
Tobacco. Manufactured smoking and chewing	C. C. Herr	22,768	Apr. 11	63	307
Tobacco. Plug.....	J. J. Hickok & Co	23,593	Mar. 7	62	1507
Tobacco. Plug.....	D. H. Spencer & Son	23,321	Jan. 10	62	313
Tobacco. Plug.....	W. W. Wood & Co	22,526	Feb. 28	62	1347
Tobacco. Plug.....	Wright Bros. Tobacco Company	22,297	Jan. 3	62	158
Tobacco. Plug.....	Wright Bros. Tobacco Company	22,298	Jan. 3	62	158
Tobacco. Smoking.....	English, Belcher & Co	23,199	June 13	63	1634
Tobacco. Twist	J. D. Walker	22,425	Feb. 7	62	895
Toilet articles and preparations. Certain named	A. & F. Pears	22,843	Apr. 18	63	461
Toilet articles and preparations, including soap. Perfumed.	V. Klotz	23,599	Sept. 12	64	1530
Toilet face-wash	D. Vice, Jr., & Co	23,444	Aug. 1	64	711
Toilet powder	Reliance Manufacturing Company	22,845	Apr. 18	63	461
Toilet powders and dentifrices	G. B. Evans	23,445	Aug. 1	64	711
Toilet preparations	Breidenbach & Marshall	22,758	Apr. 11	63	306
Toilet preparations	R. Hudnut	23,368	July 18	64	434
Toilet wash	O. J. Freeman	22,700	Mar. 28	62	1961
Toilet water	D'Ormidor & Co	22,311	Jan. 10	62	312
Tonic	J. Triner	23,700	Oct. 10	65	294
Tonic and pills	J. S. Dodge	22,613	Mar. 7	62	1509
Tonic compound	Purdue Frederick Company	23,794	Nov. 7	65	890
Tonic. Herb	V. D. Dowd	23,352	July 11	64	297
Tonic. Nerve	J. P. Roark	22,931	May 2	63	756
Tonic of malt and hops	Hospital Tonic Co	23,603	Sept. 12	64	1531
Tonic. Quinine	Weeks & Potter Company	22,608	Mar. 7	62	1508
Tonics and blood-purifiers	Bagley Dandelion Compound Company.	23,532	Aug. 22	64	1128
Tonics, bitters, liniments, and sirups	J. W. James & Co	22,567	Feb. 28	62	1350
Tonics, pills, balsam, ointment, and remedies for neuralgia and catarrh.	Hawker Medicine Company	23,094	May 23	63	1199
Tools, pruning implements, and cutlery	J. A. Schmidt	23,568	Aug. 29	64	1262
Tooth and gum washes	J. J. Ottinger	22,296	Jan. 3	62	158
Tooth-paste	J. Spyer	23,723	Oct. 17	65	439
Tooth-powder	Reliance Manufacturing Company	22,544	Feb. 28	62	1348
Tooth-wash	J. W. Johnson	23,558	Aug. 29	64	1261
Toys	Alton Manufacturing Company	22,900	May 2	63	753
Trousers	R. Reach	23,596	Sept. 12	64	1530
Trousers	C. Faulkner	23,424	Aug. 1	64	709
Trousers	J. F. Hull, Jr	22,764	Apr. 11	63	306
Trousers	J. F. Hull, Jr	22,765	Apr. 11	63	306
Trousers	J. F. Hull, Jr	23,551	Aug. 29	64	1261
Trunks	Egeman, Duguid & Co	23,549	Aug. 29	64	1261
Trunks. Professional, theatrical, and commercial travelers'	C. A. Taylor Trunk Works	23,221	June 13	63	1686
Tubs, pails, buckets, keelers, measures, and kanakins	Mann Bros.	22,504	Feb. 21	62	1304
Twine. Binder	J. T. Bailey & Co	22,673	Mar. 21	62	1817
Type-writers	Franklin Type Writer Company	22,805	Apr. 11	63	310
Type-writers and parts thereof	Domestic Sewing Machine Company	22,624	Mar. 7	62	1510
Type-writing machines	Franklin Type Writer Company	22,975	May 9	63	905
Umbrellas, parasols, and canes	J. Maddocks	23,508	Aug. 15	64	1004
Undergarments	A. N. Loeb & Co	22,486	Feb. 21	62	1203
Underwear	W. Bengel Soehne	22,488	Feb. 21	62	1203
Underwear	W. Bengel Soehne	22,520	Feb. 28	62	1346
Underwear	Rothwell Hosiery Company	23,831	Nov. 21	65	1218
Underwear for ladies and children	Stapley & Smith	23,921	Dec. 12	65	1764
Underwear, including corsets. Women's	Featherbone Corset Company	22,762	Apr. 11	63	306
Underwear made of a knit fabric having a smooth face and a plush back.	I. Jaros	22,588	Mar. 7	62	1507
Underwear. Ribbed	Lewis Knitting Company	23,182	June 6	63	1528
Unguents	E. F. Houghton & Co	22,443	Feb. 7	62	897
Valves and hydrants	Kennedy Valve Manufacturing Company.	22,416	Jan. 31	62	740
Valves and pump-governors. Pressure-reducing	Locke Brothers	22,451	Feb. 7	62	898
Valves and steam-packing	Jenkins Bros.	22,335	Jan. 10	62	314
Valves. Machinery	Mason Regulator Company	22,696	Mar. 21	62	1820
Vans and other heavy wagons. Moving	F. Ippich & Treffinger	23,106	May 23	63	1200
Vapor-engines	Union Gas Engine Company	22,625	Mar. 7	62	1510
Varnish	Berry Brothers	22,894	Apr. 25	63	610
Varnish	R. I. Clark	23,860	Nov. 21	65	1220
Varnishes, stains, driers, japans, and kindred goods	Chicago Varnish Company	22,394	Jan. 31	62	739
Velocipedes and bicycles	Monarch Cycle Company	22,711	Mar. 28	62	1962
Velocipedes, bicycles, and parts thereof	Luburg Manufacturing Company	23,109	May 23	63	1200
Vermifuge	Wood Drug Company	22,729	Apr. 4	63	147
Vermip-eradicators	S. W. McTaggart	23,704	Oct. 10	65	294
Veterinary medicine for distemper and cough	A. A. Wells and G. R. Craft	23,901	Dec. 5	65	1590
Veterinary powders	J. P. Hull Horse, Cattle, and Poultry Powder Company.	23,215	June 13	63	1685
Vinegar	Firm of Lars Montén	23,523	Aug. 22	64	1127
Vinegar and pickles	Oakland Vinegar and Pickle Company.	23,234	June 20	63	1813
Violins	J. W. Pepper	23,062	May 23	63	1197
Violins, guitars, and their accessories. Stringed instruments, such as	A. Gemünder & Sons	22,760	Apr. 11	63	306
Wall-paper	T. Hall	22,714	Apr. 4	63	146
Wash for the prevention and cure of sexual diseases	W. D. Mann	23,173	June 6	63	1527

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Washing compound. Powdered	C. S. Ely	22,744	Apr. 4	63	149
Washing fluid	H. Kohnstamm & Co.	22,436	Feb. 7	62	897
Washing fluid	A. S. Rand and G. Bell	23,485	Aug. 15	64	1002
Washing fluid	E. Wartenberg	22,692	Mar. 21	62	1819
Washing-powder	E. Bengtson	23,918	Dec. 12	65	1764
Washing-powder	G. Petri	23,006	May 9	63	908
Washing-powder	R. R. Snowden	23,447	Aug. 1	64	711
Washing-powders	White Rose Manufacturing Co.	23,559	Aug. 29	64	1261
Watchcase. Composition	Illinois Watch Case Company	22,418	Feb. 7	62	895
Watchcases	Crescent Watch Case Company	22,382	Jan. 31	62	738
Watchcases	Crescent Watch Case Company	22,383	Jan. 31	62	738
Watchcases	Fahys Watch Case Company	22,966	May 9	63	905
Watchcases	Fahys Watch Case Company	22,967	May 9	63	905
Watchcases	Fahys Watch Case Company	22,968	May 9	63	905
Watchcases	Illinois Watch Case Company	23,893	Dec. 5	65	1589
Watchcases	J. Macher	22,667	Mar. 21	62	1817
Watchcases	Roseman & Levy	23,499	Aug. 15	64	1003
Watchcases and jewelry	Lissauer & Co.	22,698	Mar. 28	62	1961
Watches	Hampden Watch Company	22,506	Feb. 28	62	1345
Watches	Hampden Watch Company	22,507	Feb. 28	62	1345
Watches	Hampden Watch Company	22,508	Feb. 28	62	1345
Watches	Hampden Watch Company	22,509	Feb. 28	62	1345
Watches	Hampden Watch Company	22,510	Feb. 28	62	1345
Watches	Hampden Watch Company	22,511	Feb. 28	62	1345
Watches	Hampden Watch Company	22,512	Feb. 28	62	1346
Watches	Hampden Watch Company	22,513	Feb. 28	62	1346
Watches	Hampden Watch Company	22,514	Feb. 28	62	1346
Watches	Hampden Watch Company	22,806	Apr. 18	63	458
Watches	Hampden Watch Company	22,969	May 9	63	905
Watches	Hampden Watch Company	22,970	May 9	63	905
Watches	Hampden Watch Company	22,971	May 9	63	905
Watches	Hampden Watch Company	23,063	May 23	63	1197
Watches	Hampden Watch Company	23,064	May 23	63	1197
Watches	Hampden Watch Company	23,892	Dec. 5	65	1589
Watches and parts thereof	American Waltham Watch Company	22,859	Apr. 25	63	606
Watches and their parts	American Waltham Watch Company	22,276	Jan. 3	62	156
Watches, cuff and lapel buttons, watch-charms, and medals	D. F. Penington	23,645	Sept. 26	64	1787
Water and sewage. Material for use in purifying	International Water and Sewage Purification Company.	23,676	Oct. 3	65	132
Water-closets	L. M. Rumsey Manufacturing Company.	22,712	Mar. 28	62	1962
Water-closets	L. M. Rumsey Manufacturing Company.	22,713	Mar. 28	62	1962
Water-closets and urinals	R. Carlisle	23,638	Sept. 19	64	1648
Water coolers and urns	A. W. Meyer	23,803	Nov. 7	65	890
Water. Natural spring	F. H. and S. M. Orvis	23,719	Oct. 17	65	439
Water-wheels	James Lefel & Company	22,857	Apr. 18	63	462
Waterproofed hollow ware known as indurated	United Indurated Fibre Company of New Jersey.	23,189	June 6	63	1528
Waters, both plain and aerated. Spring and mineral	E. E. Hoyt	23,208	June 13	63	1685
Whalebone. Commercial	New England Whalebone Manufacturing Co.	22,525	Feb. 28	62	1347
Wheat and oats for table use. Prepared	D. W. Young	23,127	May 30	63	1378
Wheat meal for a breakfast food. Rolled	Sperry Flour Company	23,942	Dec. 26	65	2058
Wheat. Rolled	Pettijohn California Breakfast Food Company.	22,459	Feb. 14	62	1060
Wheat. Rolled or crushed	C. S. Laumeister	23,620	Sept. 19	64	1646
Whiskies	J. Olwell & Co.	22,289	Jan. 3	62	157
Whiskies	J. Olwell & Co.	22,502	Feb. 21	62	1204
Whisky	J. P. Baizer	22,769	Apr. 11	63	307
Whisky	J. P. Baizer	22,770	Apr. 11	63	307
Whisky	G. Benz & Sons	23,744	Oct. 24	65	596
Whisky	G. Benz & Sons	23,745	Oct. 24	65	596
Whisky	Bernheim Bros.	23,913	Dec. 12	65	1763
Whisky	Bigbie Bros. & Co	22,529	Feb. 28	62	1347
Whisky	D. L. Bleyer & Co	22,641	Mar. 14	62	1648
Whisky	J. Bond	22,989	May 9	63	907
Whisky	J. Buchanan	23,743	Oct. 24	65	596
Whisky	Corning & Co.	23,248	June 27	63	1956
Whisky	R. W. Crawford	23,915	Dec. 12	65	1763
Whisky	Culbert & Co.	23,304	July 4	64	153
Whisky	Distillers Company	22,771	Apr. 11	63	307
Whisky	P. Doherty	23,434	Aug. 1	64	710
Whisky	E. Eising & Co.	23,305	July 4	64	153
Whisky	Fishel & Levy	22,990	May 9	63	907
Whisky	G. T. Gambrill	22,407	Jan. 31	62	740
Whisky	J. Gillon & Co	22,530	Feb. 28	62	1347
Whisky	A. Goldberg	23,379	July 18	64	435
Whisky	Gooderham & Worts	23,764	Oct. 31	65	749
Whisky	P. R. Hentz & Co	23,806	Nov. 14	65	1062
Whisky	Kaufmann Bros. & Co	22,675	Mar. 21	62	1818
Whisky	J. F. McDonald & Co	23,763	Oct. 31	65	749
Whisky	Melvale Distilling Co.	22,734	Apr. 4	63	148
Whisky	Mitchell Brothers	22,531	Feb. 28	62	1347
Whisky	A. Myers	22,865	Apr. 25	63	606
Whisky	Nickels & Tuller	23,556	Aug. 29	64	1261
Whisky	J. Olwell & Co	20,458	Feb. 14	62	1060
Whisky	R. M. Rose Co.	23,914	Dec. 12	65	1763
Whisky	Rosskam, Gerstley & Co	22,991	May 9	63	907
Whisky	A. B. Sheaffer	23,655	Sept. 26	64	1788
Whisky	H. C. Ward	23,904	Dec. 5	65	1590
Whisky, brandy, gin, rum, sherry, port, madeira, and liquors.	T. Allen & Co	23,169	June 6	63	1527
Whisky, manhattan, and other cocktails.	A. S. De Lissa	22,679	Mar. 21	62	1818
Whisky. Rye	Mayer Sons & Co	22,323	Jan. 10	62	314

Alphabetical list of trade-marks—Continued.

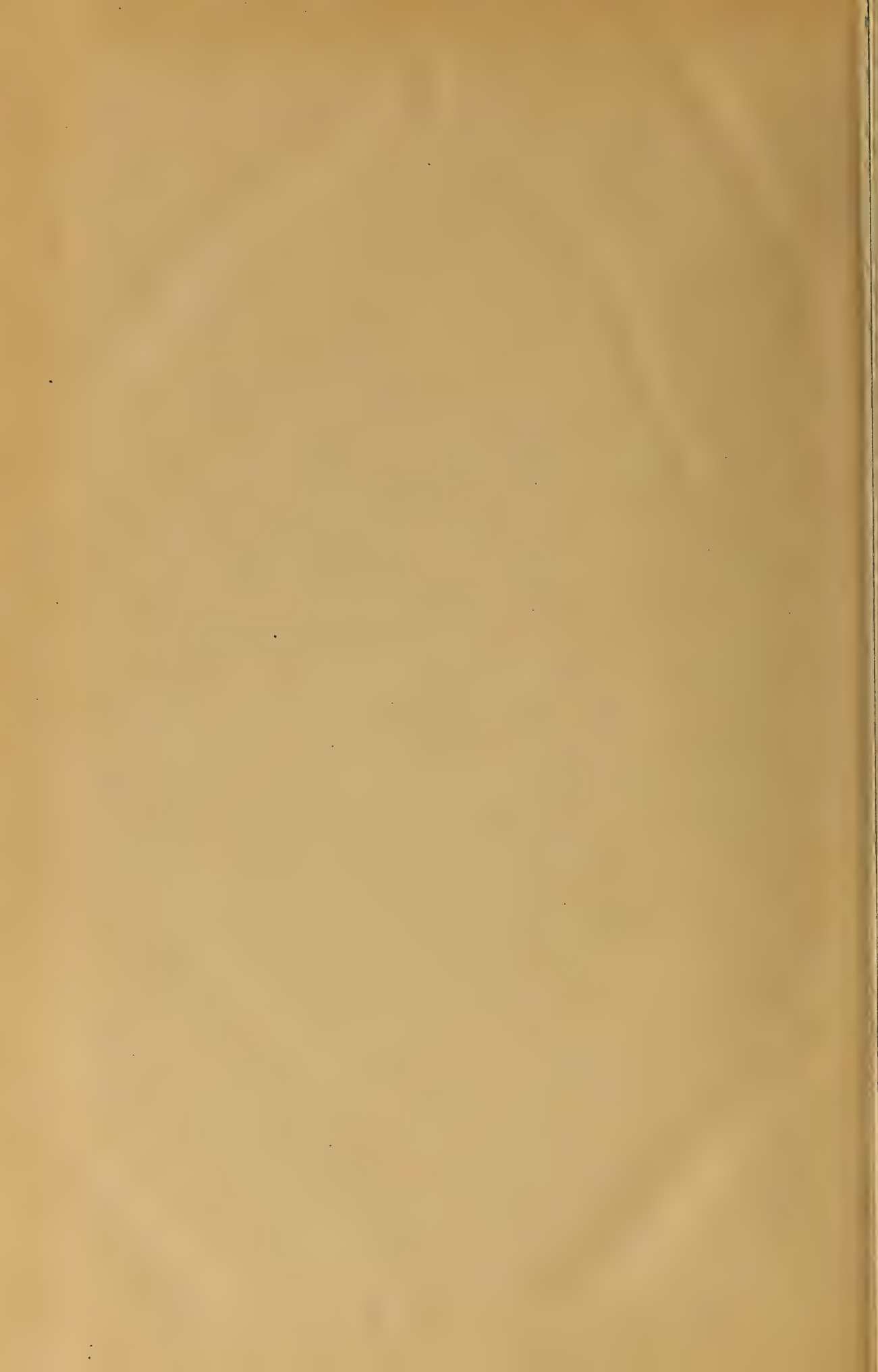
Title.	Name.	No.	Date.	Official Gazette.	
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Whisky, wines, champagnes, and liquors	Clover Leaf Wine Co.	22,866	Apr. 25	63	606
Wine. Bordeaux	Brossault & Co	22,426	Feb. 7	62	895
Wine, brandy, spirits, and liqueur	E. Dupont & Co	22,925	May 2	63	755
Wine. Champagne	St. Arnould & Co	23,247	June 27	63	1956
Wine. Orange quinine	Meagher Bros. & Co.	22,681	Mar. 21	62	1818
Wine. Vermouth	Jno. Peard Vermouth Company	23,462	Aug. 8	64	855
Wines	Brossault & Co	22,349	Jan. 17	62	448
Wines and brandies	Germain Fruit Company	22,642	Mar. 14	62	1648
Wines and brandies	M. Lienau & Co	22,772	Apr. 11	63	307
Wines and cordials	J. P. Straub	22,528	Feb. 28	62	1347
Wines and liquors. California	California Vintage Company	22,606	Mar. 7	62	1508
Wines and liquors manufactured from grape-juice	G. West	23,461	Aug. 8	64	854
Wines. Hungarian	S. Lenck	22,773	Apr. 11	63	307
Wines. Unfermented	C. H. Howe & Co	23,761	Oct. 31	65	749
Wire-netting and wire-cloth	Clinton Wire Cloth Company	22,524	Feb. 28	62	1347
Wire rope and chain	G. Cradock & Co	23,103	May 23	63	1200
Wood filler	M. K. B. Frantz	23,362	July 11	64	298
Wood-preservative	Mica Roofing Co	22,495	Feb. 21	62	1204
Woodworking-machines	Hall & Brown Wood Working Machine Company	23,055	May 16	63	1057
Woodworking-machines	Hall & Brown Wood Working Machine Company	23,107	May 23	63	1200
Woolen dress goods	Botany Worsted Mills	23,936	Dec. 19	65	1913
Worsted and cotton cloths for outer garments	B. W. Greer	22,980	May 9	63	906
Worsted piece goods	Hinck & Ould	23,241	June 27	63	1956
Woven woolen fabrics used mainly for shades for vehicle-windows.	Brussels Tapestry Company	23,340	July 11	64	296
Woven woolen fabrics used mainly for shades for vehicle-windows.	Brussels Tapestry Company	23,341	July 11	64	296
Wrenches	J. W. Pickel	23,475	Aug. 8	64	856
Wringers	American Wringer Company	23,011	May 9	63	908
Writing fluids and inks	C. E. Ogden	22,583	Mar. 7	62	1506
Writing fluids and inks	C. E. Ogden	22,584	Mar. 7	62	1506
Yarns and threads	J. R. Leeson & Co	23,073	May 23	63	1198
Yarns and threads	J. R. Leeson & Co	23,074	May 23	63	1198
Yarns and threads	J. R. Leeson & Co	23,117	May 30	63	1377
Yarns and threads	J. R. Leeson & Co	23,118	May 30	63	1377
Yarns and threads	J. R. Leeson & Co	23,119	May 30	63	1377
Yarns and threads	J. R. Leeson & Co	23,244	June 27	63	1956
Yarns and thread. Cotton, linen, silk, woolen, and hair	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Meig & Cie.	22,384	Jan. 31	62	738
Yarns and thread. Cotton, linen, silk, woolen, and hair	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Meig & Cie.	22,385	Jan. 31	62	738
Yarns and thread. Cotton, linen, silk, woolen, and hair	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Meig & Cie.	22,386	Jan. 31	62	738
Yarns and thread. Cotton, linen, silk, woolen, and hair	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Meig & Cie.	22,387	Jan. 31	62	738
Yarns and thread. Cotton, linen, silk, woolen, and hair	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Meig & Cie.	22,388	Jan. 31	62	738
Yeast	B. P. Myers	23,393	July 25	64	556
Yeast. Cake	W. J. Corner	23,392	July 25	64	556
Yeast. Compressed	Distilling and Cattle Feeding Company	22,596	Mar. 7	62	1507
Yeast-powder	Southern Coffee Co.	23,484	Aug. 15	64	1002

PRINTS.

Title.	Name.	No.	Date.	Official Gazette.	
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"Bovril." (For canned goods and cured meats)	Bovril, Limited	2	Aug. 29	64
"Heinz's Preserves, Celery Sauce, and Ketchups"	H. J. Heinz Co.	1	Mar. 7	62	1357

DISCLAIMERS.

Invention.	Patentee.	No. of patent.	Date of patent.	Disclaimer filed.	Official Gazette.	
					Vol.	Page.
Binder. Temporary	James S. Shannon	217,907	July 29, 1879	Feb. 23, 1893	62	1211
Fluid-pressure automatic brake mechanism	George Westinghouse, Jr	376,837	Jan. 24, 1888	Dec. 4, 1893	65	1597
Lanterns	Joseph B. Stetson	244,944	July 26, 1881	July 21, 1893	64	443
Lasting and fastening machine	Erastus Woodward	248,544	Oct. 18, 1881	Feb. 16, 1893	62	1069
Lasting-machine	Seth White Paine, Hiram A. Gray, and Charles H. Pettie.	387,366	Aug. 7, 1888	Mar. 16, 1893	62	1827
Overalls	Brackett G. Corser	366,621	July 12, 1887	Aug. 14, 1893	64	863
Shutter attachments for photographic cameras	Henry W. Hales	436,658	Sept. 16, 1890	Aug. 18, 1893	64	1012



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